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Examining the Willingness of Immigrant Primary School Students to Communicate in the Target Language

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Abstract. This study sought to investigate the willingness of immigrant primary school children to communicate in Turkish as the target language. The research was conducted with immigrant students in the fourth grade of primary school, selected using a convenience sampling method during the 2022–2023 academic year. Given the lack of a measurement tool specifically developed for this target group, a target language willingness to communicate (TLWTC) scale was developed, encompassing various communication styles including listening, reading, speaking, and writing. The exploratory factor analysis and confirmatory factor analysis results indicated that the scale exhibits a three-factor structure, comprising motivation, self-confidence, and developmental effort, and demonstrates good fit indices. It uniquely identifies leisure activities as indicators of developmental effort as one of the significant dimensions of willingness to communicate in the target language. Subsequently, the TLWTC levels of students and differences based on gender, native alphabet, school type, length of residence, and Turkish-speaking family members were examined. The findings revealed that students exhibited moderate-to-high TLWTC, with no differences based on gender; however, differences were observed based on native alphabet, school type, duration of residence, and the presence of Turkish-speaking family members. The developed TLWTC scale within the migration context may significantly contribute to the research agenda on willingness to communicate in a second language. The findings may provide valuable insights for researchers, administrators, and educators regarding the TLWTC of immigrant primary school students, a topic that has not yet been explored.

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1. Introduction

When individuals migrate to new countries for reasons such as seeking better employment opportunities, pursuing education, reuniting with family, or escaping persecution and conflict, they need to become proficient in the target language (TL), which is the native language of their host country (Altıntaş & Kutluca Canbulat, 2024). Proficiency in the TL is essential for successful integration within the host society. It facilitates acculturation to new cultural norms, enhances communication, and serves as a conduit for sociocultural values. It reshapes cultural reality interpretation, helping individuals become autonomous members and achieve academic success. Conversely, a lack of linguistic proficiency can result in acculturative stress, isolation, and poor educational outcomes (Bredtmann et al., 2021; Kanas et al., 2022; Montgomery et al., 2021; Ortiz Cobo et al., 2020; St John & Liubinienė, 2021).

The acculturation model, as a framework for second language (L2) acquisition, posits that learners acquire the TL to the degree that they acculturate to the TL group (Qiao, 2024). Learners simultaneously encounter the second culture and the L2, overlapping acculturative and linguistic demands (Toppelberg & Collins, 2010). Further research indicates that non-linguistic outcomes are crucial for personal development and academic achievement. The willingness to communicate in a second language (L2WTC) is considered one of the most significant non-linguistic outcomes, with extensive implications. Studies indicate a correlation between immigrants' acculturation and their willingness to communicate (WTC) with target groups, as L2 learners, is regarded as a gateway to frequent L2 use, and higher levels of WTC facilitate intergroup contact (MacIntyre et al., 2020; Montgomery et al., 2021).

In this context, educational institutions play a crucial role in addressing the challenges posed by migration. Schools serve as a fundamental mechanism, particularly for immigrant children, by facilitating their integration into the host society and providing a vital environment for their acculturation and adaptation. Specifically, they are the primary drivers of acquiring and using the TL communicatively (Ebert & Reilly, 2022; Gromova et al., 2021). Acquiring language and communicative competence within the classroom settings extends beyond this environment into daily life and becomes central to the adaptation process (Henry & MacIntyre, 2023). Schools can also shape students' TLWTC.

Successful TL acquisition depends on language support, exposure levels, and communication opportunities. It involves identifying with and engaging in the target culture. In addition to structured language instruction, the classroom environment offers simultaneous contact with the host culture and language, creates powerful opportunities in the TL, and provides an authentic setting for interaction between teachers, host peers, and immigrant children (Ebert & Reilly, 2022; Lou & Noels, 2019; Toppelberg & Collins, 2010). This can foster immigrant students' TLWTC (Kim et al., 2022; Lee & Lee, 2020; Yang & Zhang, 2026).

Studies in L2 acquisition suggest that L2WTC is pivotal in L2 learning. It is a key objective in L2 pedagogy, as it enables learners to acquire the L2 and use it for further learning. It facilitates communicative behaviour, which enhances communicative competence and L2 interaction, fostering learners' L2 acquisition (Chen et al., 2022; Dörnyei et al., 2015; Lee et al., 2021, 2022; MacIntyre et al., 2020; Wang et al., 2020). Students' L2 achievement is linked to their L2WTC (Cao, 2022; Fan, 2026; Henry & MacIntyre, 2023; Zhang et al., 2018). Studies have shown that L2WTC in the classroom predicts L2WTC outside the classroom, as students willing to communicate in L2 in class are likely to communicate in L2 out of class (Lee & Lee, 2020; Zarrinabadi et al., 2021).

However, research on L2WTC has predominantly focused on foreign language classroom settings, where acculturation is not a concern (Gallagher, 2013). Studies on L2WTC have mostly been conducted in specific geographies, such as Japan, Korea, and China, and the participants have typically been English foreign language learners residing in their native countries or international students who do not intend to remain in English-speaking nations (Jiang, 2025; Khany & Nejad, 2017; Kim et al., 2022).

Research on primary school children's L2WTC remains limited, with existing studies conducted in English foreign language context (Kim & Kang, 2014; Lee & Taylor, 2024). The primary school years hold significant importance, as they constitute a critical phase for the development of both affective and cognitive behaviours. During this period, children spend a considerable portion of their day in school, and these years establish the foundation for their future educational trajectories (Ebert & Reilly, 2022; Lui et al., 2015). In migration contexts, schools are essential sites of acculturation (Schmid et al., 2026). In this context, it is crucial to examine immigrant primary school children's L2WTC, as this influences their acculturation and educational trajectories.

1.1 Current Study

1.1.1 Immigrant primary school in Turkish setting

In recent years, Türkiye has emerged as a significant destination for migrants. Notably, in 2011, substantial migration waves originated from Syria and, in 2021, from the Russian Federation and Ukraine, primarily due to conflicts and wars (Altıntaş & Kutluca Canbulat, 2024). This has led to an increase in the enrolment of immigrant children in educational institutions. The Ministry of National Education implemented initiatives to facilitate the integration of these children into the Turkish education system.

Under the Project to Promote Inclusive Education for Children in the Turkish Education System (PIKTES), initially for Syrian students, but later expanded to all immigrants, first-grade students begin their education with native peers, while, from grade 3, students with limited Turkish proficiency attend adaptation classes. These classes operate in 26 provinces with high foreign student concentrations, aiming to enhance Turkish language skills and prepare students for the education system (Çağlıyan & Akman, 2025). The schools in which this study was conducted were also included in that project. While research exists on teaching Turkish as a foreign language, studies on WTC in Turkish are limited (Polatcan, 2018; Karakış,

2020), with none at the primary school level, highlighting the need for research targeting primary school students.

1.1.2 Purpose

This study sought to investigate the willingness of immigrant primary school children to communicate in Turkish as the TL. The objective was to offer more context-specific recommendations and advance the research agenda on L2WTC, with a particular focus on TLWTC in the migration setting.

Notably, no measurement tool for this target group was identified in the literature. Consequently, this study had two primary objectives. The first was to develop a TLWTC scale covering the communication styles of listening, reading, speaking, and writing. The second objective was to examine the TLWTC of immigrant primary school students in relation to various variables.

Significant differences can be observed among students in terms of L2WTC, and internal and external factors influencing L2WTC, which rises or falls as internal states and external circumstances interact (Dewaele, 2019; Farrokhi et al., 2023; Kim et al., 2022; Zarrinabadi et al., 2021). These orientations relate to biological variables, such as gender (Amiryousefi, 2018); situational factors, such as students' living environments, duration of stay, cultural background, family language policies, and practices; and contextual sources of L2WTC, including group dynamics, interlocutor familiarity, and relationship (Cameron, 2021; Ebert & Reilly, 2022; Lee, 2022; Sadoughi & Hejazi, 2024; Zarrinabadi & Pawlak, 2021; Zhang et al., 2018).

WTC may transform as learners transition between learning environments or develop proficiency due to changes in their life circumstances, such as immigration (Cameron, 2013; Jiang, 2025). The environment is a key dimension in interpreting motivated L2 behaviour (Hiver & Papi, 2019). In migration context, it transcends being a contributing factor and constitutes the framework that shapes L2 behaviour.

1.1.3 Research questions

To this end, this study addressed the following research questions:

1. To what extent do immigrant primary school students exhibit TLWTC?
2. Do the TLWTC mean scores of immigrant primary school students exhibit significant differences based on gender?
3. Do the TLWTC mean scores of immigrant primary school students exhibit significant differences based on their native language alphabet?
4. Do the TLWTC mean scores of immigrant primary school students exhibit significant differences based on the type of school they attend?
5. Do the TLWTC mean scores of immigrant primary school students exhibit significant differences based on their duration of residence?
6. Do the TLWTC mean scores of immigrant primary school students exhibit significant differences based on the presence of a family member who speaks the TL?

2. Literature Review

2.1 Willingness to Communicate in Second Language (L2WTC)

A WTC refers to the reasons why one person might start a conversation while another might not, even under similar situational conditions. Initially examined within the context of first language, this phenomenon was expanded by MacIntyre et al. (1998) to include L2 acquisition, and L2WTC was defined as “being ready to engage in discourse using L2 with a specific person or persons at a specific time.” They proposed a pyramid model, with a base layer of social individual context, and upper layers showing changeable variables: affective-cognitive context, motivational propensities, situated antecedents and language use at the top (Dewaele & Pavelescu, 2021).

L2WTC is recognised as a state of communicative readiness that manifests within and between communication events, characterised by its dynamic fluctuations and possessing both transient and enduring attributes. It can be understood as both a stable trait variable and a dynamic situational variable, evolving psychological state that manifests within communication events, and explains differences in learners’ intention to communicate in the L2 and is considered a final step before actual L2 use (Lee, 2022; MacIntyre, 2020; Zarrinabadi & Tanbakooei, 2016).

Various contextual, social, and individual factors influence motivation and confidence to communicate in L2. Individual’s communicative behaviours fluctuate across time and situations. Whether an individual chooses to communicate with another person in a specific situation is shaped by the constraints of that interaction, such as migration (Cameron, 2013; Gallagher, 2013; Zarrinabadi et al., 2021; Zhang, et al., 2018). Feedback loops, experiences of communication choices and their consequences shape WTC patterns that evolve over time (Henry et al., 2024). Factors such as L2 self-confidence and motivation are recognised as primary antecedents of communication factors (MacIntyre et al., 1998; Zarrinabadi & Tanbakooei, 2016; Zarrinabadi & Pawlak, 2021).

2.2 Primary Antecedents of L2WTC

2.2.1 Motivation

Motivation governs behavioural choices regarding goals to avoid or pursue. It underlies learning behaviour in terms of choice, intensity, and duration (Dörnyei & Ryan, 2015). It determines resources invested toward valued outcomes and is thus core to goal-directed behaviour (Soutschek et al, 2018). Motivation in language learning is acknowledged as a dynamic and context-dependent factor, characterised by temporal and situational variability.

Motivation is a crucial factor in determining how individuals approach their goals, persist in their efforts, and make decisions. It serves as the primary impetus for initiating the acquisition of L2 and for sustaining engagement throughout the prolonged and challenging process. All the other factors involved in L2 acquisition presuppose motivation to some extent (Dörnyei et al., 2015; Welesilassie & Nikolov, 2024). Students with high motivation initiate more L2 communication (Ebn-Abbasi et al., 2024; Lee, 2022). L2 motivation is an integral

constitutive part of context and is always situated and contextually constrained (Joe et al., 2017).

2.2.2 L2 self-confidence

Students' self-confidence in communicative competence has been recognised as a crucial predictor of L2WTC (Joe, et al., 2017; Jin & Lee, 2022). It refers to the belief in being able to communicate in L2 in an adaptive and efficient manner. It is a sense of assurance in one's ability to communicate effectively in L2 within a specific context. This concept is linked to perceived competence (MacIntyre et al., 1998; Zarrinabadi & Tanbakooei, 2016). Students who perceive themselves as having strong L2 skills are more likely to engage with the language. Conversely, a lack of confidence in language abilities can impede effective communication (Welesilassie & Nikolov, 2024). This competence is integral to intercultural adaptation. It facilitates successful communication and the achievement of personal goals, thus demonstrating a harmonious level of social functioning (Gallagher, 2013).

2.2.3 Developmental effort: Engagement in serious leisure activities as indicators of willingness to develop language skills

Recent studies have highlighted the need to clarify the potential antecedents of WTC (Ebn-Abbasi et al., 2024). Within this context, empirical investigations have employed the concept of motivated behaviour or intended effort to learn a TL as a criterion measure (Csizér 2020). It relates to individuals' willingness to work with energy and determination towards pre-planned, demanding goals (Pawlak et al., 2024).

The ultimate objective of language acquisition is L2 utilisation through communicative behaviour. Variability exists among students in the communicative use of the TL; some show greater readiness to communicate, while others avoid L2 interactions (Khany & Nejad, 2017). TL learning presents cognitive challenges that can impede abilities, leading to unsuccessful communicative interactions. Overcoming these challenges requires sustained effort, attention, and energy. Positive responses to failure situations, emphasising task persistence, continued efforts despite potential failure, and achieving mastery in difficulties, predict students' L2WTC and the use of L2 (Lee & Lee, 2020; Lee & Taylor, 2024; Lou & Noels, 2017; Pawlak et al., 2024; Zhao & Wang, 2023).

The concept of WTC can be elucidated through various theoretical frameworks. Behaviour change theory suggests behaviour is strongly linked to beliefs. Students' self-beliefs shape their behaviour as they navigate tasks (Campbell et al., 2020). According to the self-determination theory, the classroom environment may indirectly influence learners' behaviour through internal motivational processes (Yang & Zhang, 2026). Social cognitive theory posits the existence of reciprocal interactions among behavioural, environmental, and personal influences. Individuals' cognitions impact their actions and environments, actions modify cognitions and environments, and environments, in turn, shape cognitions and actions.

Learners who feel competent tend to engage in activities that help them learn, invest effort in challenging tasks, sustain productive behaviours, and regulate their environment to optimise success (Schunk & DiBenedetto, 2020). Students' interest during L2 learning and perseverance of effort, which means investing energy when facing challenges, assesses how persistent they are in achieving L2 goals (Teimouri et al., 2022), and potentially enhances L2 communication (Cheng, 2021). In this context, WTC pertains to an individual's behavioural intention, which manifests as a communicative event. This event reflects their commitment, either verbally or through action, encompassing motivated behaviour or the intended effort to learn (Pawlak et al., 2024).

As noted by MacIntyre et al. (1998), communicative behaviour includes authentic L2 communication, encompassing activities such as engaging in discussions, reading L2 literature, viewing L2 films, or employing the L2 in professional contexts (Zarrinabadi & Tanbakooei, 2016). Consequently, students' behavioural responses indicating their intention to persist in learning the TL, specifically engaging in communication activities outside the classroom voluntarily is essential for L2WTC.

Furthermore, L2 researchers have demonstrated that engagement in extramural language learning correlates with language outcomes (Reinders et al., 2022; Sundqvist, 2019, 2024). It entails the acquisition or production of L2 knowledge beyond the confines of the classroom, both online and offline language activities, driven by individual interests and needs, and occurring independently of teacher intervention and evaluation (Sundqvist, 2019; Zhang et al., 2021). Such engagement, which has the three interconnected dimensions of cognitive, emotional, and affective (Fredricks et al., 2016; Sundqvist, 2019; Sundqvist, 2024), can yield significant educational outcomes (Lee & Taylor, 2024). Researchers have explored how extramural language practice relates to L2WTC, as out-of-classroom learning links to perseverance, a significant predictor of WTC (Kim et al., 2022). Participants with stronger motivation were observed to have a greater propensity to participate in L2-based activities (Lee & Taylor, 2024).

Some typical extramural activities can be exemplified by both traditional ways of using L2 outside of class (serious leisure activities), such as studying for tests, reading books, and creative and resourceful activities (lighter leisure activities), such as listening to music in L2, watching undubbed L2 media (TV programmes and movies), surfing the internet; watching videos or YouTube channels, reading magazines in L2, and playing digital games, talking with family members using L2, talking to themselves in L2, singing karaoke in L2 (Doyle & Parrish, 2012; Lee & Taylor, 2024; Sundqvist, 2024), and frequently emphasised recently language practice with artificial intelligence (AI) tools (Chen et al., 2025).

While these activities are typically categorised as serious and light leisure pursuits, they may be better regarded as serious leisure activities given their aim of enhancing language proficiency. Leisure comprises activities individuals voluntarily pursue for personal satisfaction or fulfilment, free from external obligations. Serious leisure focuses on achieving satisfaction and personal growth

by maximising abilities through specific activities, requires perseverance, and substantial personal effort. Individuals engaged in serious leisure activities typically develop a profound connection with their selected endeavours. In such activities, the sense of accomplishment is high, and the line between work and leisure is almost blurred (Stebbins, 2018). Engagement in serious leisure activities enhances communication strategies (Montero, 2019).

The majority of L2WTC research in relation to extramural activities has predominantly focused on secondary and university English foreign language students (Kim & Kang, 2014; Lee & Drajeti, 2019; Lee, 2022; Lee et al., 2022). Studies conducted with primary school students are scarcely limited (Lee & Taylor, 2024).

3. Methodology

This section delineates the methodologies and findings of two studies conducted to achieve two primary objectives. Participants were selected through a convenience sampling method, from public and private schools in the Mediterranean region in Türkiye during 2022–2023 academic years. Data were collected on a voluntary basis. Before data collection, students were provided with information regarding the scale.

3.1 Study 1: Development of the Scale: Willingness to Communicate in Turkish as the Target Language (TLWTC)

In the initial phase of this study, the WTC in Turkish scale developed by Polatcan (2018) for adult learners, was administered to students with the author's consent. However, as all but five items failed to exceed the .32 threshold, developing a new scale for primary school-level students became necessary. This new scale includes the five items from that scale alongside new items.

In this context, the primary antecedents of L2WTC (motivation and self-confidence) were considered during scale item development. Based on research underscoring the necessity to investigate the antecedents of WTC (Ebn-Abbasi et al., 2024), developmental effort was incorporated as a sub-dimension. This inclusion was grounded in the findings of the studies mentioned, which indicate that individuals with heightened WTC tend to exert more effort, are more likely to engage in L2-based extramural activities, and that participation in leisure activities enhances communication strategies. Thus, scale items related to leisure activities were included as indicators of behavioural intentions to improve TL skills. Consequently, the scale encompassed items that assess immigrant students' motivation to communicate in Turkish, their self-confidence in comprehending and using Turkish, and their efforts to enhance Turkish communication skills during leisure time.

The initial version of the scale consisted of 25 items, with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Subsequently, three experts in the field of language education were consulted to assess the content validity of the scale using a three-point scale from 1 to 3, evaluating the clarity and relevance of the items as 1) "not relevant", 2) "not clear, relevant but needs minor revision",

and 3) “highly relevant and clear.” To calculate the content validity, the total score of the evaluated items was divided by the number of experts. An inter-rater agreement value exceeding .80 indicated that the scale possessed content validity (Yeşilyurt & Çapraz, 2018).

3.2 Data Collection and Analysis

After obtaining ethical approval from the Ethics Committee of the anonymous university and authorisation from the Research, Competition, and Social Activities unit under the Ministry of National Education, data collection commenced. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were then performed using structural equation modelling within the linear structural relationships (LISREL) framework. The EFA and CFA were conducted on separate cohorts of students, comprising sample sizes of 205 and 203 immigrant students, respectively.

3.2.1 Exploratory factor analysis (EFA)

Prior to EFA, the data were evaluated for outliers, normality, and multicollinearity. There were no outliers, and the skewness and kurtosis values were in the ± 1.5 range (Tabachnick & Fidell, 2013). Tolerance values over 0.1 and variance inflation factor values below 10 suggested that multicollinearity was not significant. The KMO scale value of .88 and Bartlett test chi-square value of .01, indicated suitability for factor analysis. In the EFA analysis, principal component analysis was used for factorisation, with varimax rotation. A total of nine items were excluded due to variance explanation rate below .10 and factor loading below .32 (Çokluk et al., 2025). The final scale had 16 items. Table 1 shows the total variance explained for TLWTC.

Table 1: TLWTC total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.735	35.841	35.841	3.636	22.723	22.723
2	1.466	9.162	45.002	2.732	17.072	39.795
3	1.208	7.551	52.553	2.041	12.758	52.553
4	.960	6.002	58.555			
5	.838	5.235	63.790			
6	.814	5.089	68.878			
7	.699	4.368	73.247			
8	.646	4.038	77.285			
9	.601	3.757	81.042			
10	.566	3.537	84.578			
11	.530	3.315	87.894			
12	.455	2.845	90.738			
13	.430	2.687	93.425			
14	.393	2.454	95.879			
15	.362	2.263	98.142			
16	.297	1.858	100.000			

As depicted in Table 1, the TLWTC scale exhibits a three-factor structure with an initial eigenvalue greater than 1 and accounting for 52.553% of the total variance. The scree plot graph, illustrated in Figure 1, corroborates this conclusion (Çokluk et al., 2025).

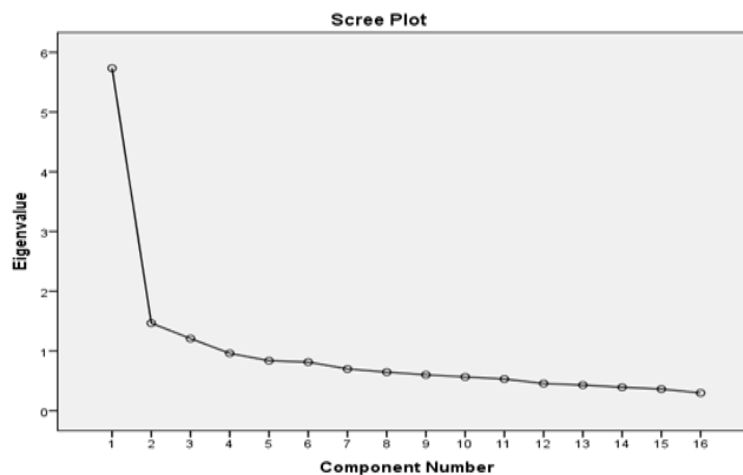


Figure 1: TLWTC scree plot graph

The components represented on the Y-axis denote the points contributing to the variance, while the diminishing intervals between points along the X-axis offer insights into the factor structure (Çokluk et al., 2025). As illustrated in Figure 1, a decreasing trend of the Y-axis towards the X-axis confirms that the scale has three-factors. The rotated component matrix for the scale is presented in Table 2.

Table 2: Rotated component matrix for TLWTC

		Component		
		Motivatio n	Self- confiden ce	Developmen tal Effort
i1	Learning Turkish is enjoyable.	.776		
i4	I'm delighted to have learned Turkish.	.757		
i2	I like conversing in Turkish with my teacher.	.688		
i3	I enjoy reading the books composed in Turkish.	.543		
i11	I watch Turkish cartoons on television.	.413		
i8	I enjoy writing in Turkish.	.402		
i12	My friends and I frequently talk about Türkiye.		.717	
i10	I can respond to questions posed in Turkish.		.630	
i5	I enjoy demonstrating to my family that I can speak Turkish.		.567	
i9	My Turkish friends and I communicate with each other effectively.		.451	
i6	I can easily talk in Turkish with my friends.		.396	

i7	I can express my feelings and ideas comfortably through writing in Turkish.	.330
i14	During my leisure time, I practice listening to Turkish through television channels, computers, or mobile phones.	.813
i15	During my leisure time, I read Turkish texts from books, magazines, or online sources.	.724
i16	During my leisure time, I engage in Turkish writing activities.	.705
i13	During my leisure time, I engage in Turkish speaking activities.	.328

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

Table 2 illustrates that items 1, 2, 3, 4, 8, and 11 of the scale pertain to motivation, items 5, 6, 7, 9, 10, and 12 relate to self-confidence, and items 13, 14, 15, and 16 correspond to the developmental effort sub-dimension. All items on the scale exceeded the acceptability threshold of .32, with scores ranging from .813 to .328.

3.2.2 Confirmatory factor analysis (CFA)

After conducting EFA, the TLWTC scale was administered to 203 immigrant primary school students for CFA. The analysis utilised the maximum likelihood estimation method. Table 3 illustrates the fit indices associated with the scales.

Table 3: CFA findings of the TLWTC scale

	χ^2	df	χ^2/df	RMSEA	SRMR	NNFI	NFI	CFI
TLWTC	206.22	101	2.04	0.07	0.06	0.96	0.93	0.96

As illustrated in Table 3, the scale demonstrated absolute or good fit indices, aligning with the recommended fit indices. Specifically, the Normed Chi-Square (χ^2/df) is ≤ 3 for absolute fit, the Standardized Root Mean Square Residual (SRMR) is ≤ 0.05 for absolute fit, the Root Mean Square Error of Approximation (RMSEA) is ≤ 0.08 for good fit, and both the Normed Fit Index (NFI)/Non-Normed Fit Index (NNFI) and the Comparative Fit Index (CFI) are ≥ 0.95 for absolute fit (Çokluk et al., 2025). The path diagrams, inclusive of t-values, derived from the first and second-order CFA of the scale, are provided in Appendices 1 and 2.

3.2.3 Reliability of the scale

The calculated internal consistency coefficients and construct reliability for TLWTC are presented in Table 4.

Table 4: Reliability results of the TLWTC

Scale	Number of Items	Cronbach's Alpha	CR
Motivation	6	.77	.82
Self-confidence	6	.76	.79
Developmental effort	4	.71	.78
TLWTC Overall	16	.87	.92

As demonstrated in Table 4, the reliability of the scale is adequately high, with values $\alpha > .70$ and $CR \geq 0.7$

3.3 Study 2: Examination of TLWTC in Terms of Variables

3.3.1 Participants

The investigation of immigrant students' TLWTC in relation to gender, grade level, and alphabet differences was based on data collected from 203 fourth-grade students for the purpose of CFA. Participants were selected from 10 public and seven private schools using a convenience sampling method. They are children from families who have immigrated from Russia, Ukraine, England, Kazakhstan, Azerbaijan, Syria, Iran, and Afghanistan.

The participants' demographic and linguistic characteristics are presented in Table 5.

Table 5: Demographic and linguistic characteristics of immigrant students

		n	%
Gender	Female	117	57,6
	Male	86	42,4
Native Language Alphabet	Cyrillic	156	76,8
	Latin	6	3,0
	Arabic	41	20,2
School type	Public School	173	85,2
	Private School	30	14,8
	0-1 year	33	16,3
Duration of Residence	1-3 years	66	32,5
	3-5 years	57	28,1
	More than 5 years	47	23,1
Presence of Turkish-speaking Family Members	Yes	167	82,3
	No	36	17,7
Total		203	100

Table 5 illustrates the demographic and linguistic characteristics of the study participants. Of 203 participants, 117 are female and 86 are male. For native language alphabet, 156 use Cyrillic, 6 use Latin, and 41 use Arabic. In terms of schooling, 173 attend public schools and 30 attend private schools. Regarding residency in Türkiye, 33 have lived there for 0–1 years, 66 for 1–3 years, 57 for 3–5 years, and 47 for over 5 years; 167 participants have Turkish-speaking family members, while 36 do not.

3.3.2 Data Analysis

Prior to data analysis, the normality of the dataset was assessed, as data did not show skewness and kurtosis values within the ± 1.5 range for each variable (Tabachnick & Fidell, 2013). The Mann-Whitney U test was used for two-variable

comparisons, while Kruskal-Wallis H test was used for multiple-variable comparisons.

4. Results and Findings

4.1 Findings Related to the First Research Question

The findings concerning the first research question, which examines the TLWTC levels of immigrant primary school students, are presented in Table 6. This study employed the mean ± 1 standard deviation as a cutoff point for categorising TLWTC levels into “high,” “mid,” and “low,” consistent with the methodologies utilised by Sellers (2000) and Özel and Kutluca Canbulat (2025).

The TLWTC levels were as follows:

- For motivation, scores of 6–20 indicate low-motivation, 21–28 indicate mid-motivation, and 29–30 indicate high-motivation.
- For self-confidence, scores of 6–18 indicate low self-confidence, 19–27 indicate mid self-confidence, and 28–30 indicate high self-confidence.
- For developmental effort, scores of 4–11 indicate low-developmental effort, 12–18 indicate mid developmental effort, and 19–20 indicate high-developmental effort.
- For overall TLWTC, scores of 16–51 indicate low-TLWTC, 52–72 indicate mid-TLWTC, and 73–80 indicate high-TLWTC.

Table 6: Descriptive statistics for TLWTC and participants' TLWTC levels

Scale	N	Mi n	Ma x	$\bar{X} \pm Sd$	Low		Mid		High	
					N	%	N	%	N	%
Motivation	203	10	30	24.36 \pm 4.25	28	13.8	143	70.4	32	15.8
Self-confidence	203	8	30	22.93 \pm 4.84	37	18.2	127	62.6	39	19.2
Developmental Effort	203	4	20	14.88 \pm 3.75	40	19.7	123	60.6	40	19.7
TLWTC Overall	203	32	80	62.17 \pm 10.90	30	14.8	134	66	39	19.2

An analysis of Table 6 reveals that most immigrant primary school students in this study exhibited moderate to high levels of TLWTC.

4.2 Findings Related to the Second Research Question

The findings for the second research question, which examined TLWTC of immigrant students by gender, are presented in Table 7.

Table 7: Results of TLWTC mean scores by gender

Scale	Gender	N	Mean Rank	Sum of Ranks	U	Z	p
Motivation	Female	117	104.92	12276	4689.0	.83	.407
	Male	86	98.02	8430			
Self-confidence	Female	117	103.03	12055	4910.0	.29	.769
	Male	86	100.59	8651			
Developmental Effort	Female	117	100.88	11803.5	4900.5	.32	.751
	Male	86	103.52	8902.5			
TLWTC Overall	Female	117	102.21	11958.5	5006.5	.06	.953
	Male	86	101.72	8747.5			

An analysis of Table 7 reveals that the overall TLWTC and its sub-dimensions for immigrant students do not differ between genders.

4.3 Findings Related to the Third Research Question

The findings related to the third research question, which examines whether immigrant students' TLWTC mean scores varies with respect to their native language alphabet, are presented in Table 8.

Table 8: Results of TLWTC mean scores by native language alphabet

Scale	Alphabet	N	Mean Rank	Sd	χ^2	p	Difference
Motivation	Cyrillic	156	93.52	2	18.80	<0.001	3-1 3-2
	Latin	6	82.00				
	Arabic	41	137.20				
Self-confidence	Cyrillic	156	92.63	2	19.32	<0.001	3-1 3-2
	Latin	6	100.92				
	Arabic	41	137.80				
Developmental Effort	Cyrillic	156	98.20	2	11.77	<0.001	1-2 3-1 3-2
	Latin	6	48.00				
	Arabic	41	124.37				
TLWTC Overall	Cyrillic	156	93.51	2	20.53	<0.001	3-1 3-2
	Latin	6	73.33				
	Arabic	41	138.49				

Analysis of Table 8 shows significant differences in TLWTC among immigrant students based on native alphabet. Students using Arabic alphabet have higher scores than those using Cyrillic and Latin. In the development effort sub-dimension, students using Cyrillic alphabet show higher rank averages than Latin alphabet users.

4.4 Findings Related to the Fourth Research Question

The findings pertaining to the fourth research question, which investigates whether the mean scores of immigrant students' TLWTC differ based on the type of school in which they are enrolled, are presented in Table 9.

Table 9: Results of TLWTC mean scores by school type

Scale	School type	N	Mean Rank	Sum of Ranks	U	Z	p
Motivation	Public	173	110.13	19053	1188.0	4.75	<0.001
	Private	30	55.10	1653			
Self-confidence	Public	173	108.63	18793	1448.0	3.87	<0.001
	Private	30	63.77	1913			
Developmental Effort	Public	173	106.12	18359.5	1881.5	2.41	<0.001
	Private	30	78.22	2346.5			
TLWTC Overall	Public	173	109.64	18968.5	1272.5	4.46	<0.001
	Private	30	57.92	1737.5			

Table 9 shows significant differences in students' scores by school type. Students in public schools had higher rank averages than those in private schools.

4.5 Findings Related to the Fifth Research Question

The results pertaining to the fifth research question, which investigates whether the mean scores of immigrant students' TLWTC differ based on their duration of residence in Türkiye, are presented in Table 10.

Table 10: Results of TLWTC mean scores by duration of residence

Scale	Time	N	Mean Rank	Sd	χ^2	p	Difference
Motivation	0-1 year	33	81.74	3	21.55	<0.001	3-1
	1-3 years	66	82.81				3-2
	3-5 years	57	120.78				4-1
	More than 5 years	47	120.39				4-2
Self-confidence	0-1 year	33	81.53	3	15.04	0.002	4-1
	1-3 years	66	91.93				4-2
	3-5 years	57	104.43				4-3
	More than 5 years	47	127.56				
Developmental Effort	0-1 year	33	97.26	3	21.17	<0.001	3-2
	1-3 years	66	79.89				4-1
	3-5 years	57	106.89				4-2
	More than 5 years	47	130.44				
TLWTC Overall	0-1 year	33	84.21	3	23.81	<0.001	3-1
	1-3 years	66	81.93				3-2
	3-5 years	57	111.51				4-1
	More than 5 years	47	131.14				4-2

Table 10 shows significant differences in immigrant students' mean ranks in TLWTC and sub-dimensions based on residence duration in Türkiye. Students residing 3-5 years and over 5 years showed higher motivation ranks than those with 0-1 year and 1-3 years. In self-confidence, those staying over 5 years ranked higher than shorter durations. For developmental effort, over 5-year residents ranked higher than 0-1 and 1-3 year groups, while 3-5 year residents ranked higher than 1-3 years. For totals, 3-5 years and over 5-year residents ranked higher than 0-1 and 1-3 year groups.

4.6 Findings Related to the Sixth Research Question

The results pertaining to the sixth research question, which investigated whether immigrant students' TLWTC scores differ based on the presence of Turkish-speaking family members, are presented in Table 11.

Table 11: Results of TLWTC mean scores by the presence of Turkish-speaking family members

Scale	Response	N	Mean Rank	Sum of Ranks	<i>U</i>	<i>Z</i>	<i>p</i>
Motivation	Yes	167	108.77	18165	1875.0	3.55	<0.001
	No	36	70.58	2541			
Self-confidence	Yes	167	108.21	18070.5	1969.5	3.25	0.001
	No	36	73.21	2635.5			
Developmental Effort	Yes	167	107.02	17873	2167.0	2.64	0.008
	No	36	78.69	2833			
TLWTC Overall	Yes	167	109.28	18250.5	1789.5	3.81	<0.001
	No	36	68.21	2455.5			

Table 11 shows that immigrant students had significant differences in TLWTC and its sub-dimensions based on the presence of Turkish-speaking family members. Students with Turkish-speaking family members showed higher rank averages than those without.

5. Discussion

This study had two primary objectives. The first involved developing a measurement tool to assess immigrant primary school students' TLWTC in Turkish. Exploratory factor analysis showed a three-factor structure – motivation, self-confidence, and developmental effort – with eigenvalue exceeding 1 and accounting for 52.553% of total variance. The confirmatory factor analysis (CFA) validated this structure, demonstrating satisfactory fit indices: $\chi^2/df \leq 3$ for absolute fit, $SRMR \leq 0.05$ for absolute fit, $RMSEA \leq 0.08$ for good fit, and $NFI/NNFI \geq 0.95$ and $CFI \geq 0.95$ for absolute fit (Çokluk et al., 2025). The study confirmed that leisure activities, indicating developmental effort, constitute a sub-dimension of students' TLWTC, supporting the studies (Lee & Taylor, 2024) indicate that extramural activities as a predictor of L2WTC.

The second objective was to examine TLWTC levels and differences based on gender, native alphabet, school type, residence duration, and Turkish-speaking family members. The findings were that immigrant primary school students exhibit a moderate to high level of WTC in Turkish as a TL. The substantial level of TLWTC can facilitate the advancement of language learning and further encourage its utilisation as a tool for lifelong development (Chen et al., 2022; Lee et al., 2022; MacIntyre et al., 2020). It is also crucial for their adaptation, as having elevated levels of WTC, facilitates intergroup contact (MacIntyre et al., 2020) and promotes acculturation to the TL group (Qiao, 2024). Moreover, these school-age children can assist their non-fluent parents' communication challenges by acting as "culture-brokers", thus contributing to their family's integration (Altıntaş & Kutluca Canbulat, 2024).

This study found that participants demonstrated moderate to high levels of developmental effort and frequently engaged in extramural activities during their leisure time, which significantly reflect in their TLWTC. This outcome may account for their potential engagement with online platforms. They may have access to authentic language materials, connections with native speakers, and virtual language communities, which enhanced their motivation to learn and communicate in the TL by helping them envision themselves as part of a native-speaking community. The accessibility and convenience of digital technology may have empowered students to actively pursue their language goals by allowing them to engage in language learning anytime and anywhere (Welesilassie & Nikolov, 2024).

For instance, students may have used AI as a learning tool, which could have positively influenced their TLWTC. Recent studies highlight AI's impact on L2WTC, as it enhances and expands language input, offers L2 use independently of a specific context or time, provides immediate feedback, and thereby potentially improves students' L2 skills communicative interactions, and thereby L2WTC (Chen et al., 2025). Furthermore, their exposure to host-culture mass media, such as television, may have facilitated in refining cultural insights and gaining linguistic proficiency. This, in turn, eases daily interactions with host-culture members and enhances comprehension of social norms (Miglietta & Tartaglia, 2009). Studies suggest that L2WTC predicts participants' L2 exposure in various activities (Kim et al., 2022).

The results further demonstrated that students' TLWTC levels did not differ based on gender but varied according to school type, native alphabet, duration of residence, and presence of Turkish-speaking family members. This finding aligns with internationally research which shows no significant relationship between gender and L2WTC (Lee & Drajati, 2019; Lee & Lee, 2021) and with studies which found no statistically significant difference in WTC among adult Turkish learners (Karakış, 2020). It is also consistent with Altıntaş's (2023) finding that immigrant students' attitudes towards learning Turkish do not differ by gender. This corroborates research indicating that external factors influence L2WTC through interaction with internal states (Dewaele, 2019; Farrokhi et al., 2023).

Moreover, it was revealed that students employing the Arabic alphabet exhibited higher mean ranks in overall TLWTC and its subdimensions compared to those using the Cyrillic and Latin alphabet. In the developmental effort subdimension, students using the Cyrillic alphabet attained higher rankings than those using the Latin alphabet. Studies suggest that similarities between first language and L2, including alphabets, syntax, discursive features, cognates, lexis and cultural contexts, can influence TL outcomes (Demirel & Yalçın, 2021; Özel & Kutluca Canbulat, 2025; Pawlak & Mystkowska-Wiertelak, 2015).

Numerous words in both Turkish and Arabic exhibit similarities in pronunciation and meaning, which can simplify the acquisition of the Turkish language for Arabic speakers. Likewise, Cyrillic alphabet users, such as from Kazakhstan, find common linguistic roots with Turkish (Özel & Kutluca Canbulat, 2025). This may

explain the differences in TLWTC between those using Arabic and other alphabets, and the variance in Turkish-language activities participation between students using Cyrillic and Latin alphabets. Furthermore, studies show that L2 learners' WTC is influenced by interlocutor familiarity (Lee, 2022; Zhang et al., 2018). Students using Latin alphabet may lack familiarity with TL culture, reducing their motivation to use it and leading them to prefer their native language (Zhang et al., 2022). This occurs especially when peers sharing the same native language are present, potentially decreasing TL engagement (Jiang, 2025).

In addition, the findings indicated that students' TLWTC scores varied by school type, with public school students showing higher scores than private school students. This difference may stem from the emphasis on foreign languages (particularly English) in private schools (Gürler, 2020), providing students another communication option. Their families' language policies and emphasis on English may have supported this language use. This opportunity is more limited in public schools. However, from a developmental perspective, primary school children primarily desire to form friendships (Altıntaş & Kutluca Canbulat, 2024), requiring meaningful interaction to improve the communicative competence (Sadoughi & Hejazi, 2024). This may account for the observed TLWTC results in public schools. Additionally, in private schools, students may prefer communicating with friends who share their native language due to family language policies or common ethnicity (Jiang, 2025; Zhang et al., 2018), potentially reducing their TLWTC.

Furthermore, the findings indicated that TLWTC level increases with length of residence. This outcome can be attributed to the duration of exposure to the TL and the opportunities available for its use. It suggests that children who have resided longer in the host country have had extended exposure to the TL and began acquiring L2 earlier. Moreover, children spend most time in school, providing substantial TL exposure and interaction. The length of exposure determines the overall time experiencing L2, potentially leading to stronger skills (Ebert & Reilly, 2022). Additionally, the extent of language contact, the frequency and intensity of interactions influence TL pragmatics recognition in host environments (Bardovi-Harlig & Bastos, 2011; Güvendir et al., 2024).

Longer exposure and intense interactions with the host community may facilitate immigrant students' TL acquisition (Qiao, 2024), enhancing their WTC (Kim et al., 2022; Welesilassie & Nikolov, 2024). This aligns with Altıntaş (2023), who found immigrant students residing in Türkiye for over 5 years had higher attitudes towards learning Turkish. The improvement of host language proficiency, attitudes, and self-confidence are significant in psychological negotiation between cultural elements, facilitating immigrant integration (Altıntaş & Kutluca Canbulat, 2024; Lopez et al., 2014; Miglietta & Tartaglia, 2009). Additionally, the findings revealed that TLWTC of students is influenced by the presence of Turkish-speaking family members, with such students scoring higher than those whose family members did not speak Turkish. The absence of Turkish-speaking individuals within family might present challenges akin to foreign language learners, as they lack daily practice opportunities in the TL. Without continuous

interaction in L2, their perceived proficiency, WTC, and communication frequency may not improve. Research suggests that environmental factors, including family dynamics, affect individuals' L2WTC (Farrokhi et al. 2023). Family members influence L2 learning motivation and self-efficacy, with parental attitudes shaping learners' motivation and L2WTC (Khany & Nejad, 2017; Papi & Hiver, 2020; Welesilassie & Nikolov, 2024). Students who observe their families using the TL and receive encouragement are more likely to develop stronger motivation and exhibit higher TLWTC.

6. Conclusion

This study developed an instrument to evaluate TLWTC, a critical factor for cultural adaptation at primary school level and addressed contextual outcomes. Moreover, this study uniquely revealed that the developmental effort, as manifested through engagement in leisure activities, is one of the significant dimensions of WTC in TL. The findings indicated that immigrant primary school students exhibit a moderate to high level of WTC in Turkish as the TL. While the students' WTC did not vary by gender, it did differ according to school type, native alphabet, length of residence, and the presence of Turkish-speaking family members. The results suggest that the willingness of immigrant primary school students to communicate in the TL fluctuates based on their circumstances. This insight could be valuable for teachers, school administrators, researchers, and education policymakers involved in the education of immigrant students, as these students' proficiency and TLWTC are essential for ensuring their cultural integration and continuation in the educational process. Furthermore, it can be anticipated that this considerable willingness will also contribute to the cultural integration of their families.

7. Limitation and Future Directions

The findings of this study may offer valuable insights into the TLWTC of immigrant primary school students, a subject that has not been previously explored. This research can make a significant contribution to the research agenda on L2WTC, with a particular focus on the migration setting. By providing an appropriate measurement tool for this specific target group, this study can facilitate new research opportunities. However, like many other studies, this research has certain limitations. The hard-to-reach nature of these students and the voluntary participation requirements limited the sample size, necessitating separate sample groups for the EFA and CFA analyses. The findings are restricted to immigrant students in primary schools in Türkiye. To achieve generalisable results, it is essential to include a larger sample of students and to conduct separate measurements at the international level. Future research could explore methods and techniques aimed at enhancing TLWTC among immigrant primary school students, thereby offering guidance for primary school educators. Furthermore, given the positive effects of AI on L2WTC highlighted by recent studies, the scale can be adjusted. AI usage can be incorporated into parenthetical statements within the Development Effort items.

Conflict of Interest

The authors have no conflicts of interest to declare relevant to this article's content.

8. Credit Author Statement

Firuze BAKAL was responsible for conducting the research and investigation process, which encompassed data collection and analysis, as well as drafting the initial text for the master's thesis. Ayşe Nur KUTLUCA CANBULAT, serving as the corresponding author, fulfilled the role of thesis advisor, overseeing the management and coordination of research planning and execution. Furthermore, Ayşe Nur KUTLUCA CANBULAT was tasked with presenting the published work, which included composing the initial draft (with substantive translation) and revising and editing the text.

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10. References

- Altıntaş, G. (2023). *The relationship of foreign students' attitudes to learn Turkish academic grit and subjective well-being at school* [Unpublished Master Thesis]. Akdeniz University.
- Altıntaş, G., & Kutluca Canbulat, A. N. (2024). An examination of immigrant primary school students' attitudes towards learning the target language: The role of subjective well-being at school and academic grit. *International Journal of Intercultural Relations*, 98, 101929. <https://doi.org/10.1016/j.ijintrel.2023.101929>
- Amiryousefi, M. (2018). Willingness to communicate, interest, motives to communicate with the instructor, and L2 speaking: A focus on the role of age and gender. *Innovation in Language Learning and Teaching*, 12(3), 221–234. <https://doi.org/10.1080/17501229.2016.1170838>
- Bardovi-Harlig, K., & Bastos, M. T. (2011). Proficiency, length of stay, and intensity of interaction and the acquisition of conventional expressions in L2 pragmatics. *Intercultural Pragmatics*, 8(3), 347–384. <https://doi.org/10.1515/IPRG.2011.017>
- Bredtmann, J., Otten, S., & Vonnahme, C. (2021). Linguistic diversity in the classroom, student achievement, and social integration. *Education Economics*, 29(2), 121142. <https://doi.org/10.1080/09645292.2020.1866499>
- Cameron, D. (2013). Willingness to communicate in English as a second language as a stable trait or context-influenced variable: Case studies of Iranian migrants to New Zealand. *Australian Review of Applied Linguistics*, 36(2), 177–196. <https://doi.org/10.1075/ara1.36.2.04cam>
- Cameron, D. (2021). Case studies of Iranian migrants' WTC within an ecosystem's framework: The influence of past and present language learning experiences. In N. Zarrinabadi & M. Pawlak (Eds), *New Perspectives on willingness to communicate in a second language. Second language learning and teaching* (pp. 25–53). Springer. https://doi.org/10.1007/978-3-030-67634-6_3
- Campbell, A. Craig, T. & Collier-Reed, B. (2020). A framework for using learning theories to inform 'growth mindset' activities. *International Journal of Mathematical Education in Science and Technology*, 51(1), 26–43. <https://doi.org/10.1080/0020739X.2018.1562118>
- Cao, G. (2022). Toward the favorable consequences of academic motivation and L2 enjoyment for students' willingness to communicate in the second language (L2WTC). *Frontiers in Psychology*, 13, 997566. <https://doi.org/10.3389/fpsyg.2022.997566>
- Chen, X., Dewaele, J. M., and Zhang, T. (2022). Sustainable development of EFL/ESL learners' willingness to communicate: The effects of teachers and teaching styles. *Sustainability*, 14, 396. <https://doi.org/10.3390/su14010396>

- Chen, Y., Zhi, Y., & Derakhshan, A. (2025). Integrating artificial intelligence (AI) into the English as a foreign language classroom: Exploring its impact on students' achievement emotions and willingness to communicate (WTC). *European Journal of Education*, 60(3), e70157. <https://doi.org/10.1111/ejed.70157>
- Cheng, H. F. (2021). The effect of language-specific grit and future self-guides on willingness to communicate in the second language. *English Teaching & Learning*, 45, 283–301. <https://doi.org/10.1007/s42321-021-00081-7>
- Çağlıyan, H., & Akman, Y. (2025). Çok kültürlülük bağlamında göçmen öğrencilerin Türk eğitim sistemine uyumuna ilişkin bir derleme [A review of immigrant students' adaptation to the Turkish education system in the context of multiculturalism]. *Studies in Educational Research and Development*, 9(2), 192–223. <http://serd.artvin.edu.tr/tr/pub/article/1757312>
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2025). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları* (Multivariate statistics for social sciences: SPSS and LISREL applications) (8th ed.). Pegem Akademy. https://www.researchgate.net/publication/326776390_Sosyal_Bilimler_Icin_Cok_Değişkenli_Istatistik_SPSS_ve_LISREL_Uygulamaları
- Csizér, K. (2020). The L2 motivational self-system. In M. Lamb, K. Csizér, A. Henry, & S. Ryan (Eds.), *The Palgrave handbook of motivation for language learning* (pp. 71–93). Springer. <https://doi.org/10.1007/978-3-030-28380-3>
- Demirel, A., & Yalçın, Ç. (2021). Yabancı dil olarak Türkçe öğrenenlerin başarılarını etkileyen unsurlar üzerine öğretici görüşleri (The instructors' views on factors affecting the success of learners learning Turkish as a foreign language). *RumeliDE Journal of Language and Literature Studies*, 10, 22–43. <https://doi.org/10.29000/rumelide.1009035>
- Dewaele, J.-M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behaviour on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology*, 38(4), 523–535. <https://doi.org/10.1177/0261927X19864996>
- Dewaele, J.-M., & Pavelescu, L. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: A multiple case study. *Innovation in Language Learning and Teaching*, 15(1), 66–80. <https://doi.org/10.1080/17501229.2019.1675667>
- Doyle, H., & Parrish, M. (2012). Investigating students' ways to learn English outside of class: A researchers' narrative. *Studies in Self-Access Learning Journal*, 3(2), 196–203. https://sisaljournal.org/archives/jun12/doyle_parrish/
- Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited* (1st ed.). Routledge. <https://doi.org/10.4324/9781315779553>
- Dörnyei, Z., MacIntyre, P. D., & Henry, A. (Eds.). (2015). *Motivational dynamics in language learning*. Multilingual Matters. https://www.researchgate.net/publication/291420960_Motivational_dynamics_in_language_learning_Zoltan_Dornyei_Peter_D_MacIntyre_and_Alastair_Henry_Publisher_Multilingual_Matters_2015_ISBN_978-1-78309-255-0_Pages_430
- Ebert, K. D., & Reilly, M. (2022). Predictors of language proficiency in school-age Spanish English bilingual children with and without developmental language disorder. *Bilingualism: Language and Cognition*, 25, 296–306. <https://doi.org/10.1017/S1366728921000985>
- Ebn-Abbasi, F., Fattahi, N., Noughabi, M. A., & Botes, E. (2024). The strength of self and L2 willingness to communicate: The role of L2 grit, ideal L2 self and language mindset. *System*, 123, 103334. <https://doi.org/10.1016/j.system.2024.103334>
- Fan, C. (2026). Impact of teacher support on L2WTC: The mediating roles of foreign language enjoyment and growth language mindset. *Innovation in Language Learning and Teaching*, 1–31. <https://doi.org/10.1080/17501229.2026.2630021>

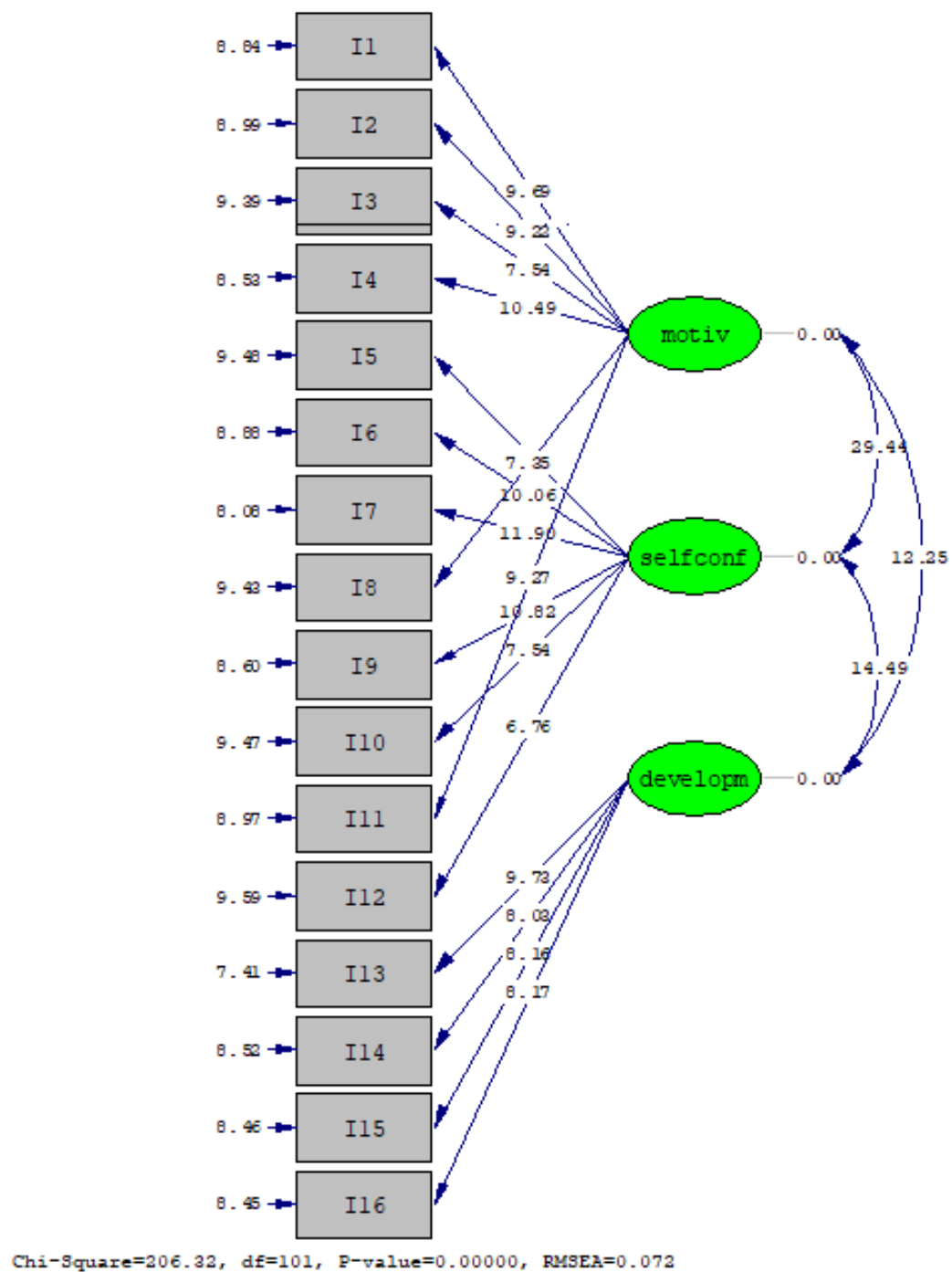
- Farrokhi, F., Zohrabi, M., & Azarberis, A. G. (2023). A socio-cognitive account of willingness to communicate from the perspective of complex dynamic systems theory. *Language Teaching Research Quarterly*, 36, 35–54. <https://doi.org/10.32038/ltrq.2023.36.03>
- Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, 43, 1–4. <https://doi.org/10.1016/j.learninstruc.2016.02.002>
- Gallagher, C. (2013). Willingness to communicate and cross-cultural adaptation: L2 communication and acculturative stress as transaction. *Applied Linguistics*, 34, 53–73. <https://doi.org/10.1093/applin/ams023>
- Gromova, C., Khairutdinova, R., Birman, D., & Kalimullin, A. (2021). Educational practices for immigrant children in elementary schools in Russia. *Education Sciences*, 11(7), 325. <https://doi.org/10.3390/educsci11070325>
- Gürler, M. (2020). Devlet Okuluyla Özel Okul Arasındaki Farklar (Differences between public school and private school). *Cappadocia Journal of Education*, 1(1), 1–6. <https://izlik.org/JA24WP62ZF>
- Güvendir, E., Borràs, J., & Acar Güvendir, M. (2024). The effects of study abroad on L2 vocabulary development: A meta-analysis. *Study Abroad Research in Second Language Acquisition and International Education*, 9(1), 26–51. https://www.researchgate.net/publication/378119459_The_effects_of_study_a_broad_on_L2_vocabulary_development_A_meta-analysis
- Henry, A., & MacIntyre, P. D. (2023). *Willingness to communicate, multilingualism and interactions in community contexts*. Channel View Publications. <https://doi.org/10.21832/HENRY1944>
- Henry, A., Thorsen, C., & MacIntyre, P. D. (2024). Willingness to communicate in a multilingual context: Part one, a time-serial study of developmental dynamics. *Journal of Multilingual and Multicultural Development*, 45(4), 937–956. <https://doi.org/10.1080/01434632.2021.1931248>
- Hiver, P. & Papi, M. (2019). Complexity theory and L2 motivation. In M. Lamb, K. Csizer, A. Henry, & S. Ryan (Eds.), *The Palgrave handbook of motivation for language learning* (pp. 117–137). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28380-3_6
- Jiang, Y. (2025). Factors influencing Tibetan college students' willingness to communicate in their second language in China: A mixed methods study. *International Journal of Applied Linguistics*, 35(3), 1194–1218. <https://doi.org/10.1111/ijal.12689>
- Jin, S., & Lee, H. (2022). Willingness to communicate and its high-evidence factors: A meta-analytic structural equation modeling approach. *Journal of Language and Social Psychology*, 41(6), 716–745. <https://doi.org/10.1177/0261927X221092098>
- Joe, H. K., Hiver, P., & Al-Hoorie, A. H. (2017). Classroom social climate, self-determined motivation, willingness to communicate, and achievement: A study of structural relationships in instructed second language settings. *Learning and Individual Differences*, 53, 133–144. <https://doi.org/10.1016/j.lindif.2016.11.005>
- Kanas, A., Kosyakova, Y., & Vallizadeh, E. (2022). Linguistic enclaves, sorting, and language skills of immigrants. *Journal of Immigrant & Refugee Studies*, 1–15. <https://doi.org/10.1080/15562948.2022.2132572>
- Karakış, Ö. (2020). The relationship between foreign language motivation and achievement orientation. *Ondokuz Mayıs University Journal of Education Faculty*, 39(1), 240–266. <https://izlik.org/JA55JT92XZ>
- Khany, R., & Nejad, A. M. (2017). L2 willingness to communicate, openness to experience, extraversion, and L2 unwillingness to communicate: The Iranian EFL context. *RELC Journal*, 48(2), 241–255. <https://doi.org/10.1177/0033688216645416>

- Kim, Y., & Kang, J. (2014). A study of Korean primary school students' use of English and their willingness to communicate in English. *English Language Teaching*, 26(3), 89–112. <https://doi.org/10.17936/pkelt.2014.26.3.005>
- Kim, J., Zhao, H., & Diskin-Holdaway, C. (2022). Willingness to communicate and second language fluency: Korean-speaking short-term sojourners in Australia. *Languages*, 7(2), 112. <https://doi.org/10.3390/languages7020112>
- Lee, J. S., & Drajeti, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(5), 168–182. <https://doi.org/10.14742/ajet.5177>
- Lee, J. S., & Lee, K. (2020). Affective factors, virtual intercultural experiences, and L2 willingness to communicate in in-class, out-of-class, and digital settings. *Language Teaching Research LT Report*, 24(6), 813e833. <https://doi.org/10.1177/1362168819831408>
- Lee, J. S. (2022). The role of grit and classroom enjoyment in EFL learners' willingness to communicate. *Journal of Multilingual and Multicultural Development*, 43(5), 452–468. <https://doi.org/10.1080/01434632.2020.1746319>
- Lee, J. S., Sylvén, L. K., & Lee, K. (2021). Cross-cultural insights into Korean and Swedish secondary school students' willingness to communicate in a second language. *Journal of Multilingual and Multicultural Development*, 42, 522–536. <https://doi.org/10.1080/01434632.2019.1708917>
- Lee, J. S., Lee, K., & Hsieh, C. J. (2022). Understanding willingness to communicate in L2 between Korean and Taiwanese students. *Language Teaching Research*, 26, 455–476. <https://doi.org/10.1177/1362168819890825>
- Lee, J. S., & Taylor, T. (2024). Positive psychology constructs and Extramural English as predictors of primary school students' willingness to communicate. *Journal of Multilingual and Multicultural Development*, 1(19), 2898–2916. <https://doi.org/10.1080/01434632.2022.2079650>
- Lopez, I. Y. & Bui, N. H. (2014). Acculturation and linguistic factors on international students' self-esteem and language confidence. *Journal of International Students* 4(4). 314–329. <https://doi.org/10.32674/jis.v4i4.451>
- Lou, N. M., & Noels, K. A. (2017). Measuring language mindsets and modeling their relations with goal orientations and emotional and behavioral responses in failure situations. *Modern Language Journal*, 101(1), 214–243. <https://doi.org/10.1111/modl.12380>
- MacIntyre P. D., Clément R., Dörnyei Z., Noels K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *Modern Language Journal*, 82, 545–562. <https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>
- MacIntyre, P. D. (2020). Expanding the theoretical base for the dynamics of willingness to communicate. *Studies in Second Language Learning and Teaching*, 10(1), 111–131. <https://doi.org/10.14746/ssllt.2020.10.1.6>
- MacIntyre, P. D., Wang, L., & Khajavy, G. H. (2020). Thinking fast and slow about willingness to communicate: A two-systems view. *Eurasian Journal of Applied Linguistics*, 6(3), 443–458. <https://doi.org/10.32601/ejal.834681>
- Miglietta, A., & Tartaglia, S. (2009). The influence of length of stay, linguistic competence, and media exposure in immigrants' adaptation. *Cross-Cultural Research*, 43(1), 46–61. <https://doi.org/10.1177/1069397108326289>
- Montero, L. (2019). Developing effective L2 communication strategies abroad and at home. *The Language Learning Journal*, 47(5), 642–652. <https://doi.org/10.1080/09571736.2017.1357744>
- Montgomery, G., Zhang, Y. B., & Imamura, M. (2021). The effects of Latino immigrants' acculturation strategy and US Americans' assimilation attitudes on perceptions of

- accommodation satisfaction and willingness to communicate. *International Journal of Intercultural Relations*, 82, 157–167. <https://doi.org/10.1016/j.ijintrel.2021.03.008>
- Ortiz Cobo, M., Kralik, R., & Bianco, R. (2020). Refugees' L2 learning: new perspectives on language motivation research. *XLingae*, 13(4), 64–80. <https://doi.org/10.18355/XL.2020.13.04.05>
- Özel, G., & Kutluca Canbulat, A. N. (2025). An examination of immigrant primary school students' target language listening and reading anxiety. *International Electronic Journal of Elementary Education*, 18(1), 89–107. <https://doi.org/10.26822/iejee.2025.421>
- Papi, M., & Hiver, P. (2020). Language learning motivation as a complex dynamic system: a global perspective of truth, control, and value. *Modern Language Journal*, 104, 209–232. <https://doi.org/10.1111/modl.12624>
- Pawlak, M., & Mystkowska-Wiertelak, A. (2015). Investigating the dynamic nature of L2 willingness to communicate. *System*, 50, 1–9. <https://doi.org/10.1016/j.system.2015.02.001>
- Pawlak, M., Zarrinabadi, N. & Kruk, M. (2024). Positive and negative emotions, L2 grit and perceived competence as predictors of L2 motivated behaviour. *Journal of Multilingual and Multicultural Development*, 45(8), 3188–3204. <https://doi.org/10.1080/01434632.2022.2091579>
- Polatcan, F. (2018). *Examining the willingness to communicate for those who learn Turkish as a foreign language* [Unpublished doctoral dissertation]. Atatürk University.
- Reinders, H., Lai, C., & Sundqvist, P. (Eds.). (2022). *The Routledge handbook of language learning and teaching beyond the classroom*. Routledge. <https://doi.org/10.4324/9781003048169>
- Qiao, P. (2024). Induction and reflection: A study of acculturation model in second language acquisition in the past decade. *Open Journal of Social Sciences*, 12, 397–405. https://www.scirp.org/pdf/jss2024124_271768538.pdf
- Sadoughi, M., & Hejazi, S. Y. (2024). Growth language mindset and willingness to communicate: Contributions of linguistic risk taking and learning experience. *Acta Psychologica*, 248, 104367. <https://doi.org/10.1016/j.actpsy.2024.104367>
- Schmid, S., Haenni Hoti, A., & Makarova, E. (2026). Tridimensional acculturation and academic self-concept of minoritized primary students in Swiss multicultural classrooms: A latent profile analysis. *Education Sciences*, 16(3), 386. <https://doi.org/10.3390/educsci16030386>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 101832. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- Sellers, V. (2000). Anxiety and reading comprehension in Spanish as a foreign language. *Foreign Language Annals*, 33(5), 512–52. <https://doi.org/10.1111/j.1944-9720.2000.tb01995.x>
- Soutschek, A., Kang, P., Ruff, C. C., Hare, T. A., & Tobler, P. N. (2018). Brain stimulation over the frontopolar cortex enhances motivation to exert effort for reward. *Biological Psychiatry*, 84(1), 38–45. <https://doi.org/10.1016/j.biopsych.2017.11.007>
- St John, O., & Liubinienė, V. (2021). This is not my world. Essential support strategies for newly arrived adult immigrants learning Swedish. *Sustainable Multilingualism*, (18), 85–110. <https://doi.org/10.2478/sm-2021-0005>
- Stebbins, R. A. (2018). Leisure and the positive psychological states. *The Journal of Positive Psychology*, 13(1), 8–17. <https://doi.org/10.1080/17439760.2017.1374444>
- Sundqvist, P. (2019). Sweden and informal language learning. In M. Dressman & R. Sadler (Eds.), *The Handbook of Informal Language Learning* (pp. 319–332). John Wiley & Sons. <https://doi.org/10.1002/9781119472384.ch21>

- Sundqvist, P. (2024). Extramural English as an individual difference variable in L2 research: Methodology matters. *Annual Review of Applied Linguistics*, 1-13. <https://doi.org/10.1017/S0267190524000072>
- Tabachnick B. G., & Fidell L. S. (2013.) *Using multivariate statistics* (6th ed). Pearson.
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2022). L2 grit: Passion and perseverance for second-language learning. *Language Teaching Research*, 26(5), 893-918. <https://doi.org/10.1177/1362168820921895>
- Toppelberg, C. O., & Collins, B. A. (2010). Language, culture, and adaptation in immigrant children. *Child and Adolescent Psychiatric Clinics of North America*, 19(4), 697-717. <https://doi.org/10.1016/j.chc.2010.07.003>
- Wang, C., Tseng, W. T., Chen, Y. L., & Cheng, H-F. (2020). Classroom interactions in the target language: Learners' perceptions, willingness to communicate, and communication behavior. *The Asia-Pacific Education Researcher*, 29, 393-404. <https://doi.org/10.1007/s40299-019-00492-y>
- Welesilassie, M. W., & Nikolov, M. (2024). The relationship among EFL learners' motivational self-system, willingness to communicate, and self-assessed proficiency at an Ethiopian preparatory high school. *Heliyon*, 10(2). <https://doi.org/10.1016/j.heliyon.2024.e24171>
- Yang, Y., & Zhang, K. (2026). The effect of classroom mastery goals structure on L2 willingness to communicate: The mediating roles of positive psychological capital and ideal L2 self. *International Journal of Applied Linguistics*. <https://doi.org/10.1111/ijal.70099>
- Yeşilyurt, S., & Çapraz, C. (2018). Ölçek geliştirme çalışmalarında kullanılan kapsam geçerliği için bir yol haritası (A road map for the content validity used in scale development studies). *Erzincan University Journal of Education Faculty*, 20(1), 251-264. <http://dx.doi.org/10.17556/erziefd.297741>
- Zarrinabadi, N., & Tanbakooei, N. (2016). Willingness to communicate: Rise, development, and some future directions. *Language and Linguistics Compass*, 10(1), 30-45. <https://doi.org/10.1111/lnc3.12176>
- Zarrinabadi, N., Lou, N. M. & Shirzad, M. (2021). Autonomy support predicts language mindsets: implications for developing communicative competence and willingness to communicate in EFL classrooms. *Learning and Individual Differences*, 86, 101981. <https://doi.org/10.1016/j.lindif.2021.101981>
- Zarrinabadi, N., & Pawlak, M. (Eds.). (2021). *New perspectives on willingness to communicate in a second language*. Springer Nature.
- Zhang, J., Beckmann, N., & Beckmann, J. F. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System*, 72, 226-239. <https://doi.org/10.1016/j.system.2018.01.003>
- Zhang, R., Zou, D., Cheng, G., Xie, H., Wang, F. L., & Au, O. T. S. (2021). Target languages, types of activities, engagement, and effectiveness of extramural language learning. *PLoS ONE*, 16(6), e0253431. <https://doi.org/10.1371/journal.pone.0253431>
- Zhang, L. J., Saeedian, A., & Fathi, J. (2022). Testing a model of growth mindset, ideal L2 self, boredom, and WTC in an EFL context. *Journal of Multilingual and Multicultural Development*, 45(8), 3450-3465. <https://doi.org/10.1080/01434632.2022.2100893>
- Zhao, X. & Wang, D. (2023). Grit in second language acquisition: a systematic review from 2017 to 2022. *Frontiers in Psychology*, 14, 1238788. <https://doi.org/10.3389/fpsyg.2023.1238788>

Appendix 1:
The path diagram (t-values) of the TLWTC scale



Appendix 2:
Path diagram obtained from the second-order confirmatory factor analysis (t-values)

