Affective factors, intercultural sensitivity, and willingness to communicate orally outside class: A study with EFL secondary school learners in Poland and Spain

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Abstract

This study examined out-of-school oral willingness to communicate (WTC) in two modes of communication (face-to-face [FtF] and digital) among English as a Foreign Language (EFL) secondary school students in Poland and Spain as well as the associations between affective factors and intercultural sensitivity with WTC in both settings. A total of 1480 students from 17 schools in Poland and 1128 students from 11 schools in Spain participated in this study. The study found that learners from both national contexts shared extremely similar levels of out-of-class oral WTC in the two settings. After controlling for sociodemographic factors (age, gender, socioeconomic status, and relative self-assessed spoken competence), hierarchical regression analyses revealed that Foreign Classroom Language Anxiety (FLCA), Foreign Language Enjoyment (FLE), and intercultural sensitivity were predictors of the two communicative settings in both contexts, although the relative importance of predictors differed in each case, as determined by the dominance analyses. Intercultural sensitivity, a factor that has seldom been investigated in relation to WTC, emerged as the most influential predictor for oral WTC in both communication environments within the two study samples. The study also discusses the implications for both research and foreign language pedagogy.

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Introduction

Willingness to communicate (WTC) has been defined as "a readiness to enter into discourse at a particular time with a specific person or persons, using an L2" (MacIntyre et al., 1998. p. 547). This voluntary choice to engage in verbal communication or remain silent when presented with the opportunity is a fundamental concept in the field of foreign and second language (FL/L2) learning and teaching (MacIntyre, 2007, 2020). Research has consistently demonstrated that learners who exhibit a strong inclination towards communicating in FL/L2 are more likely to achieve success in language learning (MacIntyre et al., 2003; Yashima et al., 2004; Zhou et al., 2023).

Although a substantial corpus of research on FL/L2 WTC is currently available, there are certain gaps in the existing literature concerning out-of-class WTC, as will become apparent in the literature review below. First, with some exceptions (Chen et al., 2021; Lee & Lu, 2021; Lee & Sylvén, 2021; Lee & Taylor, 2022; Lee, Yeung et al., 2022; Soyoof, 2022), most research on out-of-class WTC has concentrated on young undergraduate adults, with limited attention given to learners in secondary education. WTC in these two groups of learners may be influenced differently by different factors. Most notably, foreign language instruction is mandated within the secondary school curriculum, rendering it obligatory for students to enroll in such courses, whereas undergraduate adults may have more instrumental motivation for learning and using a

foreign language, such as for academic or career advancement. Second, as highlighted by Lee, Yeung et al. (2022), prior investigations of WTC have primarily focused on traditional in-class and out-of-class settings, with a dearth of studies in digital environments. Third, although some recent research has focused on predictors of out-of-class WTC, most notably concerning affective variables and informal digital English language learning (Lee & Drajati, 2019; Lee & Lee, 2020; Lee & Taylor, 2022; Mulyono & Saskia, 2020, 2021), this line of research is still in its early stages, has focused on Asian contexts, and lacks coverage of various contexts and potential influencing factors. Finally, the existing body of research on the association between intercultural-related factors and WTC, particularly the relationship between intercultural sensitivity and WTC, remains extremely limited (Liu, 2017).

In light of the lack of research on this topic with secondary school learners from different national contexts and in a variety of communication settings, this study aimed to investigate out-of-class oral WTC in EFL learners' secondary schools in Poland and Spain, and to identify the factors associated with out-of-class FtF and digital WTC, with the hope that the results obtained can then be used to inform educational practices. Despite being both European countries, Poland and Spain exhibit notable differences in their respective traditions concerning FL teaching and assessment. In Spain language teaching continues to follow the Grammar Translation Method and other traditional methodologies, while communicative competence receives comparatively lesser attention (García-Sampedro, 2021; Morales Gálvez, 2009). Conversely, in Poland, the prevalence of a communicative approach is observed among language teacher (Dziecioł-Pedich, 2015).

2. Willingness to Communicate outside the classroom: An overview

This section provides an overview of research on out-of-class WTC. Initially, L1 WTC was viewed as a stable personality trait that persisted over time and contexts (McCroskey & Richmond, 1987). However, the pyramid model of L2 WTC suggests that contextual variables play a role in determining whether an individual chooses to communicate in the L2 in specific situations. This review focuses exclusively on studies investigating WTC beyond the classroom, specifically in the context of learning a foreign language, and examines trends in out-of-class WTC research, namely variations based on the communication environment or participants' geographic context, factors influencing WTC, and interculturality-related factors and WTC.

2.1. WTC across contexts and communication settings

Research findings highlight the tendency of language learners to exhibit higher levels of WTC in the target language outside the classroom, with variations observed among learners from different backgrounds and communication settings. Lee and Hsieh (2019) found that EFL Taiwanese undergraduate students were most inclined to communicate in a digital environment and least willing in the classroom. Lee and Lee (2020) discovered that Korean EFL students had the highest WTC scores for FtF communication outside the classroom, followed by digital settings, and the lowest scores for in-class WTC. Indonesian EFL undergraduate and secondary school students, as studied by Mulyono and Saskia (2020), displayed the highest WTC in the digital environment, followed by the classroom, and the lowest WTC in extramural situations. It is worth noting that the

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assessment tools used in these studies may have influenced the results, as assessment of FtF WTC focused on oral interactive situations, while assessment of WTC in the digital environment included written communication scenarios as well.

As regard comparisons concerning student groups from different national backgrounds, in the study by Lee, Lee et al. (2022), Korean and Taiwanese EFL university students displayed the lowest WTC scores in the classroom, with no significant differences between the two groups. Additionally, Korean students had significantly higher FtF WTC scores outside the classroom, whereas Taiwanese students achieved significantly higher scores in the digital setting.

2.2. Affective factors and experiences associated to WTC

Research has explored the association between various affective-related variables and out-of-class WTC. The review in this section will confine its focus to research that investigates the associations between WTC and the affective variables under examination in the current study.

From studies concerning the association between anxiety and WTC, it can be concluded that this affective factor may affect WTC depending on the communication environment. Speaking anxiety was found to be a negative predictor of WTC in FtF contexts inside and outside the classroom and in the digital setting in the studies by Mulyono and Saskia (2020, 2021). However, in the study by Lee and Lee (2020), although anxiety was found to be a negative predictor of WTC inside the classroom, it did not have a predictive value in out-of-class environments (FtF and digital). Similarly, Lee and Hsieh (2019), who examined the relationship between affective variables and WTC in the same three contexts, concluded that while the absence of L2 anxiety significantly predicted students' WTC in non-digital environments (in-class and out-of-class contexts), it did not have the same impact in the digital setting. However, all qualitative findings indicate a relationship between speaking anxiety and out-of-class WTC. In the study by Lee, Lee et al. (2022), the data obtained from interviews conducted with a subset of participants indicated that language speaking anxiety played a significant role in influencing the WTC of both groups (Korean and Taiwanese participants). In a multiple case study that involved two adult learners of English, Pavelescu (2023) examined the role of emotions in second language learning, with a specific focus on the relationship between emotion, motivation, WTC, and second language context. The findings revealed that enjoyment and anxiety were the most prominent emotions experienced by learners, although the sources of these emotions differed slightly. While enjoyment strongly influenced their WTC in the classroom, one of the learners experienced anxiety that hindered communication outside the class. Soyoof (2022) investigated the factors that impact Iranian EFL secondary school learners' WTC in an extramural digital context. Affective variables (L2 confidence and anxiety in the digital context) were among the main factors influencing students' L2 WTC.

As regard enjoyment, Lee, Yeung et al. (2022) explored the relationship between Informal Digital Learning of English (IDLE), FLE, and WTC among EFL secondary students in Hong Kong. More precisely, the study examined how the three dimensions of FLE, namely, teacher appreciation, personal enjoyment, and social enjoyment, mediate the association between IDLE and L2 WTC, both inside and outside the classroom. The findings indicated that the three dimensions of FLE served as mediators between IDLE

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and L2 WTC in the classroom. For L2 WTC outside the classroom, personal and social enjoyment played mediating roles. Furthermore, in a study by Lee and Taylor (2022), classroom enjoyment was found to be significantly and positively correlated with WTC outside and inside the class; however, it was only found a predictor of in-class WTC. Additionally, in the multiple case study by Pavelescu (2023), enjoyment and anxiety were the most prevalent emotions reported by the participants.

2.3. Intercultural sensitivity and interculturality-related factors, and WTC

Intercultural sensitivity, an essential concept in the field of intercultural communication, refers to an individual's capacity to effectively navigate and engage with people from diverse cultural backgrounds. An early definition of intercultural sensitivity was provided by Bennett (1993), who characterized it as "the experience of cultural difference, an experience that is dependent on the way a person constructs that difference" (p. 52). The seminal work of Chen and Starosta (2000) has greatly helped further elucidate this construct. They developed the Intercultural Sensitivity Scale (ISS), a pivotal instrument for understanding and measuring individuals' receptiveness to cultural differences. It encompasses three fundamental dimensions: cognitive, affective, and behavioral. The cognitive dimension of intercultural sensitivity refers to the depth of an individual's knowledge and comprehension of diverse cultures. It includes their capacity to grasp the nuances, customs, and values that shape cultural identities. The affective component encompasses attitudes, emotions, and empathy towards diverse cultural groups. Finally, the behavioral dimension entails the ability to adapt behavior and communication styles when interacting with individuals from different cultural backgrounds. The ISS has been applied across a variety of settings, demonstrating strong validity in numerous studies (e.g., Chen & Starosta, 2000; Liu, 2017; Olson & Kroeger, 2001; Su, 2018).

To the best of our knowledge, the only study that has so far addressed the association between intercultural sensitivity and WTC is that conducted by Liu (2017) with Chinese language learners from a university in Beijing. The study concluded that the level of students' WTC in Chinese (WTCC) was predominantly influenced by their Chinese-speaking anxiety level and duration of stay in China. Although the WTC was positively correlated with intercultural sensitivity, this association was not significant. According to Liu (2017), this was a counterintuitive finding in that "a higher sensitivity to the difference between Chinese culture and the native culture and appreciation of the difference between the two were supposed to be accompanied by a higher WTCC to different audiences in different situations, and vice versa" (p. 436).

The limited research conducted on the relationship between WTC and interculturality-related issues has revolved around two notions: international posture and global perspective. Yashima (2002) investigated the relationship between international posture and WTC among EFL university students in Japan. International posture encompasses an inclination towards foreign or international affairs, a willingness to interact with intercultural partners, and a non-ethnocentric attitude. Structural equation modeling revealed that motivation affects self-confidence in second language communication, thereby influencing WTC. Additionally, a significant direct relationship was found between international posture and WTC. Mahmoodi et al. (2013) conducted a study with university students in Iran and similarly identified a direct path from international posture to WTC, along with a positive correlation. Two studies by Fan et al. (2020) and Xiao and Qiu (2022) focused on the association between the global perspective and WTC. The

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global perspective refers to a perspective on human development in the global world, grounded in intercultural maturity and communication. Both studies, conducted with Chinese university students, revealed a significant positive correlation between global perspective and WTC in English. It is important to note that both studies included items covering both inside and outside the WTC in their measurement of the WTC.

2.4. Conclusions

The reviewed studies indicate higher out-of-class WTC than in-class WTC. Digital environments generally elicit higher WTC, followed by FtF communication outside the classroom, whereas WTC within the classroom tends to be lower. These studies also indicate that out-of-class WTC can be influenced by the type of communicative environment, whether FtF or digital. It is important to note that the focus (on oral and/or written communication) of the research instruments used to investigate out-of-class WTC may have impacted the reported results. Limited evidence suggests variations in out-of-class WTC among learners of different national backgrounds. Regarding affective factors and out-of-class WTC, research has revealed that the nature of this association may vary depending on the communicative environment. The review above also reveals that the link between out-of-class WTC and intercultural sensitivity remains very much underexplored. Initial findings on the association between WTC and intercultural factors, albeit limited, suggest a potential relationship. Furthermore, it is important to note that most studies in the field of out-of-class WTC in FtF and digital settings have primarily focused on university students in Asian contexts.

3. The present study

3.1. Objectives and research questions

In light of the scarcity of research on FL secondary school students' WTC in a variety of communication settings and geographical contexts, the present study aimed to investigate the oral WTC in English outside the class among secondary school students studying EFL in Poland and Spain. This study focused on two modes of communication: FtF and digital interactions. Additionally, it explored the relationships between affective factors, intercultural sensitivity, and WTC in both communication settings. More specifically, this study aimed to answer the following research questions:

Research Question 1: How willing are EFL secondary school learners in Poland and Spain to communicate in two outside-class settings (FtF and digital)?

Research Question 2: How do EFL secondary school learners differ in out-of-class WTC in these two national contexts?

Research Question 3: How do affective factors and intercultural sensitivity predict the out-of-class WTC of EFL secondary school learners in Poland and Spain in FtF and digital settings?

3.2. Participants and Contexts

The participants in the study (N = 2608 EFL) were conveniently sampled from 17 schools in Poland and 11 schools in Spain. The ages of the learners ranged from 13 to 20 years

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(M =15.78 years; SD = 1.28 (further information can be found in Table 1). All the students in both countries studied English as their first foreign language.

Table 1 Demographic characteristics of the sample

		Poland (N = 1480)	Spain (N = 1128)
Age range		13-20	13-20
Mean age (SD)		16.19 (1.04)	15.24 (1.29)
Gender	Female	868 (58.65%)	609 (53.99%)
	Male	496 (33.51%)	490 (43.44%)
	Other	51 (3.45%)	11 (0.98%)
	Prefer not to say	65 (4.40%)	18 (1.60%)

Emails were sent to request the schools and English teachers to participate in the investigation by collaborating in data collection. Prior to the study, formal written consent was obtained from the school headteachers. The schools assumed responsibility for securing parental consent to include their children in this study. Student participation in the study was voluntary. In Poland, the data collection involved students using their own mobile devices to complete an online questionnaire during their English classes. The researcher was present during the classes to oversee the process. In Spain, a similar process was followed. Spanish teachers who agreed to participate in the study were contacted through video conferences and made responsible for ensuring that their students completed the online questionnaire during their English classes. Communication with English teachers was established in Polish and Spanish, as one of the researchers was bilingual. Polish schools were located in Pruszcz Gdanski, Gdansk, Sopot, Gdynia, and Wroclaw (northern and southern Poland), whereas Spanish schools were situated in the Andalusian provinces of Málaga, Granada, Almería, and Jaén (southern Spain). The school sample represented a mix of urban, suburban, and rural areas. Among the schools, five Spanish schools and two Polish schools were bilingual, offering instruction in both English and Spanish/Polish.

3.3. Instruments

A questionnaire was used as the quantitative instrument in this study. The language of the questionnaire varied based on the students' location, with Spanish being used for students in Spain and Polish being used for students in Poland. When incorporating English items from previous publications, cultural adaptations were made, if necessary, following the guidelines provided by the International Test Commission (2017) for test translation and adaptation. The questionnaire consisted of the following eight sections.

a. Sociodemographic section: This section gathered data related to the participants' gender, age, school, and highest level of education attained by their parents. Parental level of education was used as a proxy for socio-economic status (SES).

b. Perception of relative standing in spoken production and interaction competence measure: Students were asked to assess their spoken production and interaction in

comparison to their peers in the English class. They provided ratings on a scale ranging from 0 ("extremely far below that of my classmates") to 100 ("extremely far above that of my classmates").

c. Foreign Language Classroom Anxiety scale: This study used a short version of the Foreign Language Classroom Anxiety (FLCA) scale developed by Horwitz et al. (1986) and previously employed in a study conducted by MacIntyre (1992) (Appendix). This abbreviated version, consisting of eight items, demonstrated reliability equivalent to that of the original scale (MacIntyre, 1992) and was subsequently validated by Botes et al. (2022). Among the items, two were indicative of low anxiety (reverse-coded), while six were indicative of high anxiety. The internal consistency of this scale in our study, assessed using Cronbach's alpha coefficient, was high ($\alpha = .910$).

d. Foreign Language Enjoyment Scale: To assess student enjoyment when learning and speaking English, a modified version of the short form of the Foreign Language Enjoyment Scale (S-FLES) developed by Botes et al. (2021) was used, which comprised 9 items extracted from the original FL enjoyment scale created by Dewaele and McIntyre (2014). Some items were rephrased to reflect enjoyment, specifically when speaking and interacting orally in English (Appendix). Participants responded to the statements using a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The scale demonstrated high reliability ($\alpha = .873$).

e. Intercultural sensitivity scale: The participants' intercultural sensitivity was measured by 10 items in the scale used by Wu (2015), who extracted 13 items from the Intercultural Sensitivity Scale formulated by Chen and Starosta (2000) (Appendix). The scale included three dimensions identified by Wu (2015): security in interaction (items 1 to 4), reflecting the interlocutors' self-confidence and security during intercultural communication; commitment to and attention to interaction (items 5 to 7), capturing the participants' degree of participation and sensitivity towards culturally diverse interlocutors; and respect for cultural differences (items 8 to 10), pertaining to the identification, acceptance, and respect for others' cultural differences in communication. The scale demonstrated high reliability ($\alpha = .836$) when using Cronbach's alpha.

f. Out-of-class FtF WTC scale: Six items measured in-person WTC outside the classroom (Appendix). Items reflect common communicative situations in which the respondent may find themselves interacting in English with one or more foreign nationals. Participants were asked to answer on a five-point Likert scale, with 1 representing 'I avoid it' and 5 representing 'definitely willing.' The scale demonstrated high reliability ($\alpha = .876$).

g. Out-of-class digital WTC: Five items were designed to measure out-of-class WTC in situations where the respondents interact in English with one or more foreign nationals in the following virtual settings: playing a massively multiplayer online game, sending voice messages, and interacting through a video conferencing tool in English (Appendix). The scale was the same as the out-of-class FtF WTC scale. The reliability of the scale was high ($\alpha = .818$).

3.4. Data analysis

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To address Research Questions 1 and 2, means, standard deviations, and medians were calculated for each parameter and test group. Kolmogorov–Smirnov tests for normality were performed. As the results were not normally distributed, non-parametric (Mann–Whitney) tests were used for comparisons between the two groups.

To answer Research Question 3, Pearson correlation analyses were performed to examine the relationships between the study variables FLE, FLCA, Intercultural sensitivity, FtF WTC, and digital WTC. To ascertain whether the independent variables in each case significantly predicted participants' out-of-class FtF and digital WTC in English, hierarchical regression analyses were independently conducted on the sample data from Poland and Spain. Dominance analyses (Mizumoto, 2023) were employed to identify the relative importance of the independent variables in predicting WTC outcomes.

3.5. Results

3.5.1. EFL secondary students' out-of-class oral WTC in Poland and in Spain

Very similar levels of outside-class oral WTC in the Poland and the Spain samples concerning the communication settings under study were found. The results of the Mann–Whitney tests confirmed that there were no significant differences between the two groups (Table 2).

Table 2 Result of the Mann–Whitney test comparing the difference in out-of-class FtF and digital WTC between the two groups

Out-of-class setting	Country	*Mean* (Potential range: 1-5) (*SD*)	*Median*	Mean Rank	*U*	*z*	*p*	Effect size *d*
Face-to-face	Poland	3.66 (*.79*)	3.83	1291.09	802874.500	-1.045	.296	0.065
	Spain	3.68 (.89)	3.83	1322.10				
Digital	Poland	3.44 (*.86*)	3.60	1282.98	814870.500	-1.676	.094	0.041
	Spain	3.45 (.99)	3.60	1332.73				

3.5.2. Factors predicting the out-of-class FtF WTC of EFL secondary school students in Poland and in Spain

Prior to regression analyses, correlation analyses were performed. As shown in Tables 3 and 4, the affective factors were significantly correlated with both FtF and digital WTC in the two samples. In both communication settings, WTC was positively associated with FLE and intercultural sensitivity and negatively related to FLCA. Interestingly, the association between these affective factors was stronger with FtF than with digital WTC in both samples. Additionally, every association between the factors investigated was stronger in the case of the sample from Spain. None of the correlation coefficients between the independent variables that were significantly correlated were too high (Tables 3 and 4). This suggests that the multicollinearity of the data was not likely to be a problem (Tabachnick & Fidell, 1989).

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Table 3 Intercorrelations between variables (Poland sample)

Pearson correlations	1	2	3	4
1. FLE				
2. FLCA	–.17*			
3. Intercultural sensitivity	.21*	–.46*		
4. Face-to-face WTC	.28*	–.47*	.66*	
5. Digital WTC	.20*	–.43*	.54*	.62*

Note. FLE = Foreign Language Enjoyment; FLCA = Foreign Language Classroom Anxiety.
* $p < .01$. $N = 1364$.

Table 4 Intercorrelations between variables (Spain sample)

Pearson correlations	1	2	3	4
1. FLE				
2. FLCA	–.10*			
3. Intercultural sensitivity	.24*	–.27*		
4. Face-to-face WTC	.35*	–.36*	.53*	
5. Digital WTC	.26*	–.37*	.43*	.72*

Note. FLE = Foreign Language Enjoyment; FLCA = Foreign Language Classroom Anxiety.
* $p < .01$. $N = 1099$.

For the sample from Poland, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in FtF contexts using affective factors was significant ($F(7, 1356) = 189.397$, $p < .001$, adjusted $R^2 = .50$). In this model, gender, relative standing, FLE, and intercultural sensitivity were positive predictors of digital WTC, whereas FLCA was a significant negative predictor. The results of the hierarchical regression analysis and the dominance analysis are shown in Table 5.

Table 5. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	2.16	0.30	7.17	<.001	–			

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Gender	0.22	0.04	5.66	<.001	.14			
Age	–0.01	0.02	–0.43	.67	–.01			
SES	0.09	0.02	4.36	<.001	.11			
Relative Standing	0.17	0.01	17.96	<.001	.45			
Step 2						.49		
(Constant)	0.57	0.29	1.92	.06	–			
Gender	0.20	0.03	6.04	<.001	.12		.01 (2.6%) [6]	[.01, .02]
Age	–0.01	0.01	–0.08	.93	–.01		.00 (0%) [7]	[.00003, .0004]
SES	0.04	0.02	2.53	.01	.05		.01 (2.6%) [5]	[01, .03]
Relative Standing	0.03	0.01	2.90	.01	.07		.07 (14.8%) [3]	[.05, .09]
FLCA	–0.12	0.02	–6.20	<.001	–.16		.08 (15.6%) [2]	[.06, .10]
FLE	0.13	0.02	6.46	<.001	.13		.04 (7.5%) [4]	[.02, .06]
Intercultural Sensitivity	0.70	0.03	21.72	<.001	.52		.28 (56.7%) [1]	[.26, .31]

Note. $N = 1364$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .49$)

For the sample from Spain, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in FtF contexts using affective factors was significant ($F(7, 1091) = 127.381$, $p < .001$, adjusted $R^2 = .45$). In this model, age, SES, relative standing, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, whereas FLCA was a significant negative predictor. The results of the hierarchical regression and the dominance analysis are presented in Table 6.

Table 6. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.27		
(Constant)	1.44	0.29	4.97	<.001	–			
Gender	0.10	0.05	2.15	.032	.06			
Age	0.06	0.02	3.46	<.001	.09			
SES	0.03	0.02	1.88	.060	.05			
Relative Standing	0.18	0.01	18.15	<.001	.50			
Step 2						.45		
(Constant)	–0.47	0.31	–1.35	.176	–			
Gender	0.07	0.04	1.64	.101	.04		.003 (0.7 %) [7]	[.0015, .0091]
Age	0.04	0.02	2.57	.010	.06		.004 (0.9 %) [6]	[.0008, .011]
SES	0.04	.001	3.04	.002	.07		.02 (4.4%) [5]	[.009, .03]
Relative Standing	0.10	0.01	10.03	<.001	.28		.13 (28.9 %) [2]	[.10, .16]
FLCA	–0.10	0.03	–4.12	<.001	–.11		.05 (11.1%) [4]	[.03, .08]
FLE	0.24	0.03	8.31	<.001	.20		.07 (15.6%) [3]	[.05, .10]

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Intercultural Sensitivity	0.53	0.04	13.91	<.001	.35		.17 (37.8%) [1]	[.13, .21]

Note. N = 1099. DW: dominance weight. The sum of dominance weights is equal to the total R^2 (R^2 = .45)

3.5.3. Factors predicting the out-of-class digital WTC of EFL secondary school students in Poland and in Spain

In the sample from Poland, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in digital contexts using affective factors was significant (F(3, 1356) = 104.426, p < .001, adjusted R^2 = .35). In this model, relative standing, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, while gender, age, and FLCA were significant negative predictors. The results of the hierarchical regression analysis and the dominance analysis are presented in Table 7.

Table 7. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class digital WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.18		
(Constant)	2.95	.034	8.63	<.001				
Gender	–0.16	0.04	–3.51	<.001	–.09			
Age	–0.04	0.02	–2.37	.02	–.06			
SES	0.07	0.02	2.97	.00	.08			
Relative Standing	0.16	0.01	14.58	<.001	.37			
Step 2						.35		
(Constant)	1.85	0.37	5.02	<.001				
Gender	–.017	0.04	–4.06	<.001	–.09		.01 (2.9%) [5]	[.01, .03]
Age	–0.04	0.02	–2.54	.01	–.06		.003 (0.9%) [7]	[.0004, .01]
SES	0.02	0.02	1.17	.24	.03		.01 (2.9%) [6]	[.00, .02]
Relative Standing	0.03	0.01	2.30	.02	.07		.06 (17.1%) [3]	[.04, .08]
FLCA	–0.13	0.02	–5.34	<.001	–.16		.07 (20%) [2]	[.05, .09]
FLE	.07	.025	2.81	.01	.06		.02 (5.7%) [4]	[.01, .03]
Intercultural Sensitivity	.61	.040	15.35	<.001	.41		.18 (51.4%) [1]	[.14, .21]

Note. N = 1364. DW: dominance weight. The sum of dominance weights is equal to the total R^2 (R^2 = .35)

In the case of the sample from Spain, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in digital contexts using affective factors was significant (F(7, 1091) = 84.808, p < .001, adjusted R^2 = .35). In this model, SES, relative standing in spoken competence, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, whereas gender and FLCA were significant negative predictors. The results of the regression analysis and the dominance analysis are shown in Table 8.

Table 8. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class digital WTC)

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Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	1.74	0.33	5.23	<.001				
Gender	−0.27	0.05	−5.03	<.001	−.13			
Age	0.04	0.02	2.07	.04	.05			
SES	0.03	0.02	1.72	.09	.05			
Relative Standing	0.18	0.01	15.40	<.001	.43			
Step 2						.35		
(Constant)	0.15	0.37	0.40	.69				
Gender	−0.29	0.05	−5.51	<.001	−.15		.02 (5.7%) [5]	[.01, .04]
Age	0.02	0.02	1.07	.31	.03		.001 (0%) [7]	[.0002, .0004]
SES	0.04	0.02	2.40	.02	.06		.02 (5.7%) [6]	[.01, .03]
Relative Standing	0.10	0.01	8.34	<.001	.25		.10 (28.6%) [2]	[.07, .12]
FLCA	−0.11	0.03	−3.47	<.001	−.10		.06 (17.4%) [3]	[.03, .08]
FLE	0.18	0.04	5.16	<.001	.13		.04 (11.4%) [4]	[.02, .06]
Intercultural Sensitivity	0.52	0.05	11.16	<.001	.30		.12 (34.3%) [1]	[.09, .16]

Note. $N = 1099$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .35$)

4. Discussion

This study examined the out-of-class oral WTC of EFL learners in secondary schools in Poland and Spain. In so doing, our research has contributed to addressing research gaps concerning oral WTC in two out-of-class communication settings, FtF and digital, among the under-studied population of secondary school FL learners. This study also aimed to identify the predictors of WTC in these modes of communication. Participants in both samples reported WTC levels above neutrality for oral FtF and digital communication. This implies a positive attitude towards language use in situations outside the classroom. Previous research has consistently shown similar WTC patterns (Lee & Hsieh, 2019; Lee & Lee, 2020; Lee, Lee et al., 2022; Mulyono & Saskia, 2020, 2021; Wang et al., 2021). Additionally, our results indicate that, in the contexts studied, cultural and formal learning differences did not lead to substantial differences in oral out-of-class WTC levels. There may be common factors, not specific to culture or formal learning, that influence WTC levels. These factors could include personal motivation, individual personality traits, or exposure to and familiarity with the FL. However, it is important to note that these findings are specific to secondary school students in Poland and Spain and may not be generalizable to other populations or contexts. Further research is required to validate these results in different educational settings.

WTC levels varied depending on the communication setting, as participants from Poland and Spain showed a stronger inclination toward FtF oral communication than digital communication. This finding aligns with the results of previous studies conducted by Lee and Lee (2020) and Lee, Lee et al. (2022) with Korean EFL students. Possible reasons for this preference might include a greater sense of immediacy, greater perceived effectiveness of FtF communication in conveying meaning and building rapport,

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insufficient competence in digital skills, or a higher level of confidence in traditional, in-person conversations. However, contrasting findings were reported in studies by Lee and Hsieh (2019), Lee, Lee et al. (2022) with Taiwanese EFL learners, and Mulyono and Saskia (2020, 2021), where participants exhibited higher WTC in a digital environment. It should be noted that unlike in those studies, the instrument used in our study exclusively assessed oral WTC in the digital context.

Another noteworthy result was the stronger correlation between the affective factors of enjoyment and speaking anxiety, and intercultural sensitivity and FtF WTC compared to digital WTC. This implies that students' levels of enjoyment, anxiety, and intercultural competence have a greater impact on their WTC in English outside the classroom when engaging in direct, in-person communication. These findings corroborate previous research, which indicated that affective factors, such as motivation, risk-taking, and grit, were more strongly associated with FtF WTC outside the classroom than in digital settings (Lee & Hsieh, 2019; Lee & Lee, 2020; Mulyono & Saskia, 2020, 2021). Contextual differences in communication may influence the relevance of affective factors, with FtF interactions involving immediate emotional responses and social cues. By contrast, digital communication may be influenced by factors such as technological proficiency, digital literacy, and familiarity with online platforms. It is important to note that these findings are specific to secondary school students in Poland and Spain in the context of English language learning. Further research is necessary to validate and explore these findings across different populations, age groups, and language learning contexts.

Regarding the predictors of WTC, certain factors such as relative standing, FLCA, FLE, and intercultural sensitivity were found to be significant predictors of both FtF and digital oral WTC for the two groups of EFL learners. Relative standing among peers can be arguably interpreted as a proxy for perceived competence, which is one of the high-evidence predictors of WTC (Elahi Shirvan et al., 2019; Jin & Lee 2022). This study confirms the influence of perceived competence on FtF and digital oral WTC among EFL secondary school learners in different national contexts. Spoken competence consistently emerged as one of the strongest factors across all models, indicating its significant impact on WTC outside the classroom among secondary school students. This suggests that students' confidence and perceived proficiency in speaking English play a crucial role in their willingness to engage in English communication, whether in FtF or digital contexts.

Consistent with prior research (Dewaele, 2019; Lee & Hsieh, 2019; Lee & Lee, 2020; Mulyono & Saskia, 2020, 2021), speaking anxiety was identified as a negative predictor of out-of-school WTC in both communication modes. Students who experience lower levels of speaking anxiety in classroom settings in Poland and Spain are more likely to be willing to engage in oral communication in informal settings, both FtF and digitally. This suggests that speaking anxiety can be a significant barrier to using a language in real-life situations beyond the classroom. Furthermore, dominance weight analyses indicated that FLCA was more influential than FLE for WTC outside the classroom, except for FtF WTC in the group from Spain.

Additionally, previous research, including a meta-analysis by Botes et al. (2022), has established a strong positive correlation between foreign language enjoyment (FLE) and L2 WTC. This relationship has been further supported by qualitative and quantitative research conducted by Pavelescu (2023), Lee and Taylor (2022), and Lee, Yeung, et al.

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(2022), which specifically examined WTC outside the classroom. Our study reinforces this positive relationship in both the FtF and digital oral WTC outside the classroom and underscores the role of enjoyment as a motivating factor in language learners' communication behaviors outside of formal educational environments.

An additional remarkable finding concerns intercultural sensitivity. The dominance analyses conducted in this study revealed that intercultural sensitivity emerged as the most significant predictor of oral WTC in both the FtF and digital communication environments across the two study contexts. This highlights the crucial role of intercultural sensitivity in influencing the WTC. It is imperative to consider intercultural sensitivity when investigating and comprehending the WTC. There are several reasons for the significance of intercultural sensitivity in fostering WTC in foreign languages. First, intercultural sensitivity facilitates effective cross-cultural interactions and promotes cultural understanding (Chen & Starosta, 2000; Deardorff, 2006; Gudykunst & Nishida, 1994). Individuals with intercultural sensitivity possess the awareness and skills necessary to navigate cultural differences and adapt their communication style to accommodate diverse cultural norms and values. This adaptability contributes to a positive and inclusive communication environment, reducing the likelihood of misunderstanding or unintentional offenses (Gudykunst & Nishida, 1994). Furthermore, intercultural sensitivity enhances individuals' confidence and comfort when engaging with foreign language speakers, as it enables them to appreciate and respect the cultural context in which the language is spoken (Gudykunst & Nishida, 1994). Intercultural sensitivity also fosters empathy and open-mindedness, enabling individuals to understand and appreciate different perspectives and experiences (Deardorff, 2006). This mindset encourages meaningful cross-cultural exchanges, regardless of potential language barriers, and promotes willingness to interact and learn from others (Deardorff, 2006). Additionally, intercultural sensitivity helps reduce language-related anxiety by creating a supportive and understanding atmosphere. Language learners with intercultural sensitivity demonstrate acceptance and tolerance towards linguistic mistakes or differences, and feel less pressured and more inclined to communicate freely in a foreign language (Fantini, 2009).

Our study findings concerning intercultural sensitivity present a striking contrast to those of Liu (2017). While Liu's study found that Chinese-speaking anxiety level and duration of stay in China predominantly influenced students' WTC in Chinese, with only a non-significant correlation between WTC and intercultural sensitivity, our study revealed a contrary result. In our research, intercultural sensitivity emerged as the most influential predictor of oral WTC, both in face-to-face (FtF) and digital communication environments, across the two study contexts. The dissimilar results between Liu's (2017) study and our own can be attributed to a combination of cultural, contextual, methodological, and sample differences, as well as the distinct global status of English and Chinese. Liu's (2017) study sample consisted of university students with diverse native languages who were learning Chinese in China. This indicates a more culturally heterogeneous background. Moreover, these participants were older (mean age = 22.26) than those in our study, and their varied durations of stay in China (ranging from three months to 16 years) may impact the relationship between intercultural sensitivity and WTC. Another contributing factor may have been the variation in the WTC measures between the two studies. Furthermore, the recognition of English as a global lingua franca, frequently used for communication among speakers of different native languages, could have exposed learners to a diverse range of cultures and contexts. This may

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potentially influence the association between intercultural sensitivity and WTC. Additionally, learners' motivation to communicate in English and Chinese in these study contexts may differ based on their perceived utility and global importance and consequently, be amenable to intercultural sensitivity. We can only speculate how exactly these factors -individually or in combination- impinge on the association between intercultural communication and WTC. It may be the case that teenagers' WTC in a second or foreign language might be especially influenced by the level of openness or receptiveness to cultural differences. Alternatively, or complementarily, many university students in Lius's (2017) study presumably have a utilitarian need to study and/or work in China in contexts where speaking in Chinese is required, regardless of their stance towards cultural differences. Nevertheless, additional studies are required to examine and validate these hypotheses empirically.

Regarding the role of gender in the study participants' oral WTC in digital communication, our study found a digital gender divide in the sense that male secondary school learners in the study were significantly more willing to communicate orally in this mode of communication than female students in both contexts. Our findings diverge from those obtained in previous studies on the connection between outside-class WTC and gender. In research in Asian contexts with tertiary EFL learners by Lee and Hsieh (2019) in Taiwan, by Lee and Drajati (2019) in Indonesia and by Lee and Lee (2020) in Korean, gender did not emerge as a significant predictor of WTC. The instrument used for assessing the oral digital WTC may have contributed to this result. Studies have found that men are more inclined to use the internet for gaming (Dunahee & Lebo, 2016; Ono & Zavodny, 2007). Additionally, in a recent report (Common Sense Media, 2022) conducted in the USA, a 36-percentage-point difference in enjoyment of video gaming between boys and girls aged eight- to 18-year-olds was identified. Studies in the field of language learning have also found that male participants played significantly more massively multiplayer, role-playing, first-person shooter, and strategy games than female participants (Hjalmarsson, 2020; Sundqvist, 2009; Uuskoski, 2011).

Finally, another interesting finding was that SES was a predictor of oral WTC outside the class for the sample from Spain. This indicates that students from higher SES backgrounds in Spain are more likely to demonstrate a greater willingness to engage in oral communication in English outside the classroom, suggesting that students from higher SES backgrounds in Spain may have greater access to resources, opportunities, and experiences that positively influence their WTC in English. Additionally, these results seem to corroborate the conclusions drawn by studies that have identified a relationship between SES and factors that may arguably be associated with WTC, such as speech production scores (Huang et al., 2018), English performance (Butler, 2014, 2015; Butler & Le, 2018; Zou & Zhang, 2011), intrinsic motivation, and self-confidence (Butler, 2017). However, SES did not have a significant influence on oral WTC outside class among students from Poland. It can be speculated that one of the reasons why SES was only found to be a predictor of out-of-class WTC in the sample from Spain may be related to more spending on its GDP on school education in the case of Poland (Primary:1.4%; Spain:1.3%; Secondary: Poland:1.8%; Spain:1.3%) (OECD, 2022, p. 263), which may help facilitate access to resources and provide opportunities for language learning and use to a larger segment of the school population, which, in turn, may influence their WTC in the FL. In any case, this finding indicates that the relationship between SES and WTC outside the class can vary depending on the contextual factors within each country. This highlights the importance of considering specific contextual

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environments when examining the predictors of WTC among different student populations. Further research is needed to validate these findings and explore the potential reasons for the relationship between SES and WTC in English outside the classroom in different contexts and populations.

5. Pedagogical implications

This study has several noteworthy pedagogical implications. However, we shall direct our attention towards the most salient ones.

Based on the finding that learners with lower levels of speaking anxiety and higher levels of enjoyment in classroom settings are more likely to engage in oral communication outside the classroom, pedagogical implications can be derived. To mitigate speaking anxiety and boost the interest and enjoyment that lead to extramural WTC among learners, it is advisable to incorporate activities, materials, and topics that ignite enthusiasm and captivate their attention. In addition, cultivating a classroom environment that is supportive, inclusive, and conducive to learners' well-being and comfort in expressing themselves orally is crucial.

Additionally, the consistent presence of spoken competence as a strong factor across all models indicates its robust influence on the WTC. This suggests that developing and enhancing students' oral communication skills, including fluency, pronunciation, and self-perceived ability, can positively impact their motivation and willingness to engage in communication in English outside the classroom.

Furthermore, the present study, in line with previous research, suggests that out-of-class WTC tends to be higher than in-class WTC. Specifically, digital environments typically stimulate higher levels of WTC, with FtF communication outside the classroom ranking second in terms of eliciting WTC. This calls for promoting meaningful and authentic communication both inside and outside the classroom, achieved through the use of the target language in practical situations, such as role-play, simulations, debates, real-world tasks, and integrating technology for digital communication. In turn, this requires the development of digital communication skills and opportunities for students to engage in oral communication using digital platforms and in-person situations. This can be achieved by incorporating online discussion forums, video conferencing tools, language exchange programs, conversation clubs, language cafés, or collaborative projects that require digital and/or FtF communication.

Finally, in both study contexts, intercultural sensitivity surfaced as the primary predictor of WTC in the two communication environments beyond the classroom. This presents a compelling case to integrate intercultural competence development into language learning curricula by designing activities, materials, and discussions, facilitating experiences that promote intercultural sensitivity and competence, fostering empathy and open-mindedness towards different perspectives and life experiences, and establishing a classroom environment that embraces linguistic and cultural diversity (Byram, 1989).

6. Conclusions

This study investigated the out-of-school WTC of EFL learners in secondary schools in Poland and Spain, focusing on two communication settings: FtF and digital. The findings

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revealed that both samples reported above-neutral levels of WTC in both communication environments. Interestingly, both groups exhibited similar WTC levels for the two modes of communication.

The study also found that affective factors such as enjoyment, speaking anxiety, and intercultural sensitivity had stronger correlations with FtF WTC than with digital WTC. This indicates that when students engage in direct in-person communication, their emotional experiences and intercultural skills have a greater influence on their WTC. However, digital communication may be influenced by factors such as technological proficiency and comfort with online platforms. These findings emphasize the role of the communication context in shaping the factors that influence WTC. Moreover, this study identified several significant predictors of WTC in both communication environments, including perceived competence, spoken competence, enjoyment, speaking anxiety, and intercultural sensitivity. Additionally, this study highlighted the importance of a previously underexplored factor in connection with WTC, intercultural sensitivity.

Furthermore, the study revealed a digital gender divide, with male students showing a greater willingness to communicate orally in the digital mode than female students. SES was also found to be a predictor of WTC outside class in the sample from Spain, indicating that students from higher SES backgrounds were more likely to engage in oral communication in English outside the classroom. However, this relationship was not observed in the sample from Poland.

When interpreting these findings, it is important to acknowledge the limitations of our study. These limitations include the use of a convenience sample from specific geographical areas in Poland and Spain, which may limit the generalizability of the results. The voluntary participation of students could have introduced a self-selection bias, and the lack of qualitative data limits our ability to provide a deeper explanation of the findings. Additionally, since our study was cross-sectional, we could not determine whether WTC was the cause or the result of the predicting factors, or if there was a bidirectional relationship between them. In addition, it is possible that unaccounted factors may have influenced the results.

Despite these limitations, our study contributes to the understanding of out-of-class oral WTC experiences and expands our knowledge of the factors associated with out-of-class WTC in English in secondary education, an area that lacks sufficient research. Understanding these predictors can inform pedagogical practices and interventions aimed at promoting WTC and enhancing language learning experiences for students.

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Appendix

Note: The translations into Polish and Spanish of the different instruments can be obtained from the authors.

Foreign Language Classroom Anxiety scale

1. Even if I am well prepared for FL class, I feel anxious about it.

2. I always feel that the other students speak the FL better than I do.
3. I can feel my heart pounding when I'm going to be called on in FL class.
4. I don't worry about making mistakes in FL class. (reverse-coded)
5. I feel confident when I speak in FL class. (reverse-coded)
6. I get nervous and confused when I am speaking in my FL class.
7. I start to panic when I have to speak without preparation in FL class.
8. It embarrasses me to volunteer answers in my FL class.

(Items extracted by MacIntyre [1992] from the FLCA scale developed by Horwitz et al.[1986])

Short-Form Foreign Language Enjoyment Scale (S-FLES) In the foreign language class:

1. My teacher encourages me to speak English.
2. The teacher is friendly.
3. The teacher is supportive when I speak English in class.
4. I enjoy my English lessons.
5. I've learned interesting things when speaking English in class.
6. I am proud of my accomplishments in speaking and interacting in English.
7. We form a tight group.
8. We laugh a lot in the English lessons.
9. We have common 'legends' such as running jokes.

(Adapted from the short form of the Foreign Language Enjoyment Scale (S-FLES) validated by Botes et al. [2021])

Intercultural Sensitivity Scale

1. I feel confident when interacting with people from different cultures.
2. I always know what to say when interacting with people from different cultures.
3. I can be as sociable as I want to be when interacting with people from different cultures.
4. I am pretty sure of myself in interacting with people from different cultures.
5. I am very observant when interacting with people from different cultures.
6. I enjoy interacting with people from different cultures.
7. I have a feeling of enjoyment towards difference between my culturally-distinct counterpart and me.
8. I respect the values of people from different cultures.
9. I respect the ways people from different cultures behave.
10. I am open-minded to people from different cultures.

(Original Wu's [2018] Intercultural Sensitivity scale [first 10 items] based on Chen and Starosta's Intercultural Sensitivity Scale)

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Out-of-class face-to-face WTC

1. When I speak in English with a foreign person who I see is having communication problems, e.g., when paying on public transport or in the supermarket.
2. When I give directions in English to a foreign person to get to a certain place.
3. When I start a conversation in person with a foreign person in English to find out things about her that interest me.
4. When I start a conversation in person with a group of foreign people in English to find out things about them of interest to me (e.g., their origin, profession or hobbies).
5. When I have to tell in person in English customs of my culture to a foreign person and describe the place where I live.
6. When I introduce a foreign person to my family/friends and I have to translate their conversation into English so they can communicate.

Out-of-class digital WTC

1. When I speak in English with a foreign person about a topic of interest to me through a videoconference program like Google Meet or Skype.
2. When I speak in English with several foreign people about a topic of interest to me through a videoconference program such as Google Meet or Skype.
3. When I play online multiplayer video games in English (e.g., League of Legends) of my interest with foreigners.
4. When I play massive multiplayer online video games in English (e.g., World of Warcraft) of my interest with foreigners.
5. When I record an audio message in English on WhatsApp to a foreign person about a topic of interest to me.

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Affective factors, intercultural sensitivity, and willingness to communicate orally outside class: A study with EFL secondary school learners in Poland and Spain

Abstract

This study examined out-of-school oral willingness to communicate (WTC) in two modes of communication (face-to-face [FtF] and digital) among English as a Foreign Language (EFL) secondary school students in Poland and Spain as well as the associations between affective factors and intercultural sensitivity with WTC in both settings. A total of 1480 students from 17 schools in Poland and 1128 students from 11 schools in Spain participated in this study. The study found that learners from both national contexts shared extremely similar levels of out-of-class oral WTC in the two settings. After controlling for sociodemographic factors (age, gender, socioeconomic status, and relative self-assessed spoken competence), hierarchical regression analyses revealed that Foreign Classroom Language Anxiety (FLCA), Foreign Language Enjoyment (FLE), and intercultural sensitivity were predictors of the two communicative settings in both contexts, although the relative importance of predictors differed in each case, as determined by the dominance analyses. Intercultural sensitivity, a factor that has seldom been investigated in relation to WTC, emerged as the most influential predictor for oral WTC in both communication environments within the two study samples. The study also discusses the implications for both research and foreign language pedagogy.

Keywords: Willingness to Communicate, face-to-face setting, digital setting, EFL secondary school learners, oral production

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Introduction

Willingness to communicate (WTC) has been defined as "a readiness to enter into discourse at a particular time with a specific person or persons, using an L2" (MacIntyre et al., 1998. p. 547). This voluntary choice to engage in verbal communication or remain silent when presented with the opportunity is a fundamental concept in the field of foreign and second language (FL/L2) learning and teaching (MacIntyre, 2007, 2020). Research has consistently demonstrated that learners who exhibit a strong inclination towards communicating in FL/L2 are more likely to achieve success in language learning (MacIntyre et al., 2003; Yashima et al., 2004; Zhou et al., 2023).

Although a substantial corpus of research on FL/L2 WTC is currently available, there are certain gaps in the existing literature concerning out-of-class WTC, as will become apparent in the literature review below. First, with some exceptions (Chen et al., 2021; Lee & Lu, 2021; Lee & Sylvén, 2021; Lee & Taylor, 2022; Lee, Yeung et al., 2022; Soyoof, 2022), most research on out-of-class WTC has concentrated on young undergraduate adults, with limited attention given to learners in secondary education. WTC in these two groups of learners may be influenced differently by different factors. Most notably, foreign language instruction is mandated within the secondary school curriculum, rendering it obligatory for students to enroll in such courses, whereas undergraduate adults may have more instrumental motivation for learning and using a

foreign language, such as for academic or career advancement. Second, as highlighted by Lee, Yeung et al. (2022), prior investigations of WTC have primarily focused on traditional in-class and out-of-class settings, with a dearth of studies in digital environments. Third, although some recent research has focused on predictors of out-of-class WTC, most notably concerning affective variables and informal digital English language learning (Lee & Drajati, 2019; Lee & Lee, 2020; Lee & Taylor, 2022; Mulyono & Saskia, 2020, 2021), this line of research is still in its early stages, has focused on Asian contexts, and lacks coverage of various contexts and potential influencing factors. Finally, the existing body of research on the association between intercultural-related factors and WTC, particularly the relationship between intercultural sensitivity and WTC, remains extremely limited (Liu, 2017).

In light of the lack of research on this topic with secondary school learners from different national contexts and in a variety of communication settings, this study aimed to investigate out-of-class oral WTC in EFL learners' secondary schools in Poland and Spain, and to identify the factors associated with out-of-class FtF and digital WTC, with the hope that the results obtained can then be used to inform educational practices. Despite being both European countries, Poland and Spain exhibit notable differences in their respective traditions concerning FL teaching and assessment. In Spain language teaching continues to follow the Grammar Translation Method and other traditional methodologies, while communicative competence receives comparatively lesser attention (García-Sampedro, 2021; Morales Gálvez, 2009). Conversely, in Poland, the prevalence of a communicative approach is observed among language teacher (Dziecioł-Pedich, 2015).

2. Willingness to Communicate outside the classroom: An overview

This section provides an overview of research on out-of-class WTC. Initially, L1 WTC was viewed as a stable personality trait that persisted over time and contexts (McCroskey & Richmond, 1987). However, the pyramid model of L2 WTC suggests that contextual variables play a role in determining whether an individual chooses to communicate in the L2 in specific situations. This review focuses exclusively on studies investigating WTC beyond the classroom, specifically in the context of learning a foreign language, and examines trends in out-of-class WTC research, namely variations based on the communication environment or participants' geographic context, factors influencing WTC, and interculturality-related factors and WTC.

2.1. WTC across contexts and communication settings

Research findings highlight the tendency of language learners to exhibit higher levels of WTC in the target language outside the classroom, with variations observed among learners from different backgrounds and communication settings. Lee and Hsieh (2019) found that EFL Taiwanese undergraduate students were most inclined to communicate in a digital environment and least willing in the classroom. Lee and Lee (2020) discovered that Korean EFL students had the highest WTC scores for FtF communication outside the classroom, followed by digital settings, and the lowest scores for in-class WTC. Indonesian EFL undergraduate and secondary school students, as studied by Mulyono and Saskia (2020), displayed the highest WTC in the digital environment, followed by the classroom, and the lowest WTC in extramural situations. It is worth noting that the

assessment tools used in these studies may have influenced the results, as assessment of FtF WTC focused on oral interactive situations, while assessment of WTC in the digital environment included written communication scenarios as well.

As regard comparisons concerning student groups from different national backgrounds, in the study by Lee, Lee et al. (2022), Korean and Taiwanese EFL university students displayed the lowest WTC scores in the classroom, with no significant differences between the two groups. Additionally, Korean students had significantly higher FtF WTC scores outside the classroom, whereas Taiwanese students achieved significantly higher scores in the digital setting.

2.2. Affective factors and experiences associated to WTC

Research has explored the association between various affective-related variables and out-of-class WTC. The review in this section will confine its focus to research that investigates the associations between WTC and the affective variables under examination in the current study.

From studies concerning the association between anxiety and WTC, it can be concluded that this affective factor may affect WTC depending on the communication environment. Speaking anxiety was found to be a negative predictor of WTC in FtF contexts inside and outside the classroom and in the digital setting in the studies by Mulyono and Saskia (2020, 2021). However, in the study by Lee and Lee (2020), although anxiety was found to be a negative predictor of WTC inside the classroom, it did not have a predictive value in out-of-class environments (FtF and digital). Similarly, Lee and Hsieh (2019), who examined the relationship between affective variables and WTC in the same three contexts, concluded that while the absence of L2 anxiety significantly predicted students' WTC in non-digital environments (in-class and out-of-class contexts), it did not have the same impact in the digital setting. However, all qualitative findings indicate a relationship between speaking anxiety and out-of-class WTC. In the study by Lee, Lee et al. (2022), the data obtained from interviews conducted with a subset of participants indicated that language speaking anxiety played a significant role in influencing the WTC of both groups (Korean and Taiwanese participants). In a multiple case study that involved two adult learners of English, Pavelescu (2023) examined the role of emotions in second language learning, with a specific focus on the relationship between emotion, motivation, WTC, and second language context. The findings revealed that enjoyment and anxiety were the most prominent emotions experienced by learners, although the sources of these emotions differed slightly. While enjoyment strongly influenced their WTC in the classroom, one of the learners experienced anxiety that hindered communication outside the class. Soyoof (2022) investigated the factors that impact Iranian EFL secondary school learners' WTC in an extramural digital context. Affective variables (L2 confidence and anxiety in the digital context) were among the main factors influencing students' L2 WTC.

As regard enjoyment, Lee, Yeung et al. (2022) explored the relationship between Informal Digital Learning of English (IDLE), FLE, and WTC among EFL secondary students in Hong Kong. More precisely, the study examined how the three dimensions of FLE, namely, teacher appreciation, personal enjoyment, and social enjoyment, mediate the association between IDLE and L2 WTC, both inside and outside the classroom. The findings indicated that the three dimensions of FLE served as mediators between IDLE

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and L2 WTC in the classroom. For L2 WTC outside the classroom, personal and social enjoyment played mediating roles. Furthermore, in a study by Lee and Taylor (2022), classroom enjoyment was found to be significantly and positively correlated with WTC outside and inside the class; however, it was only found a predictor of in-class WTC. Additionally, in the multiple case study by Pavelescu (2023), enjoyment and anxiety were the most prevalent emotions reported by the participants.

2.3. Intercultural sensitivity and interculturality-related factors, and WTC

Intercultural sensitivity, an essential concept in the field of intercultural communication, refers to an individual's capacity to effectively navigate and engage with people from diverse cultural backgrounds. An early definition of intercultural sensitivity was provided by Bennett (1993), who characterized it as "the experience of cultural difference, an experience that is dependent on the way a person constructs that difference" (p. 52). The seminal work of Chen and Starosta (2000) has greatly helped further elucidate this construct. They developed the Intercultural Sensitivity Scale (ISS), a pivotal instrument for understanding and measuring individuals' receptiveness to cultural differences. It encompasses three fundamental dimensions: cognitive, affective, and behavioral. The cognitive dimension of intercultural sensitivity refers to the depth of an individual's knowledge and comprehension of diverse cultures. It includes their capacity to grasp the nuances, customs, and values that shape cultural identities. The affective component encompasses attitudes, emotions, and empathy towards diverse cultural groups. Finally, the behavioral dimension entails the ability to adapt behavior and communication styles when interacting with individuals from different cultural backgrounds. The ISS has been applied across a variety of settings, demonstrating strong validity in numerous studies (e.g., Chen & Starosta, 2000; Liu, 2017; Olson & Kroeger, 2001; Su, 2018).

To the best of our knowledge, the only study that has so far addressed the association between intercultural sensitivity and WTC is that conducted by Liu (2017) with Chinese language learners from a university in Beijing. The study concluded that the level of students' WTC in Chinese (WTCC) was predominantly influenced by their Chinese-speaking anxiety level and duration of stay in China. Although the WTC was positively correlated with intercultural sensitivity, this association was not significant. According to Liu (2017), this was a counterintuitive finding in that "a higher sensitivity to the difference between Chinese culture and the native culture and appreciation of the difference between the two were supposed to be accompanied by a higher WTCC to different audiences in different situations, and vice versa" (p. 436).

The limited research conducted on the relationship between WTC and interculturality-related issues has revolved around two notions: international posture and global perspective. Yashima (2002) investigated the relationship between international posture and WTC among EFL university students in Japan. International posture encompasses an inclination towards foreign or international affairs, a willingness to interact with intercultural partners, and a non-ethnocentric attitude. Structural equation modeling revealed that motivation affects self-confidence in second language communication, thereby influencing WTC. Additionally, a significant direct relationship was found between international posture and WTC. Mahmoodi et al. (2013) conducted a study with university students in Iran and similarly identified a direct path from international posture to WTC, along with a positive correlation. Two studies by Fan et al. (2020) and Xiao and Qiu (2022) focused on the association between the global perspective and WTC. The

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global perspective refers to a perspective on human development in the global world, grounded in intercultural maturity and communication. Both studies, conducted with Chinese university students, revealed a significant positive correlation between global perspective and WTC in English. It is important to note that both studies included items covering both inside and outside the WTC in their measurement of the WTC.

2.4. Conclusions

The reviewed studies indicate higher out-of-class WTC than in-class WTC. Digital environments generally elicit higher WTC, followed by FtF communication outside the classroom, whereas WTC within the classroom tends to be lower. These studies also indicate that out-of-class WTC can be influenced by the type of communicative environment, whether FtF or digital. It is important to note that the focus (on oral and/or written communication) of the research instruments used to investigate out-of-class WTC may have impacted the reported results. Limited evidence suggests variations in out-of-class WTC among learners of different national backgrounds. Regarding affective factors and out-of-class WTC, research has revealed that the nature of this association may vary depending on the communicative environment. The review above also reveals that the link between out-of-class WTC and intercultural sensitivity remains very much underexplored. Initial findings on the association between WTC and intercultural factors, albeit limited, suggest a potential relationship. Furthermore, it is important to note that most studies in the field of out-of-class WTC in FtF and digital settings have primarily focused on university students in Asian contexts.

3. The present study

3.1. Objectives and research questions

In light of the scarcity of research on FL secondary school students' WTC in a variety of communication settings and geographical contexts, the present study aimed to investigate the oral WTC in English outside the class among secondary school students studying EFL in Poland and Spain. This study focused on two modes of communication: FtF and digital interactions. Additionally, it explored the relationships between affective factors, intercultural sensitivity, and WTC in both communication settings. More specifically, this study aimed to answer the following research questions:

Research Question 1: How willing are EFL secondary school learners in Poland and Spain to communicate in two outside-class settings (FtF and digital)?

Research Question 2: How do EFL secondary school learners differ in out-of-class WTC in these two national contexts?

Research Question 3: How do affective factors and intercultural sensitivity predict the out-of-class WTC of EFL secondary school learners in Poland and Spain in FtF and digital settings?

3.2. Participants and Contexts

The participants in the study (N = 2608 EFL) were conveniently sampled from 17 schools in Poland and 11 schools in Spain. The ages of the learners ranged from 13 to 20 years

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(M =15.78 years; SD = 1.28 (further information can be found in Table 1). All the students in both countries studied English as their first foreign language.

Table 1 Demographic characteristics of the sample

		Poland (N = 1480)	Spain (N = 1128)
Age range		13-20	13-20
Mean age (SD)		16.19 (1.04)	15.24 (1.29)
Gender	Female	868 (58.65%)	609 (53.99%)
	Male	496 (33.51%)	490 (43.44%)
	Other	51 (3.45%)	11 (0.98%)
	Prefer not to say	65 (4.40%)	18 (1.60%)

Emails were sent to request the schools and English teachers to participate in the investigation by collaborating in data collection. Prior to the study, formal written consent was obtained from the school headteachers. The schools assumed responsibility for securing parental consent to include their children in this study. Student participation in the study was voluntary. In Poland, the data collection involved students using their own mobile devices to complete an online questionnaire during their English classes. The researcher was present during the classes to oversee the process. In Spain, a similar process was followed. Spanish teachers who agreed to participate in the study were contacted through video conferences and made responsible for ensuring that their students completed the online questionnaire during their English classes. Communication with English teachers was established in Polish and Spanish, as one of the researchers was bilingual. Polish schools were located in Pruszcz Gdanski, Gdansk, Sopot, Gdynia, and Wroclaw (northern and southern Poland), whereas Spanish schools were situated in the Andalusian provinces of Málaga, Granada, Almería, and Jaén (southern Spain). The school sample represented a mix of urban, suburban, and rural areas. Among the schools, five Spanish schools and two Polish schools were bilingual, offering instruction in both English and Spanish/Polish.

3.3. Instruments

A questionnaire was used as the quantitative instrument in this study. The language of the questionnaire varied based on the students' location, with Spanish being used for students in Spain and Polish being used for students in Poland. When incorporating English items from previous publications, cultural adaptations were made, if necessary, following the guidelines provided by the International Test Commission (2017) for test translation and adaptation. The questionnaire consisted of the following eight sections.

a. Sociodemographic section: This section gathered data related to the participants' gender, age, school, and highest level of education attained by their parents. Parental level of education was used as a proxy for socio-economic status (SES).

b. Perception of relative standing in spoken production and interaction competence measure: Students were asked to assess their spoken production and interaction in

comparison to their peers in the English class. They provided ratings on a scale ranging from 0 ("extremely far below that of my classmates") to 100 ("extremely far above that of my classmates").

c. Foreign Language Classroom Anxiety scale: This study used a short version of the Foreign Language Classroom Anxiety (FLCA) scale developed by Horwitz et al. (1986) and previously employed in a study conducted by MacIntyre (1992) (Appendix). This abbreviated version, consisting of eight items, demonstrated reliability equivalent to that of the original scale (MacIntyre, 1992) and was subsequently validated by Botes et al. (2022). Among the items, two were indicative of low anxiety (reverse-coded), while six were indicative of high anxiety. The internal consistency of this scale in our study, assessed using Cronbach's alpha coefficient, was high (α = .910).

d. Foreign Language Enjoyment Scale: To assess student enjoyment when learning and speaking English, a modified version of the short form of the Foreign Language Enjoyment Scale (S-FLES) developed by Botes et al. (2021) was used, which comprised 9 items extracted from the original FL enjoyment scale created by Dewaele and McIntyre (2014). Some items were rephrased to reflect enjoyment, specifically when speaking and interacting orally in English (Appendix). Participants responded to the statements using a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The scale demonstrated high reliability (α = .873).

e. Intercultural sensitivity scale: The participants' intercultural sensitivity was measured by 10 items in the scale used by Wu (2015), who extracted 13 items from the Intercultural Sensitivity Scale formulated by Chen and Starosta (2000) (Appendix). The scale included three dimensions identified by Wu (2015): security in interaction (items 1 to 4), reflecting the interlocutors' self-confidence and security during intercultural communication; commitment to and attention to interaction (items 5 to 7), capturing the participants' degree of participation and sensitivity towards culturally diverse interlocutors; and respect for cultural differences (items 8 to 10), pertaining to the identification, acceptance, and respect for others' cultural differences in communication. The scale demonstrated high reliability (α = .836) when using Cronbach's alpha.

f. Out-of-class FtF WTC scale: Six items measured in-person WTC outside the classroom (Appendix). Items reflect common communicative situations in which the respondent may find themselves interacting in English with one or more foreign nationals. Participants were asked to answer on a five-point Likert scale, with 1 representing 'I avoid it' and 5 representing 'definitely willing.' The scale demonstrated high reliability (α = .876).

g. Out-of-class digital WTC: Five items were designed to measure out-of-class WTC in situations where the respondents interact in English with one or more foreign nationals in the following virtual settings: playing a massively multiplayer online game, sending voice messages, and interacting through a video conferencing tool in English (Appendix). The scale was the same as the out-of-class FtF WTC scale. The reliability of the scale was high (α = .818).

3.4. Data analysis

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To address Research Questions 1 and 2, means, standard deviations, and medians were calculated for each parameter and test group. Kolmogorov–Smirnov tests for normality were performed. As the results were not normally distributed, non-parametric (Mann–Whitney) tests were used for comparisons between the two groups.

To answer Research Question 3, Pearson correlation analyses were performed to examine the relationships between the study variables FLE, FLCA, Intercultural sensitivity, FtF WTC, and digital WTC. To ascertain whether the independent variables in each case significantly predicted participants' out-of-class FtF and digital WTC in English, hierarchical regression analyses were independently conducted on the sample data from Poland and Spain. Dominance analyses (Mizumoto, 2023) were employed to identify the relative importance of the independent variables in predicting WTC outcomes.

3.5. Results

3.5.1. EFL secondary students' out-of-class oral WTC in Poland and in Spain

Very similar levels of outside-class oral WTC in the Poland and the Spain samples concerning the communication settings under study were found. The results of the Mann–Whitney tests confirmed that there were no significant differences between the two groups (Table 2).

Table 2 Result of the Mann–Whitney test comparing the difference in out-of-class FtF and digital WTC between the two groups

Out-of-class setting	Country	*Mean* (Potential range: 1-5) (*SD*)	*Median*	Mean Rank	*U*	*z*	*p*	Effect size *d*
Face-to-face	Poland	3.66 (*.79*)	3.83	1291.09	802874.500	-1.045	.296	0.065
	Spain	3.68 (.89)	3.83	1322.10				
Digital	Poland	3.44 (*.86*)	3.60	1282.98	814870.500	-1.676	.094	0.041
	Spain	3.45 (.99)	3.60	1332.73				

3.5.2. Factors predicting the out-of-class FtF WTC of EFL secondary school students in Poland and in Spain

Prior to regression analyses, correlation analyses were performed. As shown in Tables 3 and 4, the affective factors were significantly correlated with both FtF and digital WTC in the two samples. In both communication settings, WTC was positively associated with FLE and intercultural sensitivity and negatively related to FLCA. Interestingly, the association between these affective factors was stronger with FtF than with digital WTC in both samples. Additionally, every association between the factors investigated was stronger in the case of the sample from Spain. None of the correlation coefficients between the independent variables that were significantly correlated were too high (Tables 3 and 4). This suggests that the multicollinearity of the data was not likely to be a problem (Tabachnick & Fidell, 1989).

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Table 3 Intercorrelations between variables (Poland sample)

Pearson correlations	1	2	3	4
1. FLE				
2. FLCA	–.17*			
3. Intercultural sensitivity	.21*	–.46*		
4. Face-to-face WTC	.28*	–.47*	.66*	
5. Digital WTC	.20*	–.43*	.54*	.62*

Note. FLE = Foreign Language Enjoyment; FLCA = Foreign Language Classroom Anxiety.
* $p < .01$. $N = 1364$.

Table 4 Intercorrelations between variables (Spain sample)

Pearson correlations	1	2	3	4
1. FLE				
2. FLCA	–.10*			
3. Intercultural sensitivity	.24*	–.27*		
4. Face-to-face WTC	.35*	–.36*	.53*	
5. Digital WTC	.26*	–.37*	.43*	.72*

Note. FLE = Foreign Language Enjoyment; FLCA = Foreign Language Classroom Anxiety.
* $p < .01$. $N = 1099$.

For the sample from Poland, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in FtF contexts using affective factors was significant ($F(7, 1356) = 189.397$, $p < .001$, adjusted $R^2 = .50$). In this model, gender, relative standing, FLE, and intercultural sensitivity were positive predictors of digital WTC, whereas FLCA was a significant negative predictor. The results of the hierarchical regression analysis and the dominance analysis are shown in Table 5.

Table 5. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	2.16	0.30	7.17	<.001	–			

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Gender	0.22	0.04	5.66	<.001	.14			
Age	–0.01	0.02	–0.43	.67	–.01			
SES	0.09	0.02	4.36	<.001	.11			
Relative Standing	0.17	0.01	17.96	<.001	.45			
Step 2						.49		
(Constant)	0.57	0.29	1.92	.06	–			
Gender	0.20	0.03	6.04	<.001	.12		.01 (2.6%) [6]	[.01, .02]
Age	–0.01	0.01	–0.08	.93	–.01		.00 (0%) [7]	[.00003, .0004]
SES	0.04	0.02	2.53	.01	.05		.01 (2.6%) [5]	[01, .03]
Relative Standing	0.03	0.01	2.90	.01	.07		.07 (14.8%) [3]	[.05, .09]
FLCA	–0.12	0.02	–6.20	<.001	–.16		.08 (15.6%) [2]	[.06, .10]
FLE	0.13	0.02	6.46	<.001	.13		.04 (7.5%) [4]	[.02, .06]
Intercultural Sensitivity	0.70	0.03	21.72	<.001	.52		.28 (56.7%) [1]	[.26, .31]

Note. $N = 1364$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .49$)

For the sample from Spain, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in FtF contexts using affective factors was significant ($F(7, 1091) = 127.381$, $p < .001$, adjusted $R^2 = .45$). In this model, age, SES, relative standing, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, whereas FLCA was a significant negative predictor. The results of the hierarchical regression and the dominance analysis are presented in Table 6.

Table 6. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.27		
(Constant)	1.44	0.29	4.97	<.001	–			
Gender	0.10	0.05	2.15	.032	.06			
Age	0.06	0.02	3.46	<.001	.09			
SES	0.03	0.02	1.88	.060	.05			
Relative Standing	0.18	0.01	18.15	<.001	.50			
Step 2						.45		
(Constant)	–0.47	0.31	–1.35	.176	–			
Gender	0.07	0.04	1.64	.101	.04		.003 (0.7 %) [7]	[.0015, .0091]
Age	0.04	0.02	2.57	.010	.06		.004 (0.9 %) [6]	[.0008, .011]
SES	0.04	.001	3.04	.002	.07		.02 (4.4%) [5]	[.009, .03]
Relative Standing	0.10	0.01	10.03	<.001	.28		.13 (28.9 %) [2]	[.10, .16]
FLCA	–0.10	0.03	–4.12	<.001	–.11		.05 (11.1%) [4]	[.03, .08]
FLE	0.24	0.03	8.31	<.001	.20		.07 (15.6%) [3]	[.05, .10]

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Intercultural Sensitivity	0.53	0.04	13.91	<.001	.35		.17 (37.8%) [1]	[.13, .21]

Note. N = 1099. DW: dominance weight. The sum of dominance weights is equal to the total R^2 (R^2 = .45)

3.5.3. Factors predicting the out-of-class digital WTC of EFL secondary school students in Poland and in Spain

In the sample from Poland, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in digital contexts using affective factors was significant (F(3, 1356) = 104.426, p < .001, adjusted R^2 = .35). In this model, relative standing, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, while gender, age, and FLCA were significant negative predictors. The results of the hierarchical regression analysis and the dominance analysis are presented in Table 7.

Table 7. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class digital WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.18		
(Constant)	2.95	.034	8.63	<.001				
Gender	–0.16	0.04	–3.51	<.001	–.09			
Age	–0.04	0.02	–2.37	.02	–.06			
SES	0.07	0.02	2.97	.00	.08			
Relative Standing	0.16	0.01	14.58	<.001	.37			
Step 2						.35		
(Constant)	1.85	0.37	5.02	<.001				
Gender	–.017	0.04	–4.06	<.001	–.09		.01 (2.9%) [5]	[.01, .03]
Age	–0.04	0.02	–2.54	.01	–.06		.003 (0.9%) [7]	[.0004, .01]
SES	0.02	0.02	1.17	.24	.03		.01 (2.9%) [6]	[.00, .02]
Relative Standing	0.03	0.01	2.30	.02	.07		.06 (17.1%) [3]	[.04, .08]
FLCA	–0.13	0.02	–5.34	<.001	–.16		.07 (20%) [2]	[.05, .09]
FLE	.07	.025	2.81	.01	.06		.02 (5.7%) [4]	[.01, .03]
Intercultural Sensitivity	.61	.040	15.35	<.001	.41		.18 (51.4%) [1]	[.14, .21]

Note. N = 1364. DW: dominance weight. The sum of dominance weights is equal to the total R^2 (R^2 = .35)

In the case of the sample from Spain, the hierarchical linear regression predicting spoken EFL WTC outside the classroom in digital contexts using affective factors was significant (F(7, 1091) = 84.808, p < .001, adjusted R^2 = .35). In this model, SES, relative standing in spoken competence, FLE, and intercultural sensitivity were significant positive predictors of digital WTC, whereas gender and FLCA were significant negative predictors. The results of the regression analysis and the dominance analysis are shown in Table 8.

Table 8. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class digital WTC)

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Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	1.74	0.33	5.23	<.001				
Gender	−0.27	0.05	−5.03	<.001	−.13			
Age	0.04	0.02	2.07	.04	.05			
SES	0.03	0.02	1.72	.09	.05			
Relative Standing	0.18	0.01	15.40	<.001	.43			
Step 2						.35		
(Constant)	0.15	0.37	0.40	.69				
Gender	−0.29	0.05	−5.51	<.001	−.15		.02 (5.7%) [5]	[.01, .04]
Age	0.02	0.02	1.07	.31	.03		.001 (0%) [7]	[.0002, .0004]
SES	0.04	0.02	2.40	.02	.06		.02 (5.7%) [6]	[.01, .03]
Relative Standing	0.10	0.01	8.34	<.001	.25		.10 (28.6%) [2]	[.07, .12]
FLCA	−0.11	0.03	−3.47	<.001	−.10		.06 (17.4%) [3]	[.03, .08]
FLE	0.18	0.04	5.16	<.001	.13		.04 (11.4%) [4]	[.02, .06]
Intercultural Sensitivity	0.52	0.05	11.16	<.001	.30		.12 (34.3%) [1]	[.09, .16]

Note. $N = 1099$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .35$)

4. Discussion

This study examined the out-of-class oral WTC of EFL learners in secondary schools in Poland and Spain. In so doing, our research has contributed to addressing research gaps concerning oral WTC in two out-of-class communication settings, FtF and digital, among the under-studied population of secondary school FL learners. This study also aimed to identify the predictors of WTC in these modes of communication. Participants in both samples reported WTC levels above neutrality for oral FtF and digital communication. This implies a positive attitude towards language use in situations outside the classroom. Previous research has consistently shown similar WTC patterns (Lee & Hsieh, 2019; Lee & Lee, 2020; Lee, Lee et al., 2022; Mulyono & Saskia, 2020, 2021; Wang et al., 2021). Additionally, our results indicate that, in the contexts studied, cultural and formal learning differences did not lead to substantial differences in oral out-of-class WTC levels. There may be common factors, not specific to culture or formal learning, that influence WTC levels. These factors could include personal motivation, individual personality traits, or exposure to and familiarity with the FL. However, it is important to note that these findings are specific to secondary school students in Poland and Spain and may not be generalizable to other populations or contexts. Further research is required to validate these results in different educational settings.

WTC levels varied depending on the communication setting, as participants from Poland and Spain showed a stronger inclination toward FtF oral communication than digital communication. This finding aligns with the results of previous studies conducted by Lee and Lee (2020) and Lee, Lee et al. (2022) with Korean EFL students. Possible reasons for this preference might include a greater sense of immediacy, greater perceived effectiveness of FtF communication in conveying meaning and building rapport,

insufficient competence in digital skills, or a higher level of confidence in traditional, in-person conversations. However, contrasting findings were reported in studies by Lee and Hsieh (2019), Lee, Lee et al. (2022) with Taiwanese EFL learners, and Mulyono and Saskia (2020, 2021), where participants exhibited higher WTC in a digital environment. It should be noted that unlike in those studies, the instrument used in our study exclusively assessed oral WTC in the digital context.

Another noteworthy result was the stronger correlation between the affective factors of enjoyment and speaking anxiety, and intercultural sensitivity and FtF WTC compared to digital WTC. This implies that students' levels of enjoyment, anxiety, and intercultural competence have a greater impact on their WTC in English outside the classroom when engaging in direct, in-person communication. These findings corroborate previous research, which indicated that affective factors, such as motivation, risk-taking, and grit, were more strongly associated with FtF WTC outside the classroom than in digital settings (Lee & Hsieh, 2019; Lee & Lee, 2020; Mulyono & Saskia, 2020, 2021). Contextual differences in communication may influence the relevance of affective factors, with FtF interactions involving immediate emotional responses and social cues. By contrast, digital communication may be influenced by factors such as technological proficiency, digital literacy, and familiarity with online platforms. It is important to note that these findings are specific to secondary school students in Poland and Spain in the context of English language learning. Further research is necessary to validate and explore these findings across different populations, age groups, and language learning contexts.

Regarding the predictors of WTC, certain factors such as relative standing, FLCA, FLE, and intercultural sensitivity were found to be significant predictors of both FtF and digital oral WTC for the two groups of EFL learners. Relative standing among peers can be arguably interpreted as a proxy for perceived competence, which is one of the high-evidence predictors of WTC (Elahi Shirvan et al., 2019; Jin & Lee 2022). This study confirms the influence of perceived competence on FtF and digital oral WTC among EFL secondary school learners in different national contexts. Spoken competence consistently emerged as one of the strongest factors across all models, indicating its significant impact on WTC outside the classroom among secondary school students. This suggests that students' confidence and perceived proficiency in speaking English play a crucial role in their willingness to engage in English communication, whether in FtF or digital contexts.

Consistent with prior research (Dewaele, 2019; Lee & Hsieh, 2019; Lee & Lee, 2020; Mulyono & Saskia, 2020, 2021), speaking anxiety was identified as a negative predictor of out-of-school WTC in both communication modes. Students who experience lower levels of speaking anxiety in classroom settings in Poland and Spain are more likely to be willing to engage in oral communication in informal settings, both FtF and digitally. This suggests that speaking anxiety can be a significant barrier to using a language in real-life situations beyond the classroom. Furthermore, dominance weight analyses indicated that FLCA was more influential than FLE for WTC outside the classroom, except for FtF WTC in the group from Spain.

Additionally, previous research, including a meta-analysis by Botes et al. (2022), has established a strong positive correlation between foreign language enjoyment (FLE) and L2 WTC. This relationship has been further supported by qualitative and quantitative research conducted by Pavelescu (2023), Lee and Taylor (2022), and Lee, Yeung, et al.

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(2022), which specifically examined WTC outside the classroom. Our study reinforces this positive relationship in both the FtF and digital oral WTC outside the classroom and underscores the role of enjoyment as a motivating factor in language learners' communication behaviors outside of formal educational environments.

An additional remarkable finding concerns intercultural sensitivity. The dominance analyses conducted in this study revealed that intercultural sensitivity emerged as the most significant predictor of oral WTC in both the FtF and digital communication environments across the two study contexts. This highlights the crucial role of intercultural sensitivity in influencing the WTC. It is imperative to consider intercultural sensitivity when investigating and comprehending the WTC. There are several reasons for the significance of intercultural sensitivity in fostering WTC in foreign languages. First, intercultural sensitivity facilitates effective cross-cultural interactions and promotes cultural understanding (Chen & Starosta, 2000; Deardorff, 2006; Gudykunst & Nishida, 1994). Individuals with intercultural sensitivity possess the awareness and skills necessary to navigate cultural differences and adapt their communication style to accommodate diverse cultural norms and values. This adaptability contributes to a positive and inclusive communication environment, reducing the likelihood of misunderstanding or unintentional offenses (Gudykunst & Nishida, 1994). Furthermore, intercultural sensitivity enhances individuals' confidence and comfort when engaging with foreign language speakers, as it enables them to appreciate and respect the cultural context in which the language is spoken (Gudykunst & Nishida, 1994). Intercultural sensitivity also fosters empathy and open-mindedness, enabling individuals to understand and appreciate different perspectives and experiences (Deardorff, 2006). This mindset encourages meaningful cross-cultural exchanges, regardless of potential language barriers, and promotes willingness to interact and learn from others (Deardorff, 2006). Additionally, intercultural sensitivity helps reduce language-related anxiety by creating a supportive and understanding atmosphere. Language learners with intercultural sensitivity demonstrate acceptance and tolerance towards linguistic mistakes or differences, and feel less pressured and more inclined to communicate freely in a foreign language (Fantini, 2009).

Our study findings concerning intercultural sensitivity present a striking contrast to those of Liu (2017). While Liu's study found that Chinese-speaking anxiety level and duration of stay in China predominantly influenced students' WTC in Chinese, with only a non-significant correlation between WTC and intercultural sensitivity, our study revealed a contrary result. In our research, intercultural sensitivity emerged as the most influential predictor of oral WTC, both in face-to-face (FtF) and digital communication environments, across the two study contexts. The dissimilar results between Liu's (2017) study and our own can be attributed to a combination of cultural, contextual, methodological, and sample differences, as well as the distinct global status of English and Chinese. Liu's (2017) study sample consisted of university students with diverse native languages who were learning Chinese in China. This indicates a more culturally heterogeneous background. Moreover, these participants were older (mean age = 22.26) than those in our study, and their varied durations of stay in China (ranging from three months to 16 years) may impact the relationship between intercultural sensitivity and WTC. Another contributing factor may have been the variation in the WTC measures between the two studies. Furthermore, the recognition of English as a global lingua franca, frequently used for communication among speakers of different native languages, could have exposed learners to a diverse range of cultures and contexts. This may

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potentially influence the association between intercultural sensitivity and WTC. Additionally, learners' motivation to communicate in English and Chinese in these study contexts may differ based on their perceived utility and global importance and consequently, be amenable to intercultural sensitivity. We can only speculate how exactly these factors -individually or in combination- impinge on the association between intercultural communication and WTC. It may be the case that teenagers' WTC in a second or foreign language might be especially influenced by the level of openness or receptiveness to cultural differences. Alternatively, or complementarily, many university students in Lius's (2017) study presumably have a utilitarian need to study and/or work in China in contexts where speaking in Chinese is required, regardless of their stance towards cultural differences. Nevertheless, additional studies are required to examine and validate these hypotheses empirically.

Regarding the role of gender in the study participants' oral WTC in digital communication, our study found a digital gender divide in the sense that male secondary school learners in the study were significantly more willing to communicate orally in this mode of communication than female students in both contexts. Our findings diverge from those obtained in previous studies on the connection between outside-class WTC and gender. In research in Asian contexts with tertiary EFL learners by Lee and Hsieh (2019) in Taiwan, by Lee and Drajati (2019) in Indonesia and by Lee and Lee (2020) in Korean, gender did not emerge as a significant predictor of WTC. The instrument used for assessing the oral digital WTC may have contributed to this result. Studies have found that men are more inclined to use the internet for gaming (Dunahee & Lebo, 2016; Ono & Zavodny, 2007). Additionally, in a recent report (Common Sense Media, 2022) conducted in the USA, a 36-percentage-point difference in enjoyment of video gaming between boys and girls aged eight- to 18-year-olds was identified. Studies in the field of language learning have also found that male participants played significantly more massively multiplayer, role-playing, first-person shooter, and strategy games than female participants (Hjalmarsson, 2020; Sundqvist, 2009; Uuskoski, 2011).

Finally, another interesting finding was that SES was a predictor of oral WTC outside the class for the sample from Spain. This indicates that students from higher SES backgrounds in Spain are more likely to demonstrate a greater willingness to engage in oral communication in English outside the classroom, suggesting that students from higher SES backgrounds in Spain may have greater access to resources, opportunities, and experiences that positively influence their WTC in English. Additionally, these results seem to corroborate the conclusions drawn by studies that have identified a relationship between SES and factors that may arguably be associated with WTC, such as speech production scores (Huang et al., 2018), English performance (Butler, 2014, 2015; Butler & Le, 2018; Zou & Zhang, 2011), intrinsic motivation, and self-confidence (Butler, 2017). However, SES did not have a significant influence on oral WTC outside class among students from Poland. It can be speculated that one of the reasons why SES was only found to be a predictor of out-of-class WTC in the sample from Spain may be related to more spending on its GDP on school education in the case of Poland (Primary:1.4%; Spain:1.3%; Secondary: Poland:1.8%; Spain:1.3%) (OECD, 2022, p. 263), which may help facilitate access to resources and provide opportunities for language learning and use to a larger segment of the school population, which, in turn, may influence their WTC in the FL. In any case, this finding indicates that the relationship between SES and WTC outside the class can vary depending on the contextual factors within each country. This highlights the importance of considering specific contextual

environments when examining the predictors of WTC among different student populations. Further research is needed to validate these findings and explore the potential reasons for the relationship between SES and WTC in English outside the classroom in different contexts and populations.

5. Pedagogical implications

This study has several noteworthy pedagogical implications. However, we shall direct our attention towards the most salient ones.

Based on the finding that learners with lower levels of speaking anxiety and higher levels of enjoyment in classroom settings are more likely to engage in oral communication outside the classroom, pedagogical implications can be derived. To mitigate speaking anxiety and boost the interest and enjoyment that lead to extramural WTC among learners, it is advisable to incorporate activities, materials, and topics that ignite enthusiasm and captivate their attention. In addition, cultivating a classroom environment that is supportive, inclusive, and conducive to learners' well-being and comfort in expressing themselves orally is crucial.

Additionally, the consistent presence of spoken competence as a strong factor across all models indicates its robust influence on the WTC. This suggests that developing and enhancing students' oral communication skills, including fluency, pronunciation, and self-perceived ability, can positively impact their motivation and willingness to engage in communication in English outside the classroom.

Furthermore, the present study, in line with previous research, suggests that out-of-class WTC tends to be higher than in-class WTC. Specifically, digital environments typically stimulate higher levels of WTC, with FtF communication outside the classroom ranking second in terms of eliciting WTC. This calls for promoting meaningful and authentic communication both inside and outside the classroom, achieved through the use of the target language in practical situations, such as role-play, simulations, debates, real-world tasks, and integrating technology for digital communication. In turn, this requires the development of digital communication skills and opportunities for students to engage in oral communication using digital platforms and in-person situations. This can be achieved by incorporating online discussion forums, video conferencing tools, language exchange programs, conversation clubs, language cafés, or collaborative projects that require digital and/or FtF communication.

Finally, in both study contexts, intercultural sensitivity surfaced as the primary predictor of WTC in the two communication environments beyond the classroom. This presents a compelling case to integrate intercultural competence development into language learning curricula by designing activities, materials, and discussions, facilitating experiences that promote intercultural sensitivity and competence, fostering empathy and open-mindedness towards different perspectives and life experiences, and establishing a classroom environment that embraces linguistic and cultural diversity (Byram, 1989).

6. Conclusions

This study investigated the out-of-school WTC of EFL learners in secondary schools in Poland and Spain, focusing on two communication settings: FtF and digital. The findings

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revealed that both samples reported above-neutral levels of WTC in both communication environments. Interestingly, both groups exhibited similar WTC levels for the two modes of communication.

The study also found that affective factors such as enjoyment, speaking anxiety, and intercultural sensitivity had stronger correlations with FtF WTC than with digital WTC. This indicates that when students engage in direct in-person communication, their emotional experiences and intercultural skills have a greater influence on their WTC. However, digital communication may be influenced by factors such as technological proficiency and comfort with online platforms. These findings emphasize the role of the communication context in shaping the factors that influence WTC. Moreover, this study identified several significant predictors of WTC in both communication environments, including perceived competence, spoken competence, enjoyment, speaking anxiety, and intercultural sensitivity. Additionally, this study highlighted the importance of a previously underexplored factor in connection with WTC, intercultural sensitivity.

Furthermore, the study revealed a digital gender divide, with male students showing a greater willingness to communicate orally in the digital mode than female students. SES was also found to be a predictor of WTC outside class in the sample from Spain, indicating that students from higher SES backgrounds were more likely to engage in oral communication in English outside the classroom. However, this relationship was not observed in the sample from Poland.

When interpreting these findings, it is important to acknowledge the limitations of our study. These limitations include the use of a convenience sample from specific geographical areas in Poland and Spain, which may limit the generalizability of the results. The voluntary participation of students could have introduced a self-selection bias, and the lack of qualitative data limits our ability to provide a deeper explanation of the findings. Additionally, since our study was cross-sectional, we could not determine whether WTC was the cause or the result of the predicting factors, or if there was a bidirectional relationship between them. In addition, it is possible that unaccounted factors may have influenced the results.

Despite these limitations, our study contributes to the understanding of out-of-class oral WTC experiences and expands our knowledge of the factors associated with out-of-class WTC in English in secondary education, an area that lacks sufficient research. Understanding these predictors can inform pedagogical practices and interventions aimed at promoting WTC and enhancing language learning experiences for students.

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Appendix

Note: The translations into Polish and Spanish of the different instruments can be obtained from the authors.

Foreign Language Classroom Anxiety scale

1. Even if I am well prepared for FL class, I feel anxious about it.

2. I always feel that the other students speak the FL better than I do.
3. I can feel my heart pounding when I'm going to be called on in FL class.
4. I don't worry about making mistakes in FL class. (reverse-coded)
5. I feel confident when I speak in FL class. (reverse-coded)
6. I get nervous and confused when I am speaking in my FL class.
7. I start to panic when I have to speak without preparation in FL class.
8. It embarrasses me to volunteer answers in my FL class.

(Items extracted by MacIntyre [1992] from the FLCA scale developed by Horwitz et al.[1986])

Short-Form Foreign Language Enjoyment Scale (S-FLES) In the foreign language class:

1. My teacher encourages me to speak English.
2. The teacher is friendly.
3. The teacher is supportive when I speak English in class.
4. I enjoy my English lessons.
5. I've learned interesting things when speaking English in class.
6. I am proud of my accomplishments in speaking and interacting in English.
7. We form a tight group.
8. We laugh a lot in the English lessons.
9. We have common 'legends' such as running jokes.

(Adapted from the short form of the Foreign Language Enjoyment Scale (S-FLES) validated by Botes et al. [2021])

Intercultural Sensitivity Scale

1. I feel confident when interacting with people from different cultures.
2. I always know what to say when interacting with people from different cultures.
3. I can be as sociable as I want to be when interacting with people from different cultures.
4. I am pretty sure of myself in interacting with people from different cultures.
5. I am very observant when interacting with people from different cultures.
6. I enjoy interacting with people from different cultures.
7. I have a feeling of enjoyment towards difference between my culturally-distinct counterpart and me.
8. I respect the values of people from different cultures.
9. I respect the ways people from different cultures behave.
10. I am open-minded to people from different cultures.

(Original Wu's [2018] Intercultural Sensitivity scale [first 10 items] based on Chen and Starosta's Intercultural Sensitivity Scale)

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Out-of-class face-to-face WTC

1. When I speak in English with a foreign person who I see is having communication problems, e.g., when paying on public transport or in the supermarket.
2. When I give directions in English to a foreign person to get to a certain place.
3. When I start a conversation in person with a foreign person in English to find out things about her that interest me.
4. When I start a conversation in person with a group of foreign people in English to find out things about them of interest to me (e.g., their origin, profession or hobbies).
5. When I have to tell in person in English customs of my culture to a foreign person and describe the place where I live.
6. When I introduce a foreign person to my family/friends and I have to translate their conversation into English so they can communicate.

Out-of-class digital WTC

1. When I speak in English with a foreign person about a topic of interest to me through a videoconference program like Google Meet or Skype.
2. When I speak in English with several foreign people about a topic of interest to me through a videoconference program such as Google Meet or Skype.
3. When I play online multiplayer video games in English (e.g., League of Legends) of my interest with foreigners.
4. When I play massive multiplayer online video games in English (e.g., World of Warcraft) of my interest with foreigners.
5. When I record an audio message in English on WhatsApp to a foreign person about a topic of interest to me.

For Peer Review

Table 1 Demographic characteristics of the sample

		Poland (N = 1480)	Spain (N = 1128)
Age range		13-20	13-20
Mean age (SD)		16.19 (1.04)	15.24 (1.29)
Gender	Female	868 (58.65%)	609 (53.99%)
	Male	496 (33.51%)	490 (43.44%)
	Other	51 (3.45%)	11 (0.98%)
	Prefer not to say	65 (4.40%)	18 (1.60%)

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Table 2 Result of the Mann–Whitney test comparing the difference in out-of-class FtF and digital WTC between the two groups

Out-of-class setting	Country	*Mean* (Potential range: 1-5) (*SD*)	*Median*	Mean Rank	*U*	*z*	*p*	Effect size *d*
Face-to-face	Poland	3.66 (*.79*)	3.83	1291.09	802874.500	-1.045	.296	0.065
	Spain	3.68 (.89)	3.83	1322.10				
Digital	Poland	3.44 (*.86*)	3.60	1282.98	814870.500	-1.676	.094	0.041
	Spain	3.45 (.99)	3.60	1332.73				

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Table 4 Intercorrelations between variables (Spain sample)

Pearson correlations	1	2	3	4
1. FLE				
2. FLCA	–.10*			
3. Intercultural sensitivity	.24*	–.27*		
4. Face-to-face WTC	.35*	–.36*	.53*	
5. Digital WTC	.26*	–.37*	.43*	.72*

Note. FLE = Foreign Language Enjoyment; FLCA = Foreign Language Classroom Anxiety.
* $p < .01$. $N = 1099$.

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Table 5. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	2.16	0.30	7.17	<.001	–			
Gender	0.22	0.04	5.66	<.001	.14			
Age	–0.01	0.02	–0.43	.67	–.01			
SES	0.09	0.02	4.36	<.001	.11			
Relative Standing	0.17	0.01	17.96	<.001	.45			
Step 2						.49		
(Constant)	0.57	0.29	1.92	.06	–			
Gender	0.20	0.03	6.04	<.001	.12		.01 (2.6%) [6]	[.01, .02]
Age	–0.01	0.01	–0.08	.93	–.01		.00 (0%) [7]	[.00003, .0004]
SES	0.04	0.02	2.53	.01	.05		.01 (2.6%) [5]	[01, .03]
Relative Standing	0.03	0.01	2.90	.01	.07		.07 (14.8%) [3]	[.05, .09]
FLCA	–0.12	0.02	–6.20	<.001	–.16		.08 (15.6%) [2]	[.06, .10]
FLE	0.13	0.02	6.46	<.001	.13		.04 (7.5%) [4]	[.02, .06]
Intercultural Sensitivity	0.70	0.03	21.72	<.001	.52		.28 (56.7%) [1]	[.26, .31]

Note. $N = 1364$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .49$)

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Table 6. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class FtF WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.27		
(Constant)	1.44	0.29	4.97	<.001	–			
Gender	0.10	0.05	2.15	.032	.06			
Age	0.06	0.02	3.46	<.001	.09			
SES	0.03	0.02	1.88	.060	.05			
Relative Standing	0.18	0.01	18.15	<.001	.50			
Step 2						.45		
(Constant)	–0.47	0.31	–1.35	.176	–			
Gender	0.07	0.04	1.64	.101	.04		.003 (0.7 %) [7]	[.0015, .0091]
Age	0.04	0.02	2.57	.010	.06		.004 (0.9 %) [6]	[.0008, .011]
SES	0.04	.001	3.04	.002	.07		.02 (4.4%) [5]	[.009, .03]
Relative Standing	0.10	0.01	10.03	<.001	.28		.13 (28.9 %) [2]	[.10, .16]
FLCA	–0.10	0.03	–4.12	<.001	–.11		.05 (11.1%) [4]	[.03, .08]
FLE	0.24	0.03	8.31	<.001	.20		.07 (15.6%) [3]	[.05, .10]
Intercultural Sensitivity	0.53	0.04	13.91	<.001	.35		.17 (37.8%) [1]	[.13, .21]

Note. $N = 1099$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .45$)

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Table 7. Results of hierarchical regression analysis and dominance analysis for the Poland sample (Criterion: Out-of-class digital WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.18		
(Constant)	2.95	.034	8.63	<.001				
Gender	–0.16	0.04	–3.51	<.001	–.09			
Age	–0.04	0.02	–2.37	.02	–.06			
SES	0.07	0.02	2.97	.00	.08			
Relative Standing	0.16	0.01	14.58	<.001	.37			
Step 2						.35		
(Constant)	1.85	0.37	5.02	<.001				
Gender	–.017	0.04	–4.06	<.001	–.09		.01 (2.9%) [5]	[.01, .03]
Age	–0.04	0.02	–2.54	.01	–.06		.003 (0.9%) [7]	[.0004, .01]
SES	0.02	0.02	1.17	.24	.03		.01 (2.9%) [6]	[.00, .02]
Relative Standing	0.03	0.01	2.30	.02	.07		.06 (17.1%) [3]	[.04, .08]
FLCA	–0.13	0.02	–5.34	<.001	–.16		.07 (20%) [2]	[.05, .09]
FLE	.07	.025	2.81	.01	.06		.02 (5.7%) [4]	[.01, .03]
Intercultural Sensitivity	.61	.040	15.35	<.001	.41		.18 (51.4%) [1]	[.14, .21]

Note. $N = 1364$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .35$)

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Table 8. Results of hierarchical regression analysis and dominance analysis for the Spain sample (Criterion: Out-of-class digital WTC)

Independent variables	*b*	*SE*	*t*	*p*	β	R^2	Dominance weight [Rank]	95% CI of DW
Step 1						.23		
(Constant)	1.74	0.33	5.23	<.001				
Gender	−0.27	0.05	−5.03	<.001	−.13			
Age	0.04	0.02	2.07	.04	.05			
SES	0.03	0.02	1.72	.09	.05			
Relative Standing	0.18	0.01	15.40	<.001	.43			
Step 2						.35		
(Constant)	0.15	0.37	0.40	.69				
Gender	−0.29	0.05	−5.51	<.001	−.15		.02 (5.7%) [5]	[.01, .04]
Age	0.02	0.02	1.07	.31	.03		.001 (0%) [7]	[.0002, .0004]
SES	0.04	0.02	2.40	.02	.06		.02 (5.7%) [6]	[.01, .03]
Relative Standing	0.10	0.01	8.34	<.001	.25		.10 (28.6%) [2]	[.07, .12]
FLCA	−0.11	0.03	−3.47	<.001	−.10		.06 (17.4%) [3]	[.03, .08]
FLE	0.18	0.04	5.16	<.001	.13		.04 (11.4%) [4]	[.02, .06]
Intercultural Sensitivity	0.52	0.05	11.16	<.001	.30		.12 (34.3%) [1]	[.09, .16]

Note. $N = 1099$. DW: dominance weight. The sum of dominance weights is equal to the total R^2 ($R^2 = .35$)

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