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## Research Paper

# Exploring the Relationship Between Out-of-Class Engagement With English and Academic Achievement at University Level

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## Abstract

In recent decades, the advancement of information and communications technology (ICT) has transformed language learning by providing learners with extensive exposure to the target language beyond the classroom, impacting language learning methodologies and assessment practices. This study examined the out-of-class English-language-related practices of 91 prospective primary teachers at the University of the Balearic Islands and their influence on academic achievement. Using a questionnaire and the participants' grades, the study revealed significant differences in engagement frequency and grades across reading, writing, speaking, and final course grades, highlighting the positive impact of informal practices on academic achievement. No significant gender-related differences in the choice and frequency of informal language activities were observed, except for involvement in digital gaming and 'other' activities. These findings emphasize the need for L2 teachers to integrate real-world language use into formal instruction, fostering more meaningful teaching and assessment practices aligned with 21<sup>st</sup>-century learning.

**Keywords:** Out-of-School Exposure; Informal Language Learning; Academic Achievement; English Language Teaching; Primary School Teachers; Gender-Related Differences.

## 1. Introduction

In the last few decades, the rapid development of information and communication technology (ICT) has provided learners with almost unlimited contact with the target language outside the classroom (Bobkina & Dominguez-Romero, 2023; Godwin-Jones, 2019; Parmaxi, 2023; Traxler et al., 2023). These technological advances have facilitated language learners to easily access content and educational resources, enriching their language learning experience and empowering them to become autonomous learners. As Chappelle and Sauro (2017) acknowledge “. . . technology has become integral to the way that most language learners in the world today access materials in their second and foreign language, interact with others, learn in and out of the classroom, and take many language tests” (p. 1). In fact, the classroom setting is just one of numerous opportunities for engagement with the target language. These new learning environments present some challenges to L2 English teachers, who are increasingly urged to bridge formal and informal language practices, prompting them to reshape their language learning methodologies and assessment practices (Bocanegra-Valle, 2023; Brevik & Holm, 2023; Díez-Arcón & Martín-Monje, 2023; Holm, 2020; Kannan & Munday, 2018; Lucas & Vicente, 2023). Indeed, the future of instructed language learning is believed to depend on L2 teachers' willingness to embrace technological advances and create opportunities for students to engage in English language-related activities beyond the classroom (Godwin-Jones, 2019; Liu & Wang, 2024).

While previous research has explored informal language practices and their potential impact on learners' L2 development (Arndt, 2019; Muñoz, 2020; Muñoz & Cadierno, 2021; Sockett, 2014; Sundqvist, 2009, among others), there is little research on exposure to the target language in informal settings among future language teachers. However, teachers' proficiency in digital skills and their ability to integrate them into the classroom to facilitate connections with out-of-class language practices are essential to enhance the effectiveness of language classes (Holm, 2020; Trinder, 2017;



Winter et al., 2021). Thus, this study was an attempt to contribute to the limited research in this area by examining the choice and frequency of engagement with out-of-class English practices among prospective primary school teachers. Additionally, it sought to explore the impact of informal exposure on the participants' English academic achievement.

## 2. Literature Review

### 2.1. Informal Language Learning

In recent years, informal learning has become a significant focus of study in the context of SLA (Arndt, 2019; Lee, 2022; Sundqvist & Sylvén, 2016; Toffoli et al., 2023). The widespread availability of digital technologies offers numerous opportunities for L2 learning, providing learners with substantial exposure to the target language, while transcending the constraints of the traditional curriculum (Kannan & Munday, 2018). Contemporary L2 learners of all ages have become active users of English, engaging in L2 activities irrespective of geographic constraints. Thus, exploring the impact of informal learning on SLA stands as a crucial concern for researchers aiming to extend their focus beyond traditional classroom settings in the 21st century (Socketk, 2023).

Several terms have been used to investigate the field of informal learning in L2 acquisition, such as learning beyond the classroom (LBC; Benson, 2011), online informal learning of English (OILE; Socketk, 2014; Toffoli & Socketk, 2010), extramural English (EE; Sundqvist, 2009), informal digital learning of English (IDLE; Lee, 2017; Lee & Dressman, 2017), and informal second language learning ISLL; Arndt, 2019). Given the pervasive influence of English and its prominent cultural presence in digital media (e.g., music and audio-visual materials), certain terms—like OILE, EE, and IDLE—are specifically associated with the learning of English (Toffoli et al., 2023). Various approaches to informal L2 learning also distinguish between exclusively online learning (e.g., OILE and IDLE) and learning in both offline and online L2 environments (e.g., LBC, EE, or ISLL). Despite these different perspectives, informal language learning typically involves leisure-time activities, self-initiated by the learner, during their free time (Lyriqkou, 2023). While language learning may be intentional, engagement in these activities is predominantly motivated by enjoyment and entertainment, often resulting in language acquisition as a by-product of informal practices (Socketk, 2014). As Socketk (2023) argues, informal language learning involves acquiring knowledge in a naturalistic manner from resources not specifically created for the purpose of language learning. Therefore, popular informal language practices include playing video games, watching films or series in English, chatting on Twitter/X and WhatsApp, and listening to music, which can be particularly motivating (Chik & Ho, 2017).

Research on informal language learning consistently indicates that informal exposure positively impacts L2 development, particularly in terms of vocabulary acquisition. Activities such as digital gaming (Brevik, 2019; De Wilde et al., 2020; De Wilde & Eyckmans, 2017; Kuppens, 2010; Plass et al., 2020; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015) and watching TV programs and films in English have been associated with the promotion of vocabulary learning (Hannibal Jensen, 2017; Pujadas & Muñoz, 2019). Watching English-language films or series is closely linked to the improvement of receptive language skills, such as listening and reading (Alonso, 2023; Ford-Connors & Paratore, 2015; Lefever, 2010), as well as productive language skills, including writing and speaking (Kuppens, 2010; Olsson, 2011; Saito & Hanzawa, 2018; Sundqvist, 2009). Similarly, engaging in other informal language practices such as reading (Webb & Chang, 2015), writing (Verspoor et al., 2011), and speaking practices (De Wilde et al., 2020) has shown positive effects on L2 proficiency. However, these latter practices appear to be less popular, especially among younger learners who often prefer watching TV shows or films in English instead (European Commission, 2017; Pujadas & Muñoz, 2019).

Several studies have also highlighted differences in exposure to informal English across gender and age groups. Thus, research indicates that males and adolescents tend to engage in gaming more frequently than females and adults. On the contrary, females often favor spending more time watching films, using Facebook, or TikTok (Fajt, 2022; Hannibal Jensen, 2017; Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012, among others), while adults seem to prefer informal reading to a greater extent (Muñoz, 2020). In fact, evidence indicates that involvement in out-of-class activities may change or vary over time (Muñoz, 2020; Peters, 2018).

Overall, studies suggest that informal language learning is a widespread phenomenon integral to contemporary language learning, positively contributing to L2 development (Socketk, 2023).

## 2.2. Teachers' Informal Interests

The fast developments in technology-enhanced language learning systems have considerable implications for L2 learning, prompting a thorough examination of the role that informal language learning plays in L2 teaching contexts (Brevik & Holm, 2023; Holm, 2020; Kannan & Munday, 2018). Within this framework, Godwin-Jones (2019) explores three potential scenarios for the future of language learning. Given the continuous enhancement of modern language tools, which now include advanced speech translation capabilities, the first scenario leads us to contemplate a future where doubts may arise regarding the practical necessity of learning an L2. As we are increasingly exposed to abundant content in the target language and have access to appealing online resources, the second scenario hints at a potential future that may question the need for formal language instruction. The third scenario suggests that, despite the richness of today's technology-mediated environments, there will still be a demand for instructed language learning. This implies that L2 teachers will continue to play a crucial role in providing pedagogical support and guiding students. However, the viability of formal language instruction will depend on language educators embracing technological advances and promoting students' engagement in informal language practices.

Indeed, teachers should recognize the significant opportunities that emerging technologies provide for enhancing students' autonomy and enriching their language learning experiences (Kannan & Munday, 2018; Toffoli et al., 2023). This may introduce new pedagogical challenges for L2 teachers, who are encouraged to move away from traditional pedagogies and adequately integrate online resources into the language classroom, thus bridging the gap between formal and informal language learning (Kannan & Munday, 2018; Lucas & Vicente, 2023). While some scholars are skeptical about the effectiveness of present-day technology to enhance L2 learning, several studies have shown that most L2 teachers hold a positive attitude towards adapting their teaching approaches to digital reality (Toffoli & Sockett, 2015; Zadorozhnyy & Yu, 2023), highlighting the benefits of technology in engaging students in the teaching-learning process (Bobkina & Dominguez-Romero, 2023) and providing them with personalized instruction that meets their specific needs (Yudi-Cahyono et al., 2023). Innovative approaches such as blended learning, which combines formal classroom instruction with online learning experiences (Bizami et al., 2023; Godwin-Jones, 2019), have demonstrated numerous advantages, including more meaningful learning and authentic assessment, potentially leading to increased student engagement levels (Bernard et al., 2014; Vaughan, 2014).

However, for L2 teachers to adopt these new technological practices effectively, adequate training is also required (Lucas & Vicente, 2023; Momenzadeh et al., 2023; Rodríguez-Arancon, 2023). L2 teacher training programs should focus on increasing teachers' awareness of informal language learning and evaluation resources, guiding them on how to effectively assess these resources, and supporting their integration into the classroom to enhance their students' language learning process. Indeed, teachers' beliefs about technology and informal language learning have been shown to affect their instructional decisions and overall teaching and assessment methods, thus shaping their educational practice (Chen, 2008; Kim et al., 2013). However, there remains a lack of understanding regarding teachers' informal language practices and the integration of informal resources into the classroom (see Arndt & Lyriqkou, 2019; Brevik & Holm, 2023; Kim et al., 2013; Lee, 2022). Given the growing importance of digital competence in education and informal language learning, teachers have a significant impact on how students learn English (Holm, 2020). Therefore, this study aimed to contribute to addressing this gap by examining future L2 teachers' informal language practices to increase their awareness of informal language resources and facilitate their integration into the classroom, thereby making lessons more socially relevant.

## 3. The Study

### 3.1. Aims and Research Questions

The present study aimed to investigate the potential impact of English contact outside the classroom on L2 development. Specifically, it examined the types of English-language-related activities in which prospective primary school teachers engage, a population group that has received relatively little attention in previous research (Hannibal Jensen, 2017; Muñoz, 2020). Furthermore, the study explored potential gender differences in out-of-school English contact. Lastly, it analyzed the relationship between the amount and types of exposure and classroom grades in the four communicative skills (i.e., speaking, listening, reading, and writing). Thus, the study addressed the following research questions:

1. What informal English language-related activities do prospective primary teachers engage in?
2. Are there any significant differences in the choice and frequency of contact with English outside the classroom across genders?
3. Is there a significant relationship between out-of-class contact with English and students' grades in the four skills (i.e., speaking, listening, reading, and writing)?

### 3.2. Participants

The participants were a total of 91 prospective primary school teachers ( $n = 66$  female;  $n = 25$  male), enrolled in the Faculty of Education at the University of the Balearic Islands (UIB). The majority of the participants were in their first and second years at the university (87.9%), with only 12.1% in the third and fourth years. None of the students were native English speakers. The ages of the participants ranged from 18 to 39, with a mean age of 20.4. Regarding age distribution, the majority of the respondents (76%) were between 19 and 20 years old, 18% were between 21 and 24 years old, and only 6% were between 25 and 39 years old.

### 3.3. Research Instruments and Procedure

Two research instruments were used to collect the data: a questionnaire and the students' classroom grades. The questionnaire was adapted from previous research (Hannibal Jensen, 2017; Muñoz & Cadierno, 2021) in order to examine the type and frequency of contact with English beyond the classroom. Prior to the implementation, the questionnaire was piloted with 10 students from other faculties within the same age range to ensure clarity, relevance, and effectiveness.

The questionnaire consisted of closed-response questions and was divided into two main sections: The first section aimed to gather background information about the participants (e.g., age, L1, English certification level, etc.). The second section comprised 15 Likert-scale items designed to measure the participants' engagement with informal English-language-related practices, rated on a 6-point Likert scale ranging from 1 (*never*) to 6 (*more than 8 hours a week*). The following informal practices were measured: watching films or series (with L1 subtitles, with L2 subtitles, or without any subtitles), playing video games (single-player or multiplayer involving writing or speaking in English), listening to music, reading, speaking (online or face-to-face), writing, and participating in 'other' activities. The data regarding the students' grades were collected from their teachers, who provided the final grades earned by the participants in the four English communicative skills (i.e., speaking, listening, reading, and writing), as well as their course grades. It should be noted that the Spanish educational system uses a 0- to 10-point grading scale, where '0' corresponds to the lowest grade and '10' to the highest grade. A minimum of 5 points is required to pass the course.

The questionnaire was emailed to every student who volunteered to participate in the study, provided that they gave their consent before starting the survey and agreed to the use of their data for research purposes. The participants completed the questionnaire during a regular class period for about 15-20 min. The quantitative results were analysed with the Statistical Package for the Social Sciences (SPSS) version 29.0.1. The Cronbach's alpha coefficient for the scale used in this study was .78 ( $\alpha = .78$ ), indicating a good level of internal consistency within this specific sample (15 items).

### 3.4. Data Analysis

A quantitative approach was used to address the three research questions in this study. Weekly degree of contact with English was categorized into four different levels: No contact (NC; i.e., 0 level of contact); low frequency of contact (L; i.e., up to 1 hour of exposure per week); medium frequency of contact (M; i.e., between 2 and 5 hours per week), and high frequency of contact (H; i.e., between 6 and more than 8 hours per week).

Frequency tables were first used to measure the frequency of exposure to the different informal practices. Composite scale scores of the different categories were also calculated to provide a more comprehensive overview. Chi-square tests for independence were used to compare the frequency of engagement in informal language practices across genders (both categorical variables). One-way analysis of variance (ANOVA) was run to determine whether statistically significant differences existed between out-of-class contact with English (i.e., NC, L, M, or H) and the participants' grades in the four communicative skills (i.e., speaking, listening, reading, and writing), as well as their final course grades. Post-hoc Tukey tests were, then, conducted to identify specific group differences. Spearman's ranks correlations were also

computed to examine the relationship between informal language practices and participants' grades in the four skills, as well as their final course grades

#### 4. Analyses and Discussion of Results

##### 4.1. Type and Frequency of Contact with Informal English-Language-Related Activities

The first research question examined the amount and type of contact the participants had with English-language-related activities beyond the classroom. Table 1 below displays the frequency of contact with the following informal English practices: watching films or series (with L1 subtitles, with L2 subtitles, or without any subtitles), playing video games (single-player or multiplayer involving writing or speaking in English), listening to music, reading, speaking (online or face-to-face), writing, and participating in 'other' activities:

Table 1. *Frequency and Type of Contact With Informal English-Related Activities*

	NO	L	M	H
WATCHFILMS	32(35.2%)	28(30.8%)	23(25.3%)	8(8.8%)
ENGLISHSUBT	43(47.3%)	18(19.8%)	26(28.6%)	4(4.4%)
NOSUBT	56(61.5%)	23(25.3%)	8(8.8%)	4(4.4%)
SPANISHSUBT	32(35.2%)	33(36.3%)	22(24.2%)	4(4.4%)
VIDEOGAMES	54(59.3%)	20(22.0%)	13(14.3%)	3(3.3%)
SINGLEPLAYER	68(74.7%)	14(15.4%)	7(7.7%)	2(2.2%)
MULTIPLAYER	78(85.7%)	9(9.9%)	4(4.4%)	0(0.0%)
MULTIPLWRITE	81(89.0%)	8(8.8%)	2(2.2%)	0(0.0%)
MULTIPLSPEAK	81(89.0%)	7(7.7%)	2(2.2%)	1(1.1%)
LMUSIC	3(3.3%)	10(11.0%)	36(39.6%)	42(46.2%)
READ	48(52.7%)	31(34.1%)	10(11.0%)	2(2.2%)
SPEAKON	76(83.5%)	12(13.2%)	1(1.1%)	2(2.2%)
SPEAKF2F	64(70.3%)	17(18.7%)	7(7.7%)	3(3.3%)
WRITE	63(69.2%)	24(26.4%)	3(3.3%)	1(1.1%)
OTHER	37(40.7%)	24(26.4%)	24(26.4%)	6(6.6%)

Note 1: NO = Never; L = Low frequency; M = Mid frequency; H = High frequency

Note 2: WATCHFILMS = watching films; ENGLISHSUBT = films with English subtitles; NOSUBT = films with no subtitles; SPANISHSUBT = films with Spanish subtitles; VIDEOGAMES = videogames; SINGLEPLAYER = single player games; MULTIPLAYER = multiplayer games; MULTIWRITE = multiplayer writing in English; MULTISPEAK = multiplayer speaking in English; LMUSIC = listening to music; READ = reading; SPEAKON = speaking online; SPEAKF2F = speaking face-to-face; WRITE = writing; OTHER = other activities

As shown in Table 1, the highest level of out-of-class exposure to English input with medium and high frequency is through listening to music (85.8%), followed by watching films or series in English (33.1%), mainly with Spanish subtitles (28.6%), and engaging in 'other' activities (33%). These findings align with previous research indicating that listening to English-language songs and watching films or series in English are the most prevalent English-language-related activities among learners outside the classroom (see Alonso, 2022, 2023; Amengual-Pizarro & Jacob, 2022; Lai et al., 2015; Lindgren & Muñoz, 2013; Olsson, 2011; Peters, 2018; Sockett, 2014, among others). In contrast, playing video games (17.65%), participating in speaking both online and face-to-face (14.3% altogether), and particularly engaging in informal writing (4.4%) were the least popular activities practiced with medium and high frequency. These results contradict those of Alonso (2023), who indicated that university students were involved in writing and speaking activities with medium and high frequency, respectively. However, as the author points out, the participants in her study were specializing in the English language and literature, which could explain their more frequent contact with friends abroad and engagement in these activities. On the contrary, playing video games has been found to be an informal practice in which adult learners never engage or do it with very low frequency (Alonso, 2022, 2023; Muñoz, 2020), suggesting that preferences for different types of activity vary with age (Muñoz, 2020; Peters, 2018).

To facilitate comprehension and provide a general overview, composite scores of the different types of informal activities were computed. Table 2 displays the frequency distribution for the seven categories obtained: films, video games, music, reading, speaking, writing, and 'other.' As can be seen, the least popular activities were writing (95.6%) and reading (86.8%), which were rarely or never practiced. This finding is consistent with prior research, which indicates that students tend to prefer listening to English content online rather than engaging in reading or writing activities in English (Alonso 2022; Sockett, 2014; Toffoli & Sockett, 2010). In contrast, listening to English-language songs was the



most popular activity, with only 3.3% of participants reporting never being in contact with them or having very low exposure frequency (35.2%):

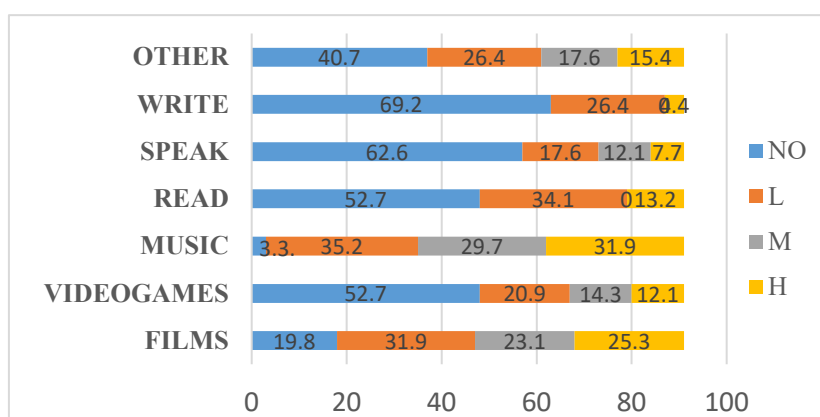
Table 2. *Frequency and Type of Contact With Informal English-Related Activities: Composite Scale Variables*

	NO	L	M	H
FILMS	18 (19.8 %)	29 (31.9 %)	21 (23.1 %)	23 (25.3 %)
VIDEOGAMES	48 (52.7 %)	19 (20.9 %)	13 (14.3 %)	11 (12.1 %)
MUSIC	3 (3.3 %)	32 (35.2 %)	27 (29.7 %)	29 (31.9 %)
READ	48 (52.7 %)	31 (34.1 %)	0 (0.0%)	12 (13.2 %)
SPEAK	57 (62.6 %)	16 (17.6 %)	11 (12.1 %)	7 (7.7 %)
WRITE	63 (69.2 %)	24 (26.4 %)	0 (0.0%)	4 (4.4 %)
<b>OTHER</b>	37 (40.7 %)	24 (26.4 %)	16 (17.6 %)	14 (15.4 %)

Note 1: NO = Never; L = Low frequency; M = Mid frequency; H = High frequency

Note 2: FILMS = watching films; VIDEOGAMES = playing videogames; MUSIC = listening to music; READ = reading; SPEAK = speaking; WRITE = writing; OTHER = other activities

Figure 1 visually represents the percentage frequency of exposure of the composite scale variables:



Note: NO = Never; L = Low frequency; M = Mid frequency; H = High frequency

Figure 1. *Bar Frequency Plot for the Composite Score Variables*

Taken together, these findings indicate a preference among participants for informal receptive activities, such as listening to music and watching films or series in English, over more productive ones like speaking or writing (see De Wilde et al., 2020). The prevalence of such practices also highlights their leisure-oriented nature outside academic settings (Godwin-Jones, 2019; Sockett, 2023; Toffoli et al., 2023), suggesting that students engage in these practices mainly for entertainment (Arndt, 2019).

#### 4.2. Gender-Related Differences in Choice and Frequency of English Exposure Outside the Classroom

As previous research findings have indicated significant gender-related differences in informal contact with English (Arndt, 2019; Hannibal Jensen, 2017; Muñoz, 2020; Peters et al., 2019; Sundqvist & Sylvé, 2014; Sylvé & Sundqvist, 2012, among others), the second research question aimed to investigate these potential differences across both groups.

Pearson chi-square tests were conducted using composite scores of the different categories to examine the potential relationship between the type and frequency of exposure to informal English-related activities and gender. The results revealed gender-related significant differences in the frequency of engagement in two informal practices: digital gaming ( $\chi^2 = 7.137$ ,  $df = 2$ ,  $p = .028$ ; Cramer's  $V = .28$ ) and involvement in 'other' activities ( $\chi^2 = 7.970$ ,  $df = 3$ ,  $p = .047$ ; Cramer's  $V = .29$ ).

Although gaming was not a popular informal activity among both genders (see Tables 3 and 4), males reported more frequent engagement than females. Specifically, 92.6% of the females reported no gaming activity compared to 76.0% of the males who reported never engaging in gaming. On the contrary, the females engaged in 'other' informal activities with medium and high frequency more often than the males (40.9% of the females vs. 12% of the males). These

results align with previous studies indicating that males are more likely to engage significantly more frequently in digital gaming (Muñoz, 2020; Sundqvist, 2009; Sundqvist & Sylvén, 2014). Similarly, they are consistent with Fajt's (2022) findings, which suggest that while the males tended to favor gaming, the females were more likely to prefer other activities, such as engaging with TikTok and watching beauty or makeup content on YouTube. Despite these trends, no significant differences were observed in the skills grades of reading ( $M = 6.88$  in the males vs.  $M = 6.65$  in the females), listening ( $M = 6.91$  in  $M$  males vs.  $M = 7.18$  in the females), writing ( $M = 6.54$  in the males vs.  $M = 6.42$  in the females), and speaking ( $M = 6.73$  in  $M$  males vs.  $M = 6.92$  in  $M$  females), nor in the final course grades between the males ( $N = 25$ ,  $M = 6.83$ ,  $SD = 1.25$ ) and the females ( $N = 66$ ,  $M = 6.93$ ,  $SD = 1.25$ ).

Table 3. *Gender-Related Differences in Composite Video Game Scale Variable*

		Gender:				Total	
		Female		Male			
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
GAMEscale	NO Contact	61	92.4%	19	76.0%	80	87.9%
	LOW Contact	5	7.6%	4	16.0%	9	9.9%
	MEDIUM Contact	0	0.0%	2	8.0%	2	2.2%
Total		66	100.0%	25	100.0%	91	100.0%

Table 4. *Gender-Related Differences in Composite 'Other' Activities Scale Variable*

		Gender				Total	
		Female		Male			
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
OTHERscale	NO Contact	22	33.3%	15	60.0%	37	40.7%
	LOW Contact	17	25.8%	7	28.0%	24	26.4%
	MEDIUM Contact	22	33.3%	2	8.0%	24	26.4%
	HIGH Contact	5	7.6%	1	4.0%	6	6.6%
Total		66	100.0%	25	100.0%	91	100.0%

### 4.3. Impact of Out-of-Class Contact With English on Academic Achievement

The third research question sought to determine whether there was a statistically significant difference between out-of-school contact with English and the participants' grades in the four communicative skills (i.e., speaking, reading, writing, and listening), as well as their final English course grades.

The ANOVA tests (see table 5) revealed a significant association between the frequency of exposure to watching films or series in English and reading grades [ $F(3, 87) = 3.276$ ,  $p = .025$ ,  $\eta^2 = .101$ ], writing grades [ $F(3, 87) = 3.146$ ,  $p = .029$ ,  $\eta^2 = .098$ ], as well as final grades [ $F(3, 87) = 3.793$ ,  $p = .013$ ,  $\eta^2 = .116$ ]. This finding highlights the positive effect of audio-visual input on L2 academic achievement (see also Kuppens, 2010; Lindgren & Muñoz, 2013; Olsson, 2011; Peters, 2018; Sundqvist, 2009).

With regard to reading grades, post-hoc Tukey tests indicated significant differences between students who never engaged in watching films or series in English ( $N = 32$ ,  $M = 6.23$ ,  $SD = 1.44$ ) and those highly involved in this informal activity ( $N = 8$ ,  $M = 7.64$ ,  $SD = 1.19$ ,  $p = .031$ ). Similarly, significant differences were found in writing grades between participants who had never watched English language films or series ( $N = 32$ ,  $M = 5.98$ ,  $SD = 1.79$ ) and those with high exposure to this activity ( $N = 8$ ,  $M = 7.57$ ,  $SD = 1.44$ ,  $p = .042$ ). Furthermore, overall course grades differed significantly between students who had never watched films or series in English ( $N = 32$ ,  $M = 6.43$ ,  $SD = 1.32$ ) and those highly exposed to this activity ( $N = 8$ ,  $M = 7.92$ ,  $SD = 0.70$ ;  $p = .012$ ). Additionally, a significant difference was found between the final grades of the participants with medium exposure to films and series in English with captions (i.e., L2 subtitles;  $N = 26$ ,  $M = 7.28$ ,  $SD = 1.19$ ) and those who never engaged in this activity ( $N = 43$ ,  $M = 6.57$ ,  $SD = 1.33$ ,  $p = .045$ ), indicating that captions were preferred by the participants with higher English language proficiency. In all instances, the

participants who had watched English language films or series with high or medium frequency achieved higher grades than those who had hardly or not been involved in this practice.

Table 5. Association Between Informal Activities and Grades in the Four Skills and Final Course Grades

	Reading Grades		Listening Grades		Writing Grades		Speaking Grades		Final Grades	
	$F_{3,87}$	$p$	$F_{3,87}$	$p$	$F_{3,87}$	$p$	$F_{3,87}$	$p$	$F_{3,87}$	$p$
WATCHFILMS	3.276	.025*	.960	.415	3.146	.029*	1.861	.141	3.793	.013*
ENGLISHSUBT	2.697	.051	1.949	.128	1.337	.268	2.000	.120	3.002	.035*
NOSUBT	2.022	.117	.438	.727	1.989	.122	.541	.656	.942	.424
SPANISHSUBT	1.216	.309	4.922	.051*	1.576	.201	2.123	.103	1.446	.235
VIDEOGAMES	1.113	.348	1.847	.145	.548	.651	.317	.813	2.363	.067
SINGLEPLAYER	.662	.578	.439	.726	.667	.575	.204	.893	1.658	.182
MULTIPLAYER	.746	.477	.879	.419	.413	.663	1.252	.291	.055	.946
MULTIWRITE	.529	.591	.940	.394	.016	.984	.462	.631	.445	.642
MULTISPEAK	.874	.458	.368	.776	.130	.942	1.209	.311	.037	.991
LMUSIC	.499	.684	.439	.726	.832	.480	.307	.820	.870	.460
READ	1.266	.291	.253	.859	2.555	.060	1.022	.387	1.846	.145
SPEAKON	.726	.539	1.176	.324	1.374	.256	.639	.592	.718	.544
SPEAKF2F	2.693	.051	1.678	.178	1.344	.265	4.030	.010*	3.025	.034*
WRITE	2.820	.051	1.978	.123	.972	.410	1.546	.208	3.511	.051
OTHER	1.984	.122	.207	.891	2.543	.061	2.273	.086	1.622	.190

Note: WATCHFILMS = watching films; ENGLISHSUBT = films with English subtitles; NOSUBT = films with no subtitles; SPANISHSUBT = films with Spanish subtitles; VIDEOGAMES = videogames; SINGLEPLAYER = single player games; MULTIPLAYER = multiplayer games; MULTIWRITE = multiplayer writing in English; MULTISPEAK = multiplayer speaking in English; LMUSIC = listening to music; READ = reading; SPEAKON = speaking online; SPEAKF2F = speaking face-to-face; WRITE = writing; OTHER = other activities

As shown in Table 5, engaging in face-to-face communication seemed to have an influence on speaking grades [ $F(3, 87) = 4.030, p = .010, \eta^2 = .122$ ] as well as final grades [ $F(3, 87) = 3.025, p = .034, \eta^2 = .094$ ]. With regard to speaking grades, significant differences were observed between the students highly involved in face-to-face speaking practices ( $N = 3, M = 8.76, SD = 1.11$ ) and those who had never participated in this activity ( $N = 64, M = 6.58, SD = 1.51, p = .045$ ). Likewise, final grades exhibited significant differences between the participants who had never engaged in face-to-face communication ( $N = 64, M = 6.70, SD = 1.28$ ) and those highly involved in this practice ( $N = 3, M = 8.55, SD = .42; p = .045$ ). Once again, higher levels of contact with these informal activities were associated with higher participants' grades.

To further explore the association between engagement in informal activities and the participants' grades, Spearman's rank correlations were computed using the composite scale scores of the different informal practices (see Table 6). Although correlation values were not exceptionally high, significant positive correlations were found between reading grades and watching films or series in English ( $r = .234, n = 91, p = .026$ ). Similarly, writing grades showed a positive correlation with engaging in informal reading ( $r = .241, n = 91, p = .021$ ), while speaking grades correlated significantly with engaging in 'other' informal activities ( $r = .258, n = 91, p = .014$ ).

As regards final grades, the strongest positive relationship was observed with watching films or series in English ( $r = .240, n = 91, p = .022$ ), highlighting its beneficial effects on academic achievement. Positive relationships were also found between final grades and writing ( $r = .231, n = 91, p = .028$ ) as well as reading ( $r = .229, n = 91, p = .029$ ) practices. It is worth noting that engaging in digital gaming showed a negative correlation with all grades in the four skills, which was significant with final grades ( $r = -.226, n = 91, p = .031$ ). This indicates that higher exposure to digital gaming was associated with lower participants' course grades. This finding corroborates prior research results obtained by Muñoz (2020), who also found that the participants with lower grades demonstrated higher levels of engagement in gaming:

Table 6. Communicative Skills and Final Course Grades Correlations

	Reading Grades		Listening Grades		Writing Grades		Speaking Grades		Final Grades	
	$r_s$	$p$	$r_s$	$p$	$r_s$	$p$	$r_s$	$p$	$r_s$	$p$
FILMS	.234	.026*	.006	.955	.200	.057	.146	.166	.240	.022*
VIDEO GAMES	-.007	.532	-.162	.126	-.087	.411	-.136	.198	-.226	.031*
MUSIC	.066	.532	.130	.220	.094	.376	-.010	.927	.080	.454



READ	.024	.821	.084	.427	.241	.021*	.151	.153	.229	.029*
SPEAK	.150	.155	.088	.407	.154	.144	.202	.055	.119	.263
WRITE	.151	.154	.149	.158	.107	.311	.121	.252	.231	.028*
OTHER	-.019	.862	.098	.353	.148	.163	.258	.014*	.118	.266

Note: FILMS = watching films; VIDEOGAMES = playing videogames; MUSIC = listening to music; READ = reading; SPEAK = speaking; WRITE = writing; OTHER = other activities

To sum up, the findings suggest that informal English-language-related activities, such as watching films or series in English, reading, and engaging in ‘other’ activities, positively impact reading, writing, and speaking grades, respectively. Additionally, most of these informal practices—watching films in English, reading, and writing—show a positive association with final course grades, with the exception of gaming, which negatively correlates with final grades.

## 5. Conclusion

This study examined the frequency and type of contact with informal English-language-related activities and its impact on the English proficiency of future primary school teachers. The results show that, in line with prior research, listening to music in English is the most popular activity that participants engage in outside the classroom (Alonso, 2022; Arndt, 2019; Muñoz, 2020; Peters, 2018; Sockett, 2014; Sundqvist, 2009), followed by watching films or series in English, mainly with Spanish subtitles. These findings emphasize the recreational (Chik & Ho, 2017) nature of engaging in informal practices, typically motivated by the desire of enjoyment and entertainment (Arndt, 2019; Toffoli et al., 2023). The investigation of the potential benefits of listening to music outside the classroom on L2 development has so far produced mixed results. While some authors argue that learners actively engage with the music they choose, showing interest in understanding the song lyrics and content (Sockett, 2014), other scholars believe that music does not necessarily require attention or involve understanding the language, making it an informal practice less conducive to language learning (De Wilde et al., 2020). In contrast, the pedagogical value of out-of-class TV viewing (i.e., TV programmes, series, films, etc.) in improving L2 has been widely acknowledged (Alonso 2023; Kusyk & Sockett, 2012; Sockett, 2014). In fact, engagement in watching films or series in English seems to be a common activity among most university students (Peters, 2018; Toffoli & Sockett, 2010). Moreover, although watching English language films with L1 subtitles has been linked to lower proficiency levels (Pujadas & Muñoz, 2019; Vanderplank, 2010), research has demonstrated that L2 learners can still benefit from viewing audio-visual content, irrespective of the type of subtitles (Peters, Heynen, & Puimège, 2016). Indeed, the findings of this study showed that watching films or series in English had the strongest positive correlation with the final course grades. Consistent with prior research, the data also indicated that writing and speaking are not common informal English activities among university students (Alonso, 2022; Sockett, 2014; Toffoli & Sockett, 2010). This might be partly attributed to the greater conscious effort and focus on content needed to perform certain informal activities (see Arndt, 2019; Meyer et al., 2024).

The results also show a lack of interest among participants for playing video games (Alonso, 2022, 2023; Muñoz, 2020), which is consistent with some research suggesting that engaging in digital gaming is more common among children and adolescents, as these activities are often age-related and tend to evolve over time (Brevik, 2019; Muñoz, 2020; Peters, 2018). Overall, the findings of this study indicate a prevalence of receptive activities (e.g., listening to music and watching films or series in English) over productive ones (e.g., speaking or writing; see De Wilde et al., 2020).

With regard to potential gender-related differences in the type and frequency of contact with English outside the classroom, the results of this study revealed significant differences in exposure to digital gaming and engagement in ‘other’ activities. In line with previous research findings, the males engaged more often in gaming than females (Muñoz, 2020; Sundqvist, 2009; Sundqvist & Sylvén, 2014), while females opted for engaging in the ‘other’ type of informal activities (see Fajt, 2022). Nevertheless, the results indicated no significant differences in the skills grades or the final course grades between the males and the females.

Finally, the ANOVA tests were used to determine whether statistically significant differences existed between out-of-class contact with English and the participants’ grades in the four communicative skills as well as their final course grades. The results showed that watching films or series in English, especially with captions (i.e., L2 subtitles), was the factor with the most significant influence on reading and writing grades, as well as final course grades (see Lindgren & Muñoz, 2013). Engaging in face-to-face communication also showed a positive effect on the speaking grades. In all cases, higher levels of engagement with these informal activities were linked to higher participant grades. Furthermore,

Spearman's rank correlations with composite scale scores indicated that engaging in watching films or series in English and informal reading was positively associated with academic achievement in reading and writing, respectively, as well as with final course grades. Additionally, participation in 'other' activities showed a statistically positive correlation with speaking grades. It is noteworthy that, despite not being extremely popular among participants, gaming was found to have a negative association with academic achievement. In fact, a negative correlation was observed between digital gaming and grades in all four skills, although it was only significant with final course grades. This aligns with the conclusions drawn by Muñoz (2020), who suggested that gaming was more popular among participants who were less academically oriented or had lower grades.

Despite the limitations of this study—such as a relatively small sample size, restriction to a single geographical context, and reliance solely on quantitative analyses—the results suggest that exposure to English outside of the classroom positively impacts L2 academic achievement. These findings carry pedagogical implications for L2 teachers. As advances in new technologies continue to proliferate and an increasing number of students engage in informal English-language-related practices, the adoption of new pedagogical approaches such as blended learning, which combines face-to-face and computer-mediated instruction (Bizami et al., 2023; Graham, 2006; Neumeier, 2005; Zawacki-Richter, 2020), becomes essential to bridging the gap between formal and informal language practices (see Godwin-Jones, 2019; Lucas & Vicente, 2023; Thorne & Reinhardt, 2008). Future research is needed to investigate the use of cutting-edge digital technologies like artificial intelligence (AI), virtual reality (VR), and intelligent personal assistants (IPAs) beyond the classroom, examining their potential impact on underresearched skills such as speaking or writing (Lee, 2022; Parmaxi, 2023). Additionally, future studies could benefit from integrating qualitative methodologies alongside quantitative research to offer a more comprehensive understanding of students' learning experiences (see Lee, 2022). L2 teacher training programs should assist teachers in incorporating informal language learning resources into the classroom (Momenanzadeh et al., 2023; Rodríguez-Arancon, 2023), including collaborative learning applications (e.g., wikis, clickers, discussion forums, etc.), to facilitate formative assessment feedback (Díez-Arcón & Martín-Monje, 2023; Vaughan, 2014) and optimize learners' individual L2 learning process (see Toffoli et al., 2023). This will, undoubtedly, contribute to more relevant and meaningful classes for learners that better align with twenty-first-century learning (see Bizami et al., 2023; Trinder, 2017).

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### Conflict of Interest

The author declares that there is no conflict of interest.

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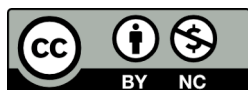
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