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Out-of-School Exposure to English in EFL Teenage Learners: Is It Related to Academic Performance?

Linh Tran * and Imma Miralpeix *

Faculty of Philology and Communication, University of Barcelona, 08007 Barcelona, Spain
* Correspondence: karintran31@gmail.com (L.T.); imiralpeix@ub.edu (I.M.)

Abstract: Learning a Foreign Language (FL) beyond the classroom has become common practice thanks to advances in technology and the use of English as a Lingua Franca. This study explores the types and amount of out-of-school informal exposure to English that Spanish secondary school students typically receive in their daily lives. Informed by recent literature on the influence of extramural activities on FL proficiency, the second aim of this study is to investigate the potential relationship between out-of-school exposure and academic performance, as measured by English school grades. Data were obtained from a questionnaire answered by secondary school students aged 12–16 (N = 2015) regarding the different types and amounts of activities they perform in English outside school. Findings revealed that teenage learners were most frequently exposed to English through audiovisual input. Social media interaction, along with reading and writing (with or without digital support), were closely associated with their English marks. Other popular activities, such as listening to music or playing video games, were not found to be related to proficiency or even showed a negative correlation with it, while less popular activities, such as watching subtitled movies and series, could have greater potential for language learning. This study contributes to the understanding of informal practices in FL learning settings and provides insights that can help bridge interactive language practices and formal curriculum to create holistic learning experiences for language learners.

Keywords: out-of-school exposure; informal learning; input modalities; EFL learners; extramural English

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1. Introduction

In the last few years, a globalized world has pushed individuals and educational institutions to search and create authentic learning resources to promote multilingualism and construct meaningful learning experiences beyond instructional settings [1]. English teaching in mainstream education systems, therefore, is no longer the only path towards language mastery: integrating English into various extracurricular activities outside the classroom offers learners more possibilities for meaningful language use and is an increasingly widespread practice in Europe and other parts of the world, where multilingualism is undoubtedly on the rise [2–4]. Examining the impact of out-of-school exposure on the academic performance of English language learners in Sweden, Sundqvist [5] found that the amount of time that learners spent using English while engaging in extracurricular activities correlated positively and significantly with their oral proficiency and vocabulary size, as measured in several tests throughout one school year. Additionally, the type of out-of-school exposure to English that EFL learners typically receive was found to be of equal importance for language development [6].

Language learning beyond the classroom can take place as a result of personal leisure or communicative intention and presents itself in various formats, such as TV programs subtitled in English, English-narrated video games, music, social network platforms, etc. Consequently, in these circumstances, language acquisition very often occurs incidentally [7]: English learners can engage in various activities, evaluate their choices, and

actively regulate their learning goals, which in turn can result in better language awareness and learning outcomes.

Findings from previous research have suggested that extracurricular activities that shared the same form-focused pattern with classroom instruction and lacked authentic, meaningful interaction with the target language (e.g., completing extra grammar exercises or reviewing textbooks) often led to counterintuitive results and attribute to the already poor academic outcomes [8]. However, in informal contexts, language acquisition tends to be stimulated by communicative purposes. Out-of-school activities in informal contexts, often through English-mediated digital environments (e.g., watching movies on online platforms, online chatting or playing video games), can be cognitively demanding and facilitate students' participation in conversations, which is not often possible in language classes. Therefore, the learning process is no longer restricted by a structured one-size-fits-all regimen with limited opportunities for personal expression. It is now transitioning itself into a more creative yet tailored learning approach.

In the next section, we first present a review of the existing out-of-school activities involving foreign languages and what research has found so far concerning their potential for language learning (Section 2.1). Of equal importance is the amount of time for which students are exposed to the target language outside school, which is why we present the prior research in this respect in Section 2.2.

2. Literature Review

2.1. Type of Out-of-School Exposure and Its Effects on Language Learning

Types of out-of-school exposure can generally be categorised according to the medium for learning (i.e., computer-mediated or face-to-face—FTF—communication) or input modalities (i.e., unimodal, bimodal, multimodal); see, for instance [9,10]. Students can engage in written and oral interactions with different kinds of cultural, recreational, or educational products (books, magazines, songs, movies, podcasts, etc.). As mentioned earlier, the existence of multimedia in an increasingly globalized world is also offering language learners an unprecedented amount of exposure to their target language in different shapes and forms, e.g., [1,4,11].

Unimodal input is often found in the language classroom, and also as an out-of-school activity in the form of listening (usually to music or podcasts) or extensive reading (online or offline). Research has shown that these forms of unimodal input can be beneficial for the development of learners' proficiency and vocabulary size. For instance, Lindgren and Muñoz [12], in a sub-study of the ELLiE project (Early Language Learning in Europe), found out that listening to music was the most common activity among young learners (10–11 years old) outside the classroom. It was also a strong predictor of listening and reading comprehension skills (although watching TV was an even better predictor). Similarly, Puimège and Peters [13] found listening to music to be positively correlated with vocabulary scores. On the contrary, Muñoz [14] found that listening to music, despite being one of the most popular activities, was not strongly correlated with proficiency scores and was not as conducive to learning as other activities. In relation to the mixed findings concerning the impact of listening to music on learning gains, De Wilde et al. [2], who found a negative correlation between listening to songs and language learning with children at the end of Primary education, suggested that it could be due either to the lack of attention that EFL learners pay to the song lyrics or their insufficient vocabulary to comprehend the input provided through this activity.

An activity with unimodal input that has been heavily researched is reading. It is widely acknowledged that this literacy-based activity has the potential to boost vocabulary. For example, Webb and Chang [15], among others, highlight the influence of reading on vocabulary acquisition. In a recent longitudinal study involving 58 English learners in Israel, Laufer and Vaisman [16] discovered that while online reading was not the predominant extracurricular activity among Grade 10 learners, it exhibited the strongest association with vocabulary acquisition outside the classroom. Despite the higher popularity of

activities such as social networking or listening to songs, their correlations with vocabulary acquisition were comparatively weaker.

Regarding bimodal input, i.e., the simultaneous presentation of aural and written input in the L2 (e.g., in reading-while-listening programs), has also been proven to have a positive influence on vocabulary learning, listening skills [17], as well as on reading comprehension [18]. However, the beneficial impact of unimodal and bimodal input on language learning were compared in a recent study by Webb and Chang [15], whose results showed some benefits of audio-assisted extensive reading on language outcomes, but not to a statistically significant extent. Other studies such as Pellicer-Sánchez et al. [19] found that there was no difference in comprehension between extensive reading and reading while listening. This was also supported by earlier comparative studies regarding the average fixation times in both activities [17,18].

Concerning multimodal input, out-of-school exposure to English can also occur in online chats with L1 speakers, or when watching subtitled movies or TV series, or when playing videogames. These out-of-school activities can help to maximize learners' exposure to their target language through social interactions and networking on online platforms. It has been stated that not only does learning motivation increase, but as learners feel more competent in online interactions, they also start to take initiative in using the language in naturalistic contexts, which in turn has a positive impact on language gains [20]. Communicative engagement beyond the classroom can also favour the learning of collocations to a greater extent than in-class instruction [21].

To further understand the impact of watching original version TV on language proficiency, Lindgren and Muñoz [12] compared TV viewing with other out-of-school activities, such as listening to music or playing video games. They found that watching movies with subtitles was a better predictor of vocabulary gains than other activities carried out by young learners. Kuppens [22] also observed significant effects of watching subtitled English TV programs and movies on translation test scores (Dutch-to-English and vice versa) in 374 Flemish children in their last year of primary school.

In relation to a different kind of multimodal input, i.e., playing video games, Soyoof et al. [23] showed they can offer a good environment for language learning. Extending empirical evidence from mediated discourse analysis to learners' social networks and online interaction was identified in Kuure's study [24]. Language learning becomes apparent through the practices of interactional skills and work coordination in multifunctional teams when playing video games online (multiplayer or massive multiplayer mode—MMO). Given the availability of international gaming partners online, it is necessary to use English as a lingua franca to sort out communicative problems in multifunctional teams. The data analysis in this study pointed out that playing video games offer learning affordances through interactional and complex gaming coordination. This activity not only provides learners with special vocabulary sets, but also negation of meaning when having to solve linguistic and strategic issues. A positive impact of playing video games was also found in ninth grade learners of English in Sundqvist's [25] study in Sweden, particularly in the boys' group (vocabulary tests were the only ones in which boys outperformed girls). This was found to be correlated with the amount of time boys spent playing video games and surfing the internet. A recent study in Sweden by Warnby [3], investigating the amount of exposure between gender groups among 817 EFL upper secondary students, also reported that the frequency of gaming was the only significant difference between male and female adolescents. Findings from Hannibal Jensen's [26] study confirmed the positive impact of this particular activity on a younger population of English learners in Denmark, showing that gaming with spoken and written English is significantly correlated with vocabulary scores among 8- to 10-year-old English learners. While most of the studies that examined the influence of playing video games on vocabulary knowledge have been conducted with young learners, gaming explained less variance to the vocabulary knowledge of older participants (16 to 19 years old) in Peters' [27] study, suggesting that this activity only had an effective impact on learners of younger age groups.

Given the diverse nature and many-faceted characteristics of out-of-school exposure, a closer investigation into the relationship of these activities with learners' language acquisition is timely. Results from previous studies highlight the role that different kinds of activities may have in L2 learning, but they also suggest that the frequency of contact with English outside of school should be considered, since the frequency of the performance of these activities can be decisive for language learning. Furthermore, the amount of out-of-school exposure in the form of the various activities mentioned might account for the mixed results regarding the effect of certain types of out-of-school activities on language proficiency across countries. The next section focuses on the quantity of English input that learners in different EFL contexts can be exposed to outside of school and its possible influence on the learning of the target language.

2.2. Amount of Out-of-School Exposure and Its Effects on Language Learning

An increasing number of studies in recent years have explored the amount of readily available English-mediated exposure outside the English classroom. Despite the variety of extracurricular exposure to English and the availability of various online platforms, contact with English differs widely across different countries where English is studied as a FL.

Concerning studies conducted in Europe, Lefever [28] investigated English proficiency levels in 182 Icelandic children prior to any kind of formal instruction: it was found that more than half of them could engage in conversational English and had a basic understanding of this language in its spoken and written form. The children from the study, even before receiving English lessons at school, acquired new vocabulary and conversational phrases through watching English movies with Icelandic subtitles. Based on the evidence from this study, Lefever concluded that these skills seem to be influenced by the type and amount of language input children are exposed to in everyday activities. In the Dutch-speaking Flemish region of Belgium, Kuppens [22] found that watching subtitled movies and playing English video games could significantly influence language skills. The influence of media provided through these activities proved to be linked to better performance in English–Dutch translation tests, which explained more than 23.9% of variance in the test scores. De Wilde and Eyckmans [29] found that prevalent exposure to English music positively influenced vocabulary recognition and listening comprehension in tests of 30 Flemish children even prior to formal instruction in English. Some of the 11-year-old participants in this study had become proficient enough to communicate at the intermediate level. De Wilde and Eyckmans [29] reported that a high number of children preferred to use English over their L1 while speaking amongst their peers.

The difference in English input availability outside school across European countries is also clearly shown by one of the main findings in Lindgren and Muñoz's [12] research in the ELLiE project, which focuses on FL learning in seven European countries: Croatia, the United Kingdom, Italy, the Netherlands, Poland, Spain, and Sweden. The frequency of exposure to English showed high variability across six countries (except the United Kingdom), with Swedish and Croatian children receiving the most exposure to English at approximately more than eight hours per week, followed by Dutch learners with six hours, while Spanish and Italian children were exposed for three to four hours weekly. Another study looking into the amounts of out-of-school exposure in Europe by Muñoz et al. [30] suggests that in Spain, the long tradition of dubbing movies and media output into Spanish might account for the reduced amount of exposure to English in this country. Based on the assumption that such differences could have had an impact on EFL learning, Muñoz et al. [30] further explored whether and how different amounts of contact with English outside the classroom affected language skills by comparing two groups of primary school learners: L1 Danish speakers and their Spanish peers. The comparative analyses showed that Danish learners' frequency of contact with English through media and games was significantly higher than that of Spanish learners, and that helped to explain why Danish children's receptive knowledge of English prior to school instruction was largely similar to that of Spanish children after several years of instruction.

While prior research has presented an overview of how exposure to the FL varies across several countries, few studies have provided a closer look into specific kinds of out-of-school exposure and even fewer have done so in contexts where English is not usually found outside of school. Given the popularity of digital media nowadays, out-of-school activities could be an effective way to make progress in English for learners and create affordances for additional language learning. It is worthwhile to explore the types and amount of contact with English beyond academic contexts in settings where English has not been usually found outside school. With this in mind, the current study targets a wider sample population in the autonomous community of Catalonia (Spain) to analyse out-of-school activities in English and their possible relation to proficiency in that language.

3. Research Questions

The present study aims to investigate the amount and type of out-of-school activities to English that Spanish secondary-school learners of English typically engage in, as well as a possible relationship between this contact and the English marks obtained at school. The following research questions are addressed:

1. What types and amounts of out-of-school exposure in English do Spanish EFL secondary school learners typically receive?
2. Is there a relationship between out-of-school exposure to English and academic performance in this language?

4. Materials and Methods

4.1. Participants

The present study comprises a total of 2015 secondary-school Spanish EFL learners (917 males, 1098 females) with a mean age of 14 years: 430 (21.33%) belong to Grade 7 (age: 12–13), 526 (26.09%) to Grade 8 (age 13–14), 411 (20.43%) to Grade 9 (age 14–15) and 648 (32.15%) to Grade 10 (age 15–16). That is, the sample comprises the four years of 'Educación Secundaria Obligatoria'—ESO—('Compulsory Secondary Education') in Spain, from the first year of ESO until the fourth year. These students have a CEFR proficiency level between A2 and B1. At testing time, participants were studying in twenty-six different secondary schools in Catalonia: four were private schools, ten were semi-private and twelve were public schools. The participants' sample for this study was drawn from a larger data set originally collected for the "SUBTiLL" ('Subtitles in Language Learning') project of the GRAL Research group at the University of Barcelona. Initially, over 3000 Spanish EFL learners from three main groups (primary, secondary, and college students) were approached over the course of the data collection. Secondary students are the focus of the present study, firstly, because this is an age group that tends to carry out different activities in English outside school more often than younger learners; secondly, because primary school students have already been the focus of previous research in this setting [30]; and thirdly, because recent research in the same context has shown that adolescents benefited more than children or adults from being additionally exposed to subtitled TV series [31], which is a form of additional multimodal input. For these reasons, it was considered that in-depth research should be conducted with this population in this context.

4.2. Instruments

An online questionnaire, created by the GRAL group (see Appendix A), was designed to collect information about the quantity, types, and nature of participants' out-of-school exposure to English, as well as other personal details and background data on the learners and their academic performance. It was divided into five main subsections regarding (A) the use of English outside the classroom, (B) stays abroad, (c) language camps, (d) extracurricular classes, and (e) general information (biodata). Section A, which provided the core data for the present study, contained nine questions corresponding to seventeen different types of out-of-school activities such as watching movies and TV series in the original version in English, playing video games in English, listening to music, reading books, etc. Each

question was divided into sub-categories to check the extent to which participants engaged with the FL. Thus, for each of the above activities, participants were asked to indicate how frequently they participated in them. Sections B and C were devoted to immersion environments, such as stays abroad or language camps, inquiring about their lengths (varying from 2 weeks to more than 6 months) and the amount of interaction learners engaged in during the stays/camps. However, students in the sample had not been in immersion settings, apart from short vacation trips with their families to an English-speaking country. Section D asked about possible extracurricular English classes that learners may have attended. Finally, Section E elicited some biodata such as age and gender, as well as the grade the students were in, and the mark they had obtained in English in the previous academic year. Although the questionnaire was mainly composed of closed questions, an open-ended question was included in Section E so that students could provide any additional comments they might have on their English learning experience.

4.3. Procedure

Prior to the beginning of the SUBTiLL project, members of the GRAL research group reached out to teachers from the schools to invite their students to participate in the project. In the case of secondary school students, the schoolteachers asked them to answer the out-of-school exposure questionnaire online in the schools' computer rooms. Although no time limits were set, the completion time was approximately fifteen to twenty minutes. The questions were answered individually. The participants could choose to answer the questionnaire in Spanish or English, depending on which language they felt more comfortable with (78% answered the questionnaire in Spanish and 22% in English).

4.4. Data Analysis

As one of the main aims of the study is to investigate a possible relationship between out-of-school exposure and learners' language proficiency, participants' English marks from the previous semester provided in Section E and assessing students' global performance in English were used as the proficiency variable in the present study, where 1 = Fail (0–4.9), 2 = Pass (5–6.9), 3= Good (7–8.9), 4 = Excellent (9–10). Concerning the answers provided in Section A, with the information about the frequency of out-of-school activities in English, these were coded on a 6-point scale (1 = never; 2 = less than once a month; 3 = between once and three times/month; 4 = between once and three times/week; 5 = between four and six times/week; 6 = every day).

All data were first transferred into an SPSS (v.27) database. The data were coded for this study before statistical analyses were performed. Initially, the reliability and validity of the questionnaire (Section A, the focus of this study) were checked by calculating Cronbach's alpha. A principal component analysis (PCA) was run to explore and summarize the information content in large data sets by means of factor groups for further analyses. The first research question was addressed by using responses from section A of the questionnaire including sixteen out-of-school activities—except 'Talking FTF in English while being abroad', as this was not an activity our participants performed—and the frequency with which they were carried out. As regards the second research question, a series of non-parametric Spearman Rank correlations were conducted using data from out-of-school activities and English grades to explore the potential relationship between them. Finally, a multiple regression analysis was performed to examine the possible effect of out-of-school exposure on language proficiency.

5. Results

First, the reliability and validity of the questionnaire were checked by measuring the Cronbach's alpha of Section A of the questionnaire. The result (α = 0.79) indicated a relatively good level of reliability [32]. The set of 16 out-of-school activities were then subjected to PCA using SPSS. Before PCA was performed, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many

coefficients of 0.3 and above. The KMO value was 0.82 and Barlett's Test of Sphericity reached statistical significance ($p = 0.000$), supporting the factorability of the correlation matrix. Results from PCA revealed the presence of four components with eigenvalues exceeding Kaiser's criterion of one (explaining 25.2%, 14.18%, 8.07% and 6.28% of the variance, respectively) and in combination explained 53.73% of the variance [33]. The scree plot (Appendix B) was ambiguous and showed inflexions that would justify retaining either two or four factors.

All in all, four factors were retained because of the large sample size and the convergence of the scree plot and Kaiser's criterion on this value. After the analysis, two items with low (below 0.4) factor loadings (i.e., 'watching movies and TV series in English without subtitles' and 'talking FTF in English with tourists') were dropped from the analysis, reducing the remaining out-of-school activities in the present study to a total of fourteen variables. Table 1 shows the factor loadings after rotation together with the descriptive statistics. The items that cluster on the same factor suggest that Factor 1 comprises speaking and reading (online or offline) and writing (online). Factor 2 includes different types of gaming: individual, multiplayer and massively multiplayer. Factor 3 loads on listening to English—both online and offline—and watching short online videos, such as YouTube videos. Factor 4 is related to watching subtitled movies and TV series (with either L1 or L2 subtitles). The interpretation of the four components was consistent with the main constructs presented in the questionnaire.

Table 1. Component matrix * of out-of-school exposure factors and frequency.

Out-of-School Activities	Factor Loadings				Frequency of Use **	
	1	2	3	4	Mean	SD
Factor 1: Speaking/reading (online or offline) and writing (online)					**2.14**	**0.94**
Talking FTF *** in English with friends	0.69				1.92	1.3
Talking FTF *** in English with family	0.67				1.63	1.13
Writing with digital support online (mail, WhatsApp, etc.)	0.61				2.72	1.68
Talking online (Skype, etc.)	0.6				1.67	1.22
Reading books/magazines in English	0.58				2.11	1.34
Reading digital materials online (eBooks, web, blogs. . .)	0.57				2.75	1.64
Factor 2: Gaming					**2.39**	**1.51**
Playing multiplayer video games in English		0.93			2.43	1.76
Playing MMO video games in English ***		0.88			2.02	1.66
Playing video games in English individually		0.81			2.71	1.75
Factor 3: Listening to music and watching short online videos					**4.62**	**1.17**
Listening to music online (podcasts, Spotify)			0.82		4.46	1.86
Listening to music offline (radio, CD, iPhone, etc.)			0.79		5.41	1.16
Watching digital content online (YouTube)			0.51		4	1.66
Factor 4: Watching subtitled movies and series					**2**	**0.98**
Watching movies and TV series in English with subtitles in L1				0.84	2.17	1.27
Watching movies and TV series in English with subtitles in L2				0.7	1.83	1.12
Variance explained	***25.2***	***14.18***	***8.07***	***6.28***		

Note: Extraction method: principal component analysis. * Rotation converged in 6 iterations. ** Scale range was 1–6, where 1 was 'never' and 6 was 'every day'. *** FTF: Face to Face, MMO: massive multiplayer.

5.1. Types and Amount of Out-of-School Exposure to English

The first research question aims to discover the amount and types of out-of-school exposure to English that EFL learners at secondary school levels typically receive. In this

section, the findings are summarized based on the answers from participants in Section A of the questionnaire. Figures 1–4 illustrate participants' reported exposure to English through different out-of-school activities: speaking and reading (online or offline) and writing (online), gaming, listening to music and watching short online videos, and watching subtitled movies and series.

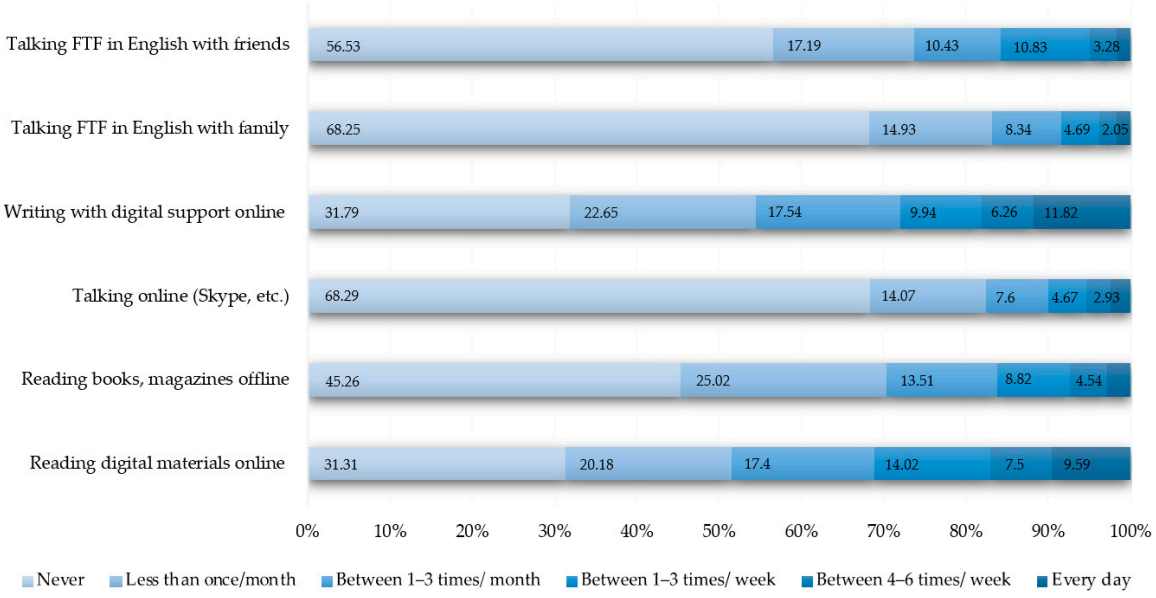

Figure 1. Factor 1. Speaking/reading (online or offline) and writing (online).

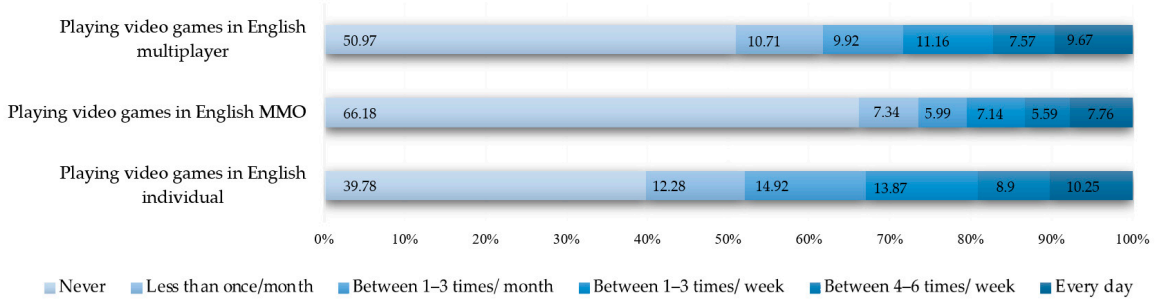

Figure 2. Factor 2. Gaming.

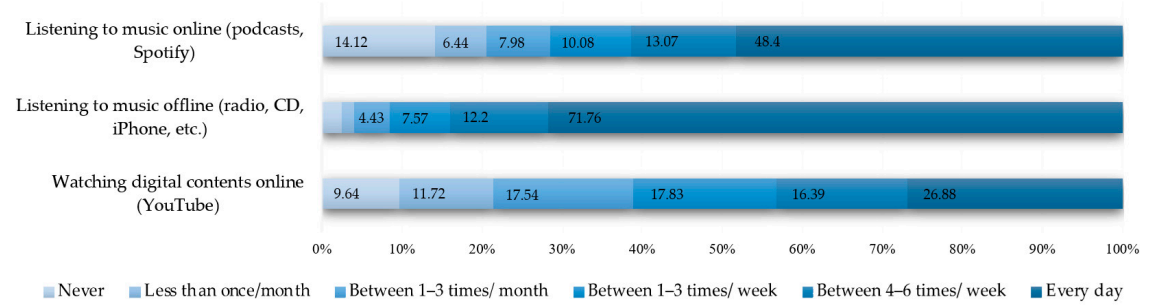

Figure 3. Factor 3. Listening to music and watching short online videos.

As shown in Table 1, there is a great variety of activities embedded in everyday life that offer EFL learners authentic contact with their target language, with means ranging from 1.63 to 5.41. An examination of the frequency of out-of-school activities reveals that students are mostly exposed to English through audiovisual input, i.e., listening to English music (the radio, CDs, on their iPhone, etc.), both online (M = 4.46), offline (M = 5.41), and

watching digital content online (YouTube) (M = 4). Less frequent activities include gaming (M = 2.39) and speaking/writing and reading (M = 2.14). They reported the lowest level of exposure through activities such as talking FTF in English (M = 1.63–1.92), online (Skype, etc.) (M = 1.67), as well as watching movies and TV series in English with L2 subtitles (M = 1.83). Other types of exposure to English, such as watching movies and TV series with the support of L1 subtitles, are slightly more popular among secondary school students (M = 2.17).

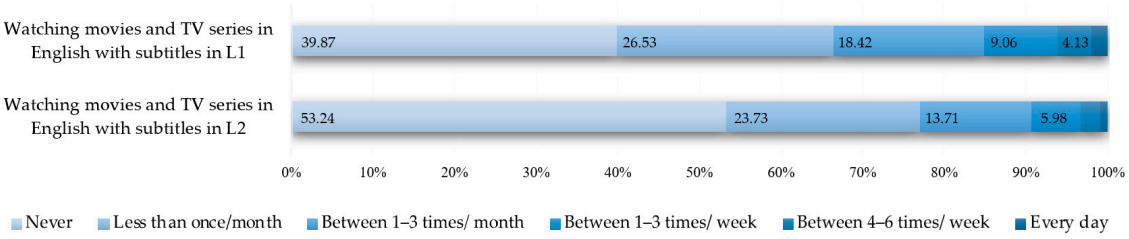

Figure 4. Factor 4. Watching subtitled movies and series.

5.2. Out-of-School Exposure Effects on Academic Proficiency in English

In order to study the potential relationship between the different types of exposure to English on the participants' academic performance in this language, several analyses were performed before the multiple regression analysis. First, the correlations between the different types of exposure were examined. Except for the high correlations among playing video games subtypes (individual, multiplayer, MMO) (r > 0.50) and listening to music (online and offline) (r = 0.47), the previous PCA confirmed that the variables measure divergent aspects of language exposure, indicating that composite variables (as combined into factors) can be beneficial for further investigation. Then, preliminary correlations between exposure types and the language ability measure (English grade) were carried out (see Table 2). As can be observed, English grade is positively and significantly correlated with the majority of potential predictors (except playing video games in English—either individually or multiplayer).

Table 2. Correlations between the different types of exposure and English grade.

Out-of-School Activities	English Grades
Factor 1: Speaking/reading (online or offline) and writing (online)	**0.352** **
Talking FTF in English with friends	0.255 **
Talking FTF in English with family	0.186 **
Writing with digital support online (mail, WhatsApp, etc.)	0.207 **
Talking online (Skype, etc.)	0.182 **
Reading books/magazines in English	0.339 **
Reading digital materials online (eBooks, web, blogs...)	0.288 **
Factor 2: Gaming	**−0.033** **
Playing video games in English multiplayer	−0.035 **
Playing video games in English MMO	−0.060 **
Playing video games in English individual	−0.004 **
Factor 3: Listening to music and watching short online videos	**0.220** **
Listening to music online (podcasts, Spotify)	0.177 **
Listening to music offline (radio, CD, iPhone, etc.)	0.170 **
Watching digital content online (YouTube)	0.140 **
Factor 4: Watching subtitled movies and series	**0.232** **
Watching movies and TV series in English with subtitles in L1	0.129 **
Watching movies and TV series in English with subtitles in L2	0.261 **

** p < 0.01.

Based on the data extracted from the PCA and correlation analyses, composite variables based on factor loading categories were computed and used for further regression

analyses [33]. Multiple linear regression analyses were employed for overall language proficiency and representative predictors, which share a high correlation with equivalent subtypes in each group of activities and English grades (see Table 3). As the tolerance value for each independent variable is not less than 0.10; the assumptions for regression analysis are not violated. This is also supported by the VIF values, which are all lower than two, indicating that there is no multicollinearity between the independent variables. The P-P plot (Appendix C) shows that the points generally follow the normal (diagonal) line with no strong deviations. This indicates that the residuals are normally distributed.

Table 3. Predictors of overall language proficiency.

Predictors Overall Language Proficiency	***B***	***SE***	***β***	***p***
(Constant)	*1.773*	*0.079*		0.000
Speaking/writing and reading	0.281	0.023	0.3	0.000
Gaming	−0.054	0.012	−0.093	0.000
Listening to music and watching short online videos	0.048	0.017	0.065	0.003
Watching subtitled movies and series	0.089	0.020	0.099	0.000
Model Summary		**Adjusted R-squared: 0.14, *df* 2006**		

Table 3 presents the results of the regression analyses with English grade as the dependent variable. Results show that the multiple regression model with four predictors produced Adjusted $R^2 = 0.142$, $F(4, 2006) = 84.5$, $p < 0.001$. This means that the predictors in the model jointly explained 14.2% of the variance in the data. As shown in Table 3, three independent variables had significant positive regression weights, indicating that students with higher scores on these scales were expected to have higher English grades. By comparing the standardized coefficients, it is clear that speaking/reading in English (online or offline) and writing (online) have the highest impact on learners' language outcome ($\beta = 0.3$). This is followed by watching movies and TV series in English with L1/L2 subtitles ($\beta = 0.099$) and using audiovisual input (i.e., listening to music and watching digital content online) ($\beta = 0.065$). Playing video games in English MMO has a significant weight, but the relationship is negative ($\beta = -0.093$), indicating that students who spent more time engaging in this particular activity reported lower scores in English.

6. Discussion

The present study was designed to examine the type and amount of out-of-school exposure to English that secondary school students learning English as a FL in Spain typically receive, as well as its possible relationship with their school marks in that language. We analysed the answers that a representative sample of 2015 students provided in an out-of-school exposure questionnaire about the activities performed beyond the language classroom and the frequency with which they were carried out. Then, we assessed whether those could possibly be related to their marks in English. The large sample of participants included in the study helps to uncover trends and patterns in adolescents' practices. The extensive questionnaire with good internal reliability and the statistical analyses performed show which activities can potentially enhance language learning. This also facilitates comparisons with findings across other European settings where the presence of English beyond the classroom is stronger [28,34].

The first research question explored the type and amount of exposure to English that secondary students typically receive outside the classroom. The descriptive analysis from the questionnaire on the frequency of various activities confirmed some of the results found in previous research that focused on informal learning environments [12,22,27]. Findings from the present research have shown that the learners' most frequent source of input is songs (i.e., listening to music online and offline). As can be seen from the frequency chart (Figure 3), more than 70% of the participants listen to English music on a daily basis. This may provide more opportunities to acquire new vocabulary and sentence chunks often repeated in lyrics [35]. With the rise of pop music, listening to music can also be

seen as popular cultural memes for secondary school students, which in turn offers more encounters with the target language. Listening to music was then followed by activities such as watching YouTube videos, writing with digital support, reading books or magazines, and playing video games. The least popular activity among this population is watching movies and TV series (either without on-screen text or with L1/L2 subtitles). These findings may seem to contradict results from previous studies. For instance, Flemish-speaking children in the last year of primary education reported having extensive exposure to English-language films and programs in Kuppens' [22] study. Sharing the same context of the Flemish-speaking region, Peters et al.'s [34] research found that adolescent learners spent more time watching movies and TV programs (with and without subtitles) than the participants in the present study. However, the omnipresence of English in TV programs in Belgium can obviously account for these results, as TV there is not dubbed. Additionally, Muñoz et al.'s [30] comparative study of Denmark and Spain further supports the findings from the present study, as they showed that Danish learners' contact with English through media and games was significantly greater than that of Spanish learners. There are socially influential factors (e.g., English-dubbing tradition, use of the FL in the multilingual community, etc.) that can account for the differences in teenage learners' practices. We have also seen that, of all the out-of-school activities investigated in the current study, interactional activities (e.g., talking online, playing with other gamers, etc.) are popular among English learners, as they can align with their individual interests and preferences at these ages. However, activities related to receptive skills, such as listening to music and reading or watching YouTube videos, are among those performed more often.

The second research question aimed to investigate a potential relationship between out-of-school exposure to English and learners' overall academic proficiency in English by looking at the English grades they obtained at school. The multiple regression analysis results showed a significant positive correlation between all activities and language outcomes, except for gaming. Playing video games (MMO in this case) had a significant negative correlation with participants' academic performance, i.e., engaging in this particular activity is associated with a lower English mark at school within the investigated context. This result corroborates findings from previous studies on the null effects of gaming on the development of vocabulary size [30,36] and the negative impact on academic performance [14]. Conversely, a couple of studies, namely, those of Sundqvist [25] and Sylvén and Sundqvist [37], showed a significant influence of gaming on vocabulary knowledge. Sundqvist [25] also revealed that the amount of time spent gaming among ninth graders positively correlated with L2 vocabulary and oral proficiency. Gaming was also found to be the strongest predictor for vocabulary development, together with computer use, in the study of De Wilde and Eyckmans [29]. In line with these findings, vocabulary scores were significantly related to gaming with both spoken and written English in Hannibal Jensen's [26] study. To explain the mixed findings on the impact of playing video games in English on learners' academic performance, several considerations appear relevant. It may not come as a surprise to see that learners feel motivated to understand the input provided in video games to advance to the next level. However, the different types of games and how the input is delivered while playing should also be taken into account, as well as the fact that language in video games is not always found in EFL classes [38], which has not been controlled for thus far in prior research. Another methodological limitation was acknowledged in Sylvén and Sundqvist's work [37] concerning the assessment of participants' L2 proficiency prior to their involvement in digital games: the direct causality of the frequency of gaming on high test scores seems far-fetched, since a certain degree of L2 knowledge is essential to make it possible for the participants to proceed in these games.

Even if they were not the most frequent activities, speaking and reading, as well as online writing (emails, WhatsApp messages, etc.), have the strongest relationship with participants' academic performance at school. This is relevant because speaking and writing are productive activities (and in FL settings, students do not have frequent opportunities to practice their oral skills in class). Additionally, De Wilde et al. [2] found that speaking

English was a significant predictor of overall proficiency in 10-to-12-year-olds in Flanders. Our results for reading contrast with the findings of Peters et al. [34], who found a weak correlation between reading vocabulary scores in an adolescent group compared to university students. However, in that study, the fact that teenagers did not usually engage in reading could account for the results. Their findings reported higher correlations between vocabulary knowledge and reading when browsing websites and less so with books. The diversity of online and offline reading materials in the present study, as well as a higher amount of input, could account for the difference in the findings. Another possible reason for the different effects of reading on language learning between these studies could be the proficiency measures used. The significantly high correlation found in the current study may be due to the similarities in the input secondary students receive though reading and the learning materials at school (as well as the literacy-focused nature of English tests, which mainly involve written output and on which the proficiency marks in this study are based). Age-related factors may also play a part in explaining the mixed findings in this area. In Muñoz and Lindgren [39], data from 865 children revealed that reading was found to be the least common activity in the FL. When looking into the amount of engagement through similar media between two groups of Swedish EFL upper secondary students (age 16 and age 18), Warnby [3] found that the older group spent more time reading non-fiction and watching programs either with or without subtitles. Also, Tam and Reynolds [40] found that, in Cantonese-speaking university students, reading was the extramural English factor most closely related to students' vocabulary size. Taking into consideration the age of the participants in these studies, one plausible explanation is that certain activities may only be related to language learning when they are performed often. Another possibility is that students must be cognitively mature to make the most of complex written input. It is crucial that learners attain a certain level of proficiency or "a minimum lexical coverage" [41] in order to notice and, consequently, comprehend input without further support in informal settings.

The second predictor of learners' language proficiency was found to be watching movies and TV series in English with the support of L2 subtitles, although, again, this was not one of the most common activities among the population examined. Textual support in TV viewing has been reported to be facilitative and beneficial for language learning in two previous studies [22,42]. Additionally, in the work of Peters [36], the results from participants at secondary school indicated that TV viewing, together with the abundance of audiovisual and written input in their target language, helped to enlarge the vocabulary size of not only proficient learners but also of beginners. Possible benefits of captioning for L2 language learning have been analysed in recent studies concerning comprehension [43] or vocabulary acquisition [36,42,44]. Even though on-screen text could potentially be distracting and, hence, slow down the comprehension rate among more advanced learners [45], it can be a useful tool for teenage learners at less advanced levels. On the whole, it seems that in informal contexts without teaching support, the written textual aid when watching TV—be it in the L1 or L2—and reading provide learners with positive reinforcement in language acquisition.

Listening to English songs and watching digital content online also played a role in learners' language outcomes, though to a much lesser extent. Despite the high frequency of listening to music in English—as reported in the descriptive analysis—this activity did not actually explain much of the participants' proficiency in the present study. Findings in De Wilde et al.'s [2] study with Dutch-speaking learners (aged 10–12) in Flanders even revealed a negative influence on language knowledge, which suggested that while students spent a great amount of time listening to music, they may not be paying attention to the song lyrics. They also suggested that young learners benefited more from actively engaging in language exchange via speaking or using social media than from passively perceiving it. Although the role of listening cannot be neglected, the present study did show that in teenage learners at low intermediate levels, practices featuring written input—such as

reading or original TV viewing with on-screen text—were more closely related to English grades at school.

7. Conclusions, Limitations and Further Research

The overall pattern of findings from the current study suggests that various out-of-school activities may improve FL learning, although these may not always be the ones that students usually perform more frequently (e.g., listening to music, which is very common, seems to be less beneficial than watching subtitled videos, which is not a usual practice). Reading, together with other productive social, media-based activities, such as speaking (online or offline) or online writing, are closely associated with learners' academic achievement in the FL in formal educational settings, while gaming does not seem to be related to achievement in the L2, as measured by school grades. Results suggest performing activities involving written support was more related to English class grades. This can be explained by the focus on written language rather than on oral performance at school.

Our findings carry significant pedagogical implications. Firstly, we have observed that certain activities commonly undertaken by learners, such as listening to songs, do not appear to correlate with improved academic performance. This lack of correlation could be attributed to several factors, including the relevance of the vocabulary presented in songs to academic contexts. Additionally, it may stem from learners encountering difficulties in comprehending song lyrics. Consequently, within formal learning settings, it is beneficial to incorporate classroom activities that aid in bridging the gap between written vocabulary knowledge and listening comprehension, as advocated by Nation [46]. For example, exercises such as dictation or listening to simplified texts read aloud by the teacher can assist students in segmenting and comprehending oral discourse, thereby facilitating the identification of words within the speech stream. Such activities offer valuable support in enhancing learners' listening skills and their ability to engage with spoken language effectively.

Secondly, we have identified activities that are less frequently performed but demonstrate a significant correlation with participants' academic performance. These activities predominantly focus on either productive skills (such as speaking and writing) or the receptive skill of reading. It is conceivable that augmenting the frequency of activities that foster language production within the classroom would prove beneficial. For instance, integrating exercises that facilitate the transition of receptive vocabulary into productive usage or enhance vocabulary access could be valuable. Similarly, encouraging oral and written interactions among students and with more proficient L2 users, both within and outside the classroom (in person or online), can also yield positive outcomes. Regarding receptive activities, such as reading, educators might consider selecting materials with adequate lexical coverage for extensive reading (approximately 98%, as suggested by Hu & Nation [47]). This coverage enables learners to engage in independent, unassisted reading for pleasure outside of formal instruction, thereby promoting language acquisition beyond the confines of the classroom.

Thirdly, concerning activities that are less commonly carried out but have been shown in the study to significantly influence performance, such as watching captioned TV, it would be interesting to implement pedagogical interventions to acquaint learners with this practice, particularly in dubbing countries. Introducing students to the use of captioned TV programs in the classroom, as in [31] and Suter et al. [48], can encourage them to pursue this activity outside the classroom, thus fostering incidental language acquisition.

It should be noted, however, that the present study is limited by the lack of an objective proficiency test at the time of data collection and relies on the mark awarded by the school. Another debatable issue that we should carefully consider is that we cannot directly assume a cause–effect relationship between learners' out-of-school activities and proficiency: this limitation has also been acknowledged in other studies in the field [5]. The relationship between these two variables (extra exposure and proficiency) can also work in the opposite direction: in order to benefit from the abundance of input in natural contexts,

a "threshold" level of language proficiency needs to be attained. Thus, it is advisable that further research conducts longitudinal studies where this cause–effect relationship could be more easily elucidated. For example, in [16] it was observed that prior vocabulary knowledge contributed to out-of-school learning more than the amount of digital activity in which students were involved extramurally, suggesting that "the best guarantee to improve out-of-school learning is to reinforce vocabulary learning in class" (p. 866).

In addition, although this study provides a general picture with a large group of participants, more controlled studies taking into account individual differences—such as learning style, motivation, and aptitude—would be recommended to better understand which forms of out-of-school exposure are the most convenient to help language learners acquire the language in informal settings. Finally, although there has recently been an increase in the number of studies examining the type of activities learners perform in the FL in informal settings, research should also carefully consider the opportunities they actually provide for learners to produce, not just to be exposed to FL input, as output is crucial as well in the language-learning process.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and with the ethical principles proposed by the Research Ethics Committee at the University of Barcelona (2020-22).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. The study respected the privacy and confidentiality of all the participants involved.

Data Availability Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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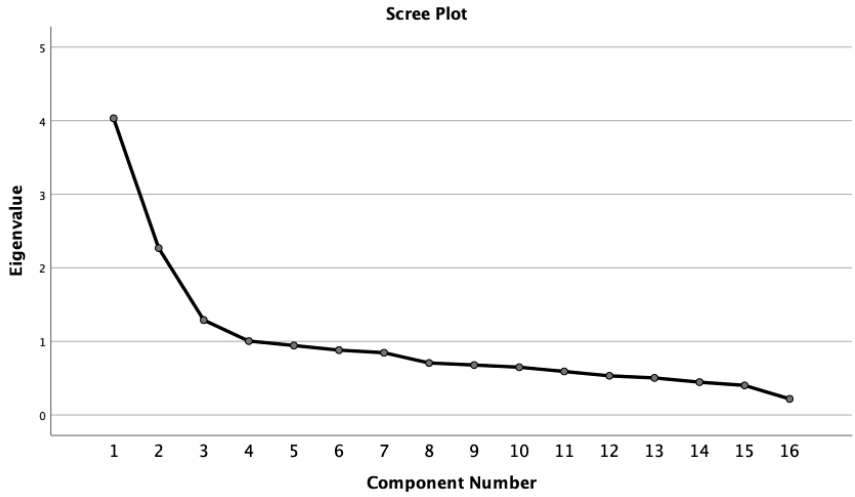
Conflicts of Interest: The authors declare no conflicts of interest.

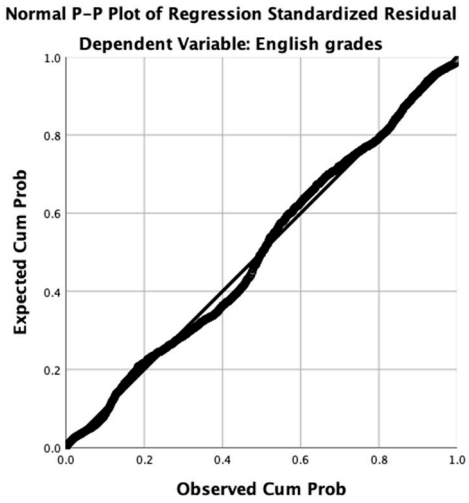
Appendix A

Link to the questionnaire: https://ubgral.wordpress.com/gral-materials/ (accessed on 1 April 2024).

Appendix B



Appendix C



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