

Pick a Movie: How Audiovisual Materials Enhance Vocabulary Learning Outside the EFL Classroom

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Abstract

Foreign language learners without an immersion experience are advised to partake in activities that enhance their language learning outside the classroom. The objectives of this study were to explore which forms of language practice English as a Foreign Language (EFL) learners engage in outside the classroom and whether this practice increases proficiency. The results showed that the most frequent forms of practice were academic activities (e.g., reading academic textbooks) and recreational activities (e.g., watching movies). In this study, EFL proficiency in participants correlated positively with age. Those with higher proficiency listened to English more frequently by watching movies in their free time than those with lower proficiency. We conclude that exposure to audiovisual material, such as movies, is an effective way to reinforce language learning outside the EFL classroom. Older learners with high English language proficiency reported practicing English frequently in their free time, so watching movies may constitute an effective means of increasing L2 exposure outside the classroom.

Keywords: EFL learners; EFL language practice; vocabulary learning; audiovisual material.

Resumen

Escoge una película: Cómo los materiales audiovisuales mejoran el aprendizaje del vocabulario fuera del aula de inglés como lengua extranjera (ILE)

A los aprendices de lenguas extranjeras se les recomienda buscar actividades para practicar la lengua fuera del salón de clases. Los objetivos de este estudio fueron explorar cuáles son las prácticas de lengua que utilizan los aprendices de inglés como lengua extranjera (ILE) fuera del salón de clases, y si estas prácticas aumentan la proficiencia. Los

resultados mostraron que las prácticas más frecuentes fueron las actividades académicas (por ejemplo, leer textos académicos) y las actividades de tiempo libre (por ejemplo, ver películas). Asimismo, la proficiencia en el ILE aumentó conforme a la edad de los participantes. Aquellos con una proficiencia alta practicaban más frecuentemente el inglés al ver películas en su tiempo libre que aquellos con proficiencia baja. Se concluye que los aprendices de ILE encuentran en el material audiovisual una forma útil para reforzar el aprendizaje del ILE, por lo que ver películas puede resultar un medio efectivo para la exposición del inglés fuera del salón de clases.

Palabras clave: aprendices de ILE; práctica de la lengua en aprendices de ILE; aprendizaje de vocabulario; material audiovisual.

Résumé

Choisissez un film : Comment les matériaux audiovisuels améliorent l'apprentissage du vocabulaire en dehors de la salle de classe d'anglais langue étrangère (ALE)

Il est recommandé aux apprenants des langues étrangères pratiquer la langue en dehors de la classe. Cette étude avait pour objectifs d'analyser quelles sont les meilleures pratiques de langue utilisées par les apprenants d'anglais comme langue étrangère (ALE) en dehors de la classe, et si celles-ci augmentent la compétence. Les résultats montrent que les pratiques les plus courantes sont les activités académiques (par exemple, lire des textes académiques) et les activités de loisirs (par exemple, regarder des films). Également, la compétence en ALE augmente selon l'âge des participants. Ceux ayant un niveau de compétence plus élevé pratiquent l'ALE en regardant des films pendant leur temps libre plus souvent que ceux ayant un niveau inférieur. La conclusion est que les apprenants d'ALE trouvent dans le matériel audiovisuel une manière utile pour renforcer l'apprentissage d'ALE. Par conséquent, regarder des films peut constituer un moyen efficace pour l'exposition à l'ALE en dehors de la classe.

Mots-clés : apprenants d'ALE ; pratique de langue parmi les apprenants d'ALE ; apprentissage du vocabulaire ; matériel audiovisuel.

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362

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INTRODUCTION

Studying English as a Foreign language (EFL) has become an academic requirement for most university students in Mexico City. It is thus important to explore the ways in which students practice English outside the classroom in order to become proficient. For the purposes of this study, an EFL learner is defined as a person who studies English, which is not their first language, in a formal setting (e.g., in school) and who may participate in different situations where English is used. According to the Council of Europe (2001), as proficiency increases, receptive abilities (e.g., reading comprehension) and productive abilities (e.g., writing) in the foreign language are expected to improve, and this improvement can be observed in proficiency tests. It is thus important to know which types of language practice an EFL learner engages in to achieve high proficiency in English so that such practices can be recommended to students with lower proficiency. The objective of this study was therefore to explore whether language proficiency in EFL learners was influenced by language practice outside the classroom. The results may contribute to a better understanding of which activities are most effective in raising proficiency in EFL learners.

363 EFL Learners and their Context

The terms *foreign language* and *second language* (L2) might suggest different features for some researchers in the field of Second Language Acquisition (see Leung & Valdés, 2019). However, both terms imply the action of learning a language that is not a person's first or native language (L1) (Douglas Fir Group, 2016). For the purposes of the current research, the terms foreign language and L2 will be used interchangeably as a way to denote a contrast with the L1. Similarly, the terms *acquisition and learning* in the context of language can be used to refer to different processes in the way an L2 is learned. That is, while the former may involve an unconscious process as a consequence of an immersion experience in the L2, the latter implies an intentional learning process (Wei & Fan, 2022). Nevertheless, some researchers, as in our case, have opted to avoid a "strong opposition" between the terms since the process of gaining more knowledge in a language might imply similar efforts when acquiring or when learning an L2 (Douglas Fir Group, 2016; Muñoz, 2022).

In this study, the EFL learner is a person who has acquired two languages, Spanish as their L1 and English as a foreign language, who has used their L1 as their primary means of interacting or socializing with family since birth, and who has learned their L2 English in formal settings (e.g., in school) or informally at a certain point in life (Douglas Fir Group, 2016; Mitchell et al., 2013). This perspective of the EFL learner is distinct from the concept of the bilingual individual: different authors describe the latter as a simultaneous or successive process of language acquisition, depending on the context of

language learning and socialization, such as with family or at school (Costa & Sebastián-Gallés, 2014). According to some authors, bilingual individuals may also be classified as early or late, depending on the age of L2 acquisition (Marian et al., 2018). However, these perspectives as they relate to bilingual people do not necessarily apply to EFL learners, whose L2 use may be restricted to one setting, such as at school.

The Douglas Fir Group (2016) has defined various settings for learning and use of additional languages. For instance, a college student from Mexico whose L1 is Spanish and who has learned English as an L2 in school, is considered an EFL learner, since their socialization and schooling have been mainly in their L1. In contrast, bilingual individuals typically have immersion experiences in both their L1 and L2 through socialization and formal education (Bialystok et al., 2008; Costa & Sebastián-Gallés, 2014; Marian et al., 2018). The effects of L2 immersion have been documented (see, for example, Anderson et al., 2018; Li et al., 2019; Luk & Bialystok, 2013; and Marian et al., 2007), and the evidence points to the positive effects of an immersion experience on proficiency, in which longer periods of immersion are generally associated with greater proficiency. Some authors have found that as little as one month of immersion is sufficient to positively impact L2 proficiency (Botezatu et al., 2021). The present study focuses on EFL learners with formal instruction in English as an L2 in school, who have not had an immersion experience in English as an L2. Here, the term EFL learner reflects the context of the study's participants, where the dominant language for education and socialization is the L1, Spanish.

Proficiency, Dominance, and Language Practice in EFL Learners

L2 learning is closely related to the concepts of proficiency and dominance. Proficiency usually refers to a specific language skill or component, such as lexical range or grammatical control. It can be assessed through tests designed for this purpose (Montrul, 2016), including the Test of English as a Foreign Language (TOEFL; Educational Testing Service, 2018) and the Quick Placement Test (QPT; Oxford University Press, 2001). On the other hand, dominance is used to describe the language most used on a daily basis by a learner and therefore refers to a high degree of exposure to that language. Dominance is generally determined by self-reporting questionnaires (Montrul, 2016). Proficiency and dominance are thus not interchangeable as higher levels of proficiency in a language do not necessarily imply dominance (Vicente et al., 2019). Proficiency can be operationalized as a cognitive or linguistic characteristic, while dominance can be measured as a multidimensional construct in learning a second language (Montrul, 2016). Instruments that provide information about proficiency and dominance in EFL learners thus offer a complementary perspective on the use, practice, and proficiency of the L2 (Botezatu et al., 2021).

In addition to exams such as the TOEFL and the QPT, simplified tests have been developed to evaluate L2 proficiency. Picture-naming tests, for example, have been

widely used to assess L2 language proficiency (Botezatu et al., 2021; Kharkhurin, 2012); the Lexical Test for Advanced Learners of English (LexTALE) has also been used for this purpose (Lemhöfer & Broersma, 2012).

Various instruments have been developed to gather data about language dominance from people who speak more than one language, including the Language Experience and Proficiency Questionnaire (LEAP-Q; Marian et al., 2007) and the Language and Social Background Questionnaire (LSBQ; Anderson et al., 2018). The LEAP-Q considers a person's language dominance and language preference for communicating in different settings, with questions about the age of acquisition of each language, past and current exposure to each language in different contexts, and basic sociodemographic information such as formal education and migration status. The LSBQ shares some features with the LEAP-Q, such as questions about the settings in which each language is used, but it also asks more detailed questions about language use in contexts such as preschool, religious activities, browsing the Internet, and language switching (the preference for one language over another when communicating with family and friends). Similarly, the Bilingual Language Profile (BLP; Birdsong et al., 2012) and the Language History Questionnaire (LHQ3; Li et al., 2019) collect information related to the age of L2 acquisition, the duration of exposure, and the current patterns of use of both the L1 and the L2. However, all these instruments use the term 'bilingual,' which may not accurately reflect the language practice of EFL learners.

365

From another perspective, qualitative instruments can also be used to provide multifactorial dimensions of L2 acquisition. These instruments frequently employ open-ended questions which are generally tailored to the objectives of a particular study (see, for example, Delgado et al., 1999), and they can provide complementary data about the language practice of EFL learners. For instance, see Mitchell (2023) for a comprehensive review of questionnaires directed to L2 learners in an immersion context.

However, the English dominance of EFL learners without an immersion situation could be different from that of a bilingual person or of EFL learners in an immersion context (Mitchell, 2023). Thus, for the purposes of this study, a qualitative questionnaire was adapted using elements from both the BLP and LHQ3 to explore dominance in relation to the language practice of EFL learners.

What is understood by 'language practice'? Some authors consider that learning an L2 in a formal setting is complemented by informal exposure to the L2 outside the classroom (Choi & Nunan, 2018; De Wilde et al., 2019; Muñoz, 2022; Sundqvist, 2009a), through activities such as watching television and movies, reading novels, interacting on social media, playing video games, and listening to music. Others have found that activities outside the classroom provide opportunities to practice the L2 in more engaging ways and effectively raise proficiency. For instance, Muñoz (2020) found that the frequency of exposure to L2 audiovisual input, reading, and online activities in EFL learners increases with age (e.g., adolescents vs adults) when these are performed

informally. Lee (2019) found that volunteering as a translator to subtitle videos on the Internet, interacting with foreign Facebook friends, and participating in conversation clubs to practice English, were all activities associated with high vocabulary scores in the L2. In addition, some studies have found consistently high vocabulary scores for English learners who frequently play online video games (Muñoz, 2020; Olsson, 2012; Sundqvist, 2009b, 2016). High vocabulary scores in the L2 might thus be related to higher L2 exposure in informal settings, which could indicate that the inverse - a lower exposure to the L2 outside the classroom - might limit progress toward greater proficiency. For instance, De Wilde et al. (2019) observed that young learners of English who demonstrated greater lexical range than their counterparts reported greater exposure to English words in informal settings, such as watching television. Choi and Nunan (2018) demonstrated that L2 language practice through extensive reading, intensive listening, and writing personal diaries developed greater proficiency in EFL learners. Similarly, the evidence provided by Sylvén (2004) with students of English in Sweden demonstrated that reading English texts outside the classroom was correlated with high scores on vocabulary tests. Consulting academic texts in English outside the L2 classroom is another form in which EFL learners can practice in an informal setting: Rodríguez-Lázaro (2015) found that college students practiced English mostly by consulting specialized texts in English as an informational resource for their school assignments.

The Current Study

The term EFL learner offers a more accurate description of the vast majority of Mexico City university students: as individuals learning English in a formal setting who have not had an immersion experience in the L2. In this context, L2 proficiency might be influenced by these students' differing language practices: English learners with high proficiency are more likely to engage more frequently in activities outside the classroom that improve their proficiency in the L2 (e.g., > 8 hours a week), while those with lower proficiency might do so less frequently (e.g., < 7 hours a week). It is expected that high proficiency in the L2 is influenced by language practice outside the classroom, and it is likely that the frequency of this practice also has an influence on proficiency. For this study, the definition of proficiency was limited to vocabulary (lexical) knowledge in the L2, and it was measured using the LexTALE, both for the convenience of its online application and for its high coefficients of reliability and validity in comparison with other language proficiency exams (Lemhöfer & Broersma, 2012).

To assess the English language practice of EFL learners, an online qualitative questionnaire was adapted from the BLP (Birdsong et al., 2012) and the Language History Questionnaire (LHQ3; Li et al., 2019), as both instruments include questions that generate more detailed data on learners' language practice habits. Participants' self-assessment of receptive and productive L2 performance was also considered in relation to proficiency

and language practice. This study concentrated more on proficiency than dominance, given that EFL learners differ from bilinguals in the limited informal settings they have for L2 practice that is conceptualized within the notion of dominance. We anticipated that L2 language practice outside the classroom would be distinguished more by receptive and productive abilities (reading, writing, speaking, and listening) than by specific informal settings. With these points in mind, the research questions were formulated as follows:

1. Which types of language practice do EFL learners use outside the classroom to improve their proficiency in English?
2. How frequently do they practice outside the classroom?
3. Does the frequency of their language practice correlate with greater proficiency in the L2?
4. Do participants' self-assessments of their L2 receptive and productive abilities relate to their language practice and actual/exam-assessed? L2 proficiency?

METHOD

Participants¹

367

The participants in this study were a non-random convenience sample of EFL learners enrolled in English courses at the Escuela Nacional de Lenguas, Lingüística y Traducción (ENALLT) of the Universidad Nacional Autónoma de México (UNAM). Before enrolling in an English course, students take a placement test in which they must demonstrate a minimum A2 level according to the European Framework of Reference for Languages (Council of Europe, 2001). ENALLT's English courses cover the A2 to B2 levels, and students are enrolled in one of these levels depending on the results of the placement test.

Due to the COVID-19 pandemic, classes at the ENALLT were given online. Teachers of these classes were sent emails asking them to invite their students to participate in the study. Participants who completed the study received course credit.

Students who responded to the email forwarded by their teachers received an email invitation to participate in this study. The message contained the statement of informed consent to participate in the research. This document, approved by the Ethics Committee of the Graduate Program in Psychology, described the procedures and the objectives of the study and was provided to participants in Spanish as a Word document via email. Participants digitally signed the informed consent and returned it via email.

The inclusion criteria for participants were to be native speakers of Spanish learning English as an L2, to be enrolled in regular courses at ENALLT, have an A2 to B2 English level, and have an age range of 18-35 years. Students enrolled were

¹ Participants also took part in studies with an eye-tracking task to explore visual attention and vocabulary knowledge in the L2. Data from these studies were analyzed for future publication.

undergraduates at UNAM, in Mexico City. The exclusion criteria were having an L1 other than Spanish, failure to complete all the tests for the study, or voluntary withdrawal from the study; in such cases, any recorded data were eliminated.

The initial sample included 73 learners of English. Two participants were excluded because their ages (53 and 63 years old) did not meet the inclusion criteria. The final sample included 71 participants (53 female). Participants' mean age was 21.6 ($SD = 2.4$, range: 18-31) and their mean age of English acquisition was 11 ($SD = 4.8$, range: 2-23). Participants' mean English proficiency score, according to the LexTALE, was 63.3 ($SD = 7.0$, range: 48-76), corresponding to an upper-intermediate level. Twenty-six students reported that they had studied a third language some years after learning English, but only two of them had studied it for more than three years. None of the students reported having had an immersion experience in an English-speaking country for more than a month.

Instruments and Procedure

Lexical Test for Advanced Learners of English

This is a lexical decision test, freely available online, that assesses vocabulary knowledge in English and provides reliable results on general proficiency in English as an L2 (Lemhöfer & Broersma, 2012). The test includes 60 words, of which 20 are English pseudowords (words that follow phono-orthographic rules from English but do not actually exist, e.g., *purage*), it takes approximately five minutes to complete, and participants receive their results at the end of the test. The test authors report a reliability of .87 and a validity of .74. LexTALE scores can be divided into three levels according to the participant's correct responses: advanced (80%-100%), upper-intermediate (60%-79%), and beginner (less than 59%) (Lemhöfer & Broersma, 2012). Table 3 shows detailed information about the scores and corresponding proficiency levels of participants in our study.

Language Experience Questionnaire

This self-reporting questionnaire contains items adapted from the BLP and the LHQ3. These two surveys collect sociodemographic data and information related to the participants' age of L2 acquisition and time exposed to it, and use of the L1 and the L2. We selected questions from the BLP and the LHQ3 that were most relevant to the context of EFL learners' practice with the L2. Sections III and IV from the BLP and questions 15, 18, 19, and 21 from the LHQ3 were used. Both the BLP and the LHQ3 ask about age of L2 acquisition, so the questionnaire included the item 'At what age did you start learning English?' The BLP and the LHQ3 both ask about the frequency of use of the L1 and the L2 in different activities (e.g., listening to the radio, reading for pleasure, and using social

media). In Section III of the BLP, the options for frequencies are a list of percentages (10%, 20% . . . 100%); item 18 of the LHQ3 is an open question asking participants to give the number of hours spent on the activities listed and indicating whether those activities are in the L1 or the L2.

Our language experience questionnaire asked in Spanish about the English used in various activities (e.g., writing in English), and the amount of time spent on that practice. We provided three options: a) 0 to 7 hours per week, b) 8 to 15 hours per week, and c) 16 hours or more per week. These options were chosen because in the English courses at ENALLT, students receive six hours of instruction per week, and if an extra hour a week is included for homework, the minimum exposure in a formal setting for an EFL learner would be around seven hours a week. We hypothesized that any time above that number would mean greater exposure and practice of the L2 outside the classroom. We included specific questions about productive and receptive abilities in the L2, with questions about reading, writing, speaking, and listening that might relate to L2 language practice. For example, one section focused on the texts participants might write to examine L2 productive ability, with questions such as 'How many hours do you spend writing the following types of texts in English?'. Five types of texts were listed: messages on social media, messages on WhatsApp, email messages, personal diaries, and academic assignments that could be written in English. Neither the BLP nor the LHQ3 provided this clear distinction between receptive and productive abilities. Our questionnaire included two sections on types of language practice related to the receptive skills of reading and listening, and two on types of practice related to the productive skills of writing and speaking, each with categories comparable to the five described for writing. A final section asked participants to estimate their own performance in the four abilities, asking them to estimate how comfortable they felt reading texts in English, writing in English, talking to others in English, and listening to recordings in English. The response options in this section were *uncomfortable*, *not very comfortable*, *comfortable*, or *very comfortable*. The questionnaire included a total of 10 questions, and a Google Form was used so participants could answer it online (see Appendix A for further details about this questionnaire).

369

When participants returned the informed consent digitally signed by email to the first author (as mentioned earlier), they then received an email including a link to the eye-tracking task (not included in this manuscript). Once the eye-tracking was completed (the task takes nine minutes), they were directed to the Google Form containing the language experience questionnaire and the LexTALE. Participants completed first the language experience questionnaire and then the LexTALE. If they had questions, these were addressed by email prior to beginning the tasks of this study. The total time necessary to complete the language experience questionnaire and the LexTALE was approximately 15 minutes.

RESULTS

The objective of this study was to explore English learners' language practice outside the classroom, using an adapted questionnaire, to assess whether that practice was related to improvements in their L2 proficiency. An exploratory factor analysis was first carried out to observe whether the questionnaire showed reliable results. A multiple regression analysis was then performed to explore which types of language practice could predict higher proficiency scores in the L2.

The sample included 71 participants and data analysis was performed with SPSS version 25 (IBM Corporation, 2017). The Google Form used to collect the data required participants to respond to each question, so there were no missing values.

Language Experience Questionnaire

The questionnaire for this study was adapted from the BLP and the LHQ3, instruments with a theoretical basis for assessing L2 practice. Its internal consistency in assessing the relationship between the language practice of EFL learners and improvement in their proficiency was analyzed. The questionnaire included five sections related to language practice: reading, writing, listening, speaking, and a self-estimation of performance in these areas. Participants responded to 23 items about different types of language practice (e.g., 'How many hours do you spend writing the following types of texts in English? Messages on social media, messages on WhatsApp, email messages, personal diary, and assignments from school that can be written in English.') The internal consistency was analyzed and found a Cronbach's alpha of .81, indicating a high degree of reliability (Cronbach, 1951) and suitability for assessment of the correlations between items. A Cronbach's alpha was also calculated to discern the reliability and internal consistency of each of the five components. Three components—reading practice (RP), writing practice (WP), and listening practice (LP)—with a total of 15 items showed acceptable reliability (see Table 1 for further details), with a Cronbach's alpha of .81. An exploratory factor analysis (EFA) was then carried out on these three components to determine which best described the EFL learners' language practice outside the classroom. A principal components analysis was performed with varimax rotation and Kaiser normalization, and absolute values below .40 were discarded (Aráuz, 2015; De Winter et al., 2009).

Table 1. Cronbach's Alpha, Mean, and Standard Deviation for the Components of the Language Experience Questionnaire

Component	Number of items	Initial Cronbach's Alpha	Mean	SD
1. Writing practice (WP) 'Estimate the number of hours you spend writing documents in English (e.g., personal diaries).'	6	.65	6.75	1.23
2. Reading practice (RP) 'Estimate the number of hours you spend reading material in English (e.g., social media).'	5	.62	6.79	1.7
3. Listening practice (LP) 'Estimate the number of hours you spend listening to material in English (e.g., music).'	4	.70	6.62	1.7
4. Speaking practice (SP) 'Estimate the number of hours you spend speaking in English (e.g., with friends).'	4*	.40	3.56	.806
5. Self-estimation performance of these abilities (SC) 'How comfortable do you feel when talking to others in English?'	4	.53	10.56	1.84

Note. *One item ('Estimate the number of hours you speak in English (e.g., with family)') was deleted from this component because the matrix of covariance revealed a zero score; therefore, only three items were considered for analysis. Values in bold indicate an acceptable reliability according to Cronbach's alpha.

371

We first used a Keiser-Meyer-Olkin (KMO) model, a test for the adequacy of sampling to explain the proportion of variance among variables, in which values between 0.8 and 1 indicate an adequate sampling. We obtained a value of .71, a moderate value (Spicer, 2005). Bartlett's test of sphericity, which indicates the correlation between the variables, was significant, $X^2(105) = 450.59$, $p < 0.001$, with a variance of 70.75% within the first five components. We took a closer look using an anti-image matrix, communalities, and the rotated component matrix, which provide additional information about the adequacy of the model. The anti-image matrix, in which values above .600 denote a stronger correlation with the other items (De Winter et al., 2009), detected two items with correlations below that threshold. The communalities table detected two items with values below .40, indicating that those items would not contribute strongly to the model due to the proportions of the variance provided by the other components. Finally, the rotated component matrix found three items with loadings below .600, which suggests a possible imprecision (Aráuz, 2015).

The EFA was performed again without these seven confounding items but otherwise using the same criteria and obtained a KMO of .68 and a significant Bartlett sphericity test, $X^2(28) = 191.73$, $p < 0.001$, with a variance of 57% within the first two components. The values of the anti-image matrix were above .600. The communalities

table showed two items below .500, one of which was correspondingly identified in the rotated component matrix without loadings. These two items were deleted and the EFA performed again with the remaining six items. This final EFA found a KMO of .65 and a significant Bartlett sphericity test, $X^2 = 160.55$, $df = 15$, $p < 0.001$, with a variance of 70% within the first two components.

Table 2 shows the components and loadings obtained in the rotated component matrix for this final EFA. These results suggest a cautious interpretation of the results because of the moderate KMO values (Spicer, 2005), and no generalization can be assumed. Nevertheless, this first part of the results provides insight for the subsequent analyses. There are two components related to the practice of English as an L2: one related to academic activities (ACA) and the other related to spare time activities (SPA). A final Cronbach’s alpha analysis was performed to determine whether these two components were reliable for subsequent analysis. Using only these two components ($n = 6$), we obtained an alpha of .77, which indicates acceptable reliability (Cronbach, 1951). The ACA component includes RP (reading practice) and LP (listening practice) activities, while the SPA includes WR (writing practice) and LP. These types of language practice can be considered in the multiple regression analysis to determine which has the greatest effect on the L2 proficiency of this sample.

Table 2. Final EFA Rotated Component Matrix

Final Components	Component		Communalities		
	1	2	Initial	Extracted	Anti-image correlation
RP-ACA-1. ‘How many hours a week do you spend reading the following types of texts in English?’ (academic textbooks)	0.907		1.000	0.736	.606 ^a
RP-ACA-2. ‘How many hours a week do you spend reading the following types of texts in English?’ (academic or specialist papers)	0.897		1.000	0.480	.636 ^a
LP-ACA-3. ‘How many hours a week do you spend listening to the following types of materials related to your field of study in English?’ (YouTube videos)	0.704		1.000	0.814	.810 ^a
WR-SPA-1. ‘How many hours a week do you spend writing the following types of texts in English?’ (emails)		0.841	1.000	0.835	.677 ^a
LP-SPA-2. ‘How many hours a week do you spend listening to the following types of materials in English?’ (podcasts)		0.815	1.000	0.706	.633 ^a

LP-SPA-3. 'How many hours a week do you spend listening to the following types of materials in English?' (movies)

Eigenvalues	2.91	1.28	-	-	-
% of variance	48.51	21.41	-	-	-

Note. The extraction was performed with principal component analysis and the rotation with varimax with the Kaiser normalization. The rotation converged in three iterations. ^a Measures of sampling adequacy (MSA). ACA: academic activities; SPA: spare time activities.

The two components obtained from the final EFA included six items that shared the same types of responses, so no standardization of responses was needed to run the regression analysis. Participants' responses were summarized to create two new variables: the three items from the ACA component in the variable ACA_summ, and the three items from the SPA component in the variable SPA_summ (Table 3). These two new variables were introduced into the regression analysis as predictors using the enter method, with proficiency as the dependent variable. The two predictors explained only .097% of the variance, $F(2,68) = 3.66$, $p < .03$, $R^2 = .097$, $R^2_{adj} = 0.07$. The regression coefficient of these predictors lacked statistical significance, ACA: $\beta = .82$, $t(68) = 1.50$, $B = .189$, 95% CI [-0.266-1.91], $p = 0.13$; SPA: $\beta = 1.190$, $t(68) = 1.48$, $B = .186$, 95% CI [-0.410-2.790], $p = 0.14$. Although the model was statistically significant, these results did not provide clear evidence of the effect of the components on language proficiency.

A multiple regression analysis was then performed to examine the interaction of ACA and SPA, using the enter method with the variables ACA_summ, SPA_summ, age, gender, and age of acquisition of English as predictors, with language proficiency as the dependent variable. These predictors explained 23% of the variance, $F(5,65) = 3.93$, $p < .004$, $R^2 = .232$, $R^2_{adj} = .173$. The only predictors with a statistically significant regression coefficient were SPA_summ, $\beta = 2.04$, $t(65) = 2.45$, $B = .316$, 95% CI [.379-3.70], $p = .017$, and age, $\beta = 1.14$, $t(65) = 3.11$, $B = .383$, 95% CI [0.401-1.82], $p = .003$. SPA had an important effect on language proficiency, and neither age of English language acquisition nor gender contributed to the model.

Another multiple regression was carried out with the enter method to examine whether age and the three items of the SPA component (Table 3) were potential predictors for language proficiency in the L2. This model explained 20% of the variance, $F(4,66) = 4.32$, $p < .004$, $R^2 = .208$, $R^2_{adj} = .160$. The only predictors with statistically significant regression coefficients were age, $\beta = 1.10$, $t(66) = 3.83$, $B = .380$, 95% CI [.453-1.76], $p = .001$, and LP-SPA-3, $\beta = 2.71$, $t(66) = 2.00$, $B = .41$, 95% CI [0.016-5.48], $p = .049$.

Table 3. Mean, Standard Deviation, and Correlation of the variables in the regression analysis

Variable	Mean	SD	r
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LexTALE L2 proficiency score	63.36	7.06	--
Age of acquisition of English	11.07	4.85	-0.31*
Gender	1.25	0.43	0.124
Age	21.62	2.42	0.312**
ACA_summ	4.42	1.61	0.261*
SPA_summ	4.01	1.10	0.259*
RP-ACA-1. 'How many hours a week do you spend reading the following types of texts in English?' (academic textbooks)	1.44	0.62	0.256*
RP-ACA-2. 'How many hours a week do you spend reading the following types of texts in English?' (academic or specialized papers)	1.49	0.60	0.232*
LP-ACA-3. 'How many hours a week do you spend listening to the following types of materials related to your field of study in English?' (YouTube videos)	1.49	0.65	0.185
WR-SPA-1. 'How many hours a week do you spend writing the following types of texts in English?' (emails)	1.11	0.36	0.173
LP-SPA-2. 'How many hours a week do you spend listening to the following types of materials in English?' (podcasts)	1.15	0.40	0.180
LP-SPA-3. 'How many hours a week do you spend listening to the following types of materials in English?' (movies)	1.75	0.62	0.241*

Note. Correlations with the LexTALE score (*r*). * $p < .05$; ** $p < .001$.

LexTALE

The final model provides evidence that age and the language practice of watching movies were indicators associated with a higher score on the LexTALE test. This test assesses English proficiency according to the percentage of correct responses. Scores are divided into three levels: advanced (80%-100%), upper-intermediate (60%-79%), and beginner (48%-59%). Table 4 shows the participants' scores.

Table 4. LexTALE scores

Level of proficiency in English	Frequency (%)	Range
1. Beginner level	21 (30)	48-59
2. Upper-intermediate level	50 (70)	60-78

Most participants' scores were in the upper-intermediate level, showing a greater L2 proficiency. A multiple regression analysis was carried out with the enter method to determine whether the age and LP-SPA-3 variable would predict a higher English

proficiency within the sample. EFL learners with scores of 60 and over on the LexTALE were selected for this model. The predictors age and LP-SPA-3 explained 35% of the variance, $F(2,46) = 3.24$, $p < .048$, $R^2 = .124$, $R^2_{adj} = .086$. The only predictor with a statistically significant regression coefficient was age, $\beta = .692$, $t(46) = 2.53$, $B = .370$, 95% CI [0.143-1.24], $p = .015$. For upper-intermediate EFL learners ($n = 50$), age was positively associated with greater proficiency.

In sum, the most frequent activities of the EFL learners outside the classroom were ACA (e.g., reading academic textbooks) and SPA (e.g., listening to podcasts). Those with high proficiency engaged more frequently in the spare time activity of listening to English by watching movies. Proficiency also increased with age.

DISCUSSION

The main objective of this study was to analyze whether L2 proficiency was influenced by language practice outside the classroom and whether the frequency of that practice was related to L2 proficiency.

The results related to the reported academic activities (ACA) were expected. EFL learners reported that reading academic textbooks and specialized papers and listening to videos related to their fields of study were among the most frequent activities for practicing English outside the classroom. These activities are common among college students in Mexico City, who frequently read academic texts in English as supporting material for their coursework and to acquire knowledge related to their majors. This is in line with the finding of Verhoeven (1990) that reading in an L2 favors its development. However, our study was limited in assessing EFL learners' reading comprehension. Future studies should assess the correlation of reading comprehension with tests such as the IELTS (<https://www.ielts.org/>), which measures the academic performance and proficiency of EFL learners through receptive and productive abilities (reading, writing, listening, and speaking).

The second important form of L2 language practice our questionnaire found was spare time activities (SPA), which were frequent. This was an interesting outcome, given the combination of language practice we observed: one type was related to productive abilities (writing email messages) and the other to receptive abilities with two types of materials in English (listening to podcasts and movies). EFL learners may have been communicating more frequently by email because of the COVID-19 pandemic, which was taking place during the study. Additional research would be needed to learn more about the kind of emails they were writing, if, for example, they were sent to friends from other countries as part of their English coursework.

Language practice using the Internet to listen to podcasts and movies appears to be beneficial for EFL learners. This practice promotes exposure to the natural use of the target language and increases knowledge about other cultures (Beresova, 2015), which

might provide additional motivation for increasing L2 proficiency (Choi & Nunan, 2018; De Wilde, 2019; Lee, 2019; Muñoz, 2022; Olsson, 2012; Sundqvist, 2009b, 2016). According to Muñoz (2022), exposure to online audiovisual content provides immediate contact with authentic material in the L2 while promoting language practice at different levels (e.g., pronunciation of words, the meaning of words, to name a few). Similarly, Hubbard (2020) indicates that EFL learners should be encouraged to find meaningful opportunities to improve L2 learning through digital media.

The second part of the results with the regression models was intended to explore which parts of the ACA and SPA predicted greater proficiency in the L2. The main results revealed that age and the SPA of listening to English by watching movies showed an important effect on language proficiency. We can conclude, at least with the results obtained from this sample, that both an increase in age and in the frequency of watching movies in English promote greater proficiency in the L2. These results show that EFL learners find more informal opportunities such as movie watching to practice the L2 with increasing age. Albiladi et al. (2018) found that movies were perceived as an authentic and effective material to practice different abilities in the L2, at least with college students. Bahrani et al. (2014) explored the quality and frequency of exposure to audiovisual material and found that L2 learners of English with low proficiency preferred watching animation, while those with high proficiency preferred to watch longer news programs. The quality of these programs was considered in relation to their modification of authentic material: in animation, characters' voices are often modified, and language simplified, for example, but not in news programs. Future studies could explore the types of movies L2 learners prefer (e.g., animation or drama). Additionally, it would be interesting to know whether the use of subtitles in audiovisual material supports the development of receptive abilities stimulated by audiovisual material (Aksu-Ataç & Günay-Köprülü, 2018). For instance, Pujadas and Muñoz (2020) explored in a controlled setting (i.e., during EFL classes) the effects of captions and subtitles on audiovisual material in the L2. The main findings were that EFL learners' comprehension was dependent on vocabulary knowledge, that is, low-proficiency EFL learners' comprehension of audiovisual material in the L2 improved with subtitles, while captions were favorable for EFL learners with high proficiency (see Wei & Fan, 2022 for an extensive review of L2 vocabulary learning with on-screen text).

In addition to these findings, it is noteworthy that the variable of age of L2 acquisition was not a predictor for greater proficiency, which contradicts evidence from previous studies that suggest that early learning of an L2 promotes greater proficiency (Bialystok et al., 2008; Botezatu et al., 2021; Costa & Sebastián-Gallés, 2014; Marian et al., 2018). However, in these studies, the experience of immersion has been found to positively influence L2 proficiency. For instance, Saito (2015) demonstrated that early acquisition of the L2 promotes near-native pronunciation and prosody, while late acquisition was related to better language use on the grammatical and lexical levels. A

higher level of motivation in late EFL learners, however, played an important role in finding opportunities to practice. Participants in our study reported they had never experienced an immersion in the L2, and had learned English only in school, which is an important limitation to exposure in informal settings.

Our results, however, demonstrate that with the frequency of language practice, such as watching and listening to audiovisual materials like podcasts and movies in English, most of the sample (50/71) had acquired an upper-intermediate level of English which might lead to a higher proficiency in the L2. In addition, in our sample, exposure to audiovisual material such as movies increased with age. The importance of age was supported by the regression analysis using only the EFL learners with high proficiency, which indicates that greater exposure to the L2 positively affects proficiency (Bialystok et al., 2005; Kroll et al., 2015; Luk et al., 2011). Previous research has found similar results. For example, Muñoz (2020) demonstrated that older EFL participants pursued exposure to audiovisual materials in the L2 more than younger EFL participants.

377

Finally, participants' self-estimation of their receptive and productive abilities in English did not correlate with their proficiency. Gaffney (2018) has suggested several potential causes of inaccurate self-assessment that might be responsible for this result. These include psychological or individual factors, such as a lack of confidence, or aspects of personality, such as introversion. Gaffney (2018) found that when self-estimation of L2 performance is correlated with instruments that assess personality traits (e.g., 'make friends easily'), extroverted participants showed a higher self-estimation of performance in the L2 than their introverted counterparts. Similarly, Andrade (2019) has described an ongoing debate about the difficulties of defining and conceptualizing self-assessment in students, due to the affective mechanisms that might influence their perception of achievement in learning, which our study did not explore. However, these issues could be considered in future studies to better understand the factors influencing EFL learners with low proficiency. As Marian and Hayakawa (2021) note, possible factors affecting the validity of self-reported measures include the language ability being rated, the proficiency level of the EFL learner, and age. Additionally, we have reported the reliability and consistency of the items included in our language experience questionnaire which might be useful for researchers in this field to promote comparisons and consistency in self-estimation instruments created to explore language use and practices (Mitchell, 2023).

In sum, our study indicates that instruments intended for bilinguals, such as the BLP and the LHQ3, can be adapted to generate useful and reliable information about EFL learners' language practice. Even though we found no evidence of the effects of age of L2 acquisition on proficiency, we did find that age has a positive effect. Interestingly, this relationship encourages EFL learners to find opportunities for spare time practice, leading to greater exposure to authentic material outside the classroom, such as through movie watching.

Limitations and Suggestions for Future Research

This study was carried out during the COVID-19 pandemic, when classes were conducted online, reducing the possibilities for interaction and oral participation. This situation may have affected the results. It would be interesting to replicate this study with students returned to in-person classes to compare the effects of EFL language practice without pandemic restrictions.

Additionally, due to the COVID-19 restrictions, proficiency was measured with an online test, that provided significant results. Nevertheless, it would be advisable to complement the proficiency measurement with in-person testing to obtain a broader perspective on proficiency.

Also, at a time when the COVID-19 pandemic has highlighted the effectiveness of using online tools, different approaches are needed to observe whether EFL learners' language practice with these tools leads to greater proficiency in receptive and productive abilities.

CONCLUSION

This study explored EFL learners' language practice outside the classroom and evaluated the relationship between the frequency of that practice and L2 proficiency. It found that there are two main areas where EFL learners practice more frequently: in academic and spare time activities. The first area is related to the academic life in which the EFL learners of this sample are immersed, and the second reveals the importance of learning outside the classroom through activities that provide authentic exposure to the L2, such as listening to podcasts and watching movies. The spare time activity of watching movies in English was related to greater proficiency, and the frequency of this activity increased with age. We conclude that as EFL learners increase in age, their L2 proficiency is greater and is predominantly affected by exposure to audiovisual material such as movies in the L2. Nevertheless, we recommend caution in interpreting these results, and additional studies addressing the types of language practices that help to increase proficiency in EFL learners are suggested.

378

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APPENDIX

Appendix A. Language experience questionnaire. Adapted from the BLP (Birdsong et al., 2012) and the LHQ3 (Li et al., 2019)

Uso de lenguas en contextos sociales

Las preguntas de esta sección servirán para obtener información sobre el uso de las lenguas que dominas en contextos sociales. [This section aims to obtain information about the use of the languages that you use in social contexts.]

Género [Gender]

- a) Mujer [Female]
- b) Hombre [Male]
- c) Prefiero no decirlo [Rather not say]

Edad [Age] _____

383

¿Trabajas además de estudiar? [Besides studying, do you work?]

- a) Sí [Yes]
- b) No

Lengua materna [First language]

- a) Español [Spanish]
- b) Otra [Other]

Si tu lengua materna no es el español, ¿cuántos años has estudiado español en la escuela? [If Spanish is not your first language, how long have you studied Spanish at school?] _____

Además del inglés, ¿has estudiado otra lengua? [Besides English, have you ever studied another language?]

- a) Sí (favor de responder la pregunta 13) [Yes, (please go to question 13)]
- b) No (pasa a la pregunta 14) [No, (please go to question 14)]

¿Qué otra lengua aprendiste y cuánto tiempo la estudiaste? [Which other language have you studied and for how long?] _____

¿A qué edad comenzaste a estudiar inglés? _____ [At what age did you start studying English?]

Estima tu conocimiento de inglés [Estimate your knowledge of English]

Cero [Zero] 0-1-2-3-4-5 **Perfecto** [Perfect]

¿En qué nivel de inglés te ubicas actualmente? [Which is your current English level?]

- a) Principiante [Beginner]
- b) Intermedio [Intermediate]
- c) Intermedio avanzado [Upper-intermediate]
- d) Avanzado [Advanced]

Estima la cantidad de horas a la semana en las que escribes en inglés [Estimate how many hours a week you write in English]

	0 a 7 horas a la semana [0 to 7 hours a week]	8 a 15 h horas a la semana [8 to 15 hours a week]	Más de 16 horas a la semana [More than 16 hours a week]
1. Mensajes en redes sociales [Messages on social media (e.g., Facebook, Twitter)]			
2. Mensajes en Whatsapp [Messages on WhatsApp]			
3. Mensajes de correos [Email messages]			
4. Diarios personales [Personal diary]			
5. Trabajos de escuela [School assignments]			
6. Artículos científicos [Academic papers]			

Estima la cantidad de horas a la semana en las que lees material en inglés [Estimate how many hours a week you read material in English]

	0 a 7 horas a la semana [0 to 7 hours a week]	8 a 15 h horas a la semana [8 to 15 hours a week]	Más de 16 horas a la semana [More than 16 hours a week]
7. Redes sociales [Social media]			
8. Libros (p. ej. novelas) [Books (e.g., novels)]			
9. Artículos académicos o especializados [Academic or specialist papers]			
10. Libros académicos [Academic textbooks]			
11. Videojuegos [Videogames]			

Estima la cantidad de horas a la semana en las que escuchas material en inglés [Estimate how many hours a week you listen to material in English]

	0 a 7 horas a la semana [0 to 7 hours a week]	8 a 15 h horas a la semana [8 to 15 hours a week]	Más de 16 horas a la semana [More than 16 hours a week]
12. Música [Music]			
13. Películas [Movies]			
14. Podcasts de diferentes temas [Podcasts about different topics]			

15. Materiales especializados en tu área de estudio [Specialist materials related to your field of study (e.g., YouTube videos)]			
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Estima la cantidad de horas a la semana en las que platicas en inglés [Estimate how many hours a week you speak in English]

	0 a 7 horas a la semana [0 to 7 hours a week]	8 a 15 h horas a la semana [8 to 15 hours a week]	Más de 16 horas a la semana [More than 16 hours a week]
16. Familia [with family]			
17. Amigos [with friends]			
18. Escuela [at school]			
19. Trabajo [at work]			

¿En qué habilidad del inglés te sientes más cómodo? [How comfortable do you feel when...]

	Nada cómodo [Very uncomfortable]	Poco cómodo [Somewhat uncomfortable]	Cómodo [Comfortable]	Muy cómodo [Very comfortable]
20. Platicar con otros en inglés [chatting to others in English]				
21. Leer materiales en inglés [reading texts in English]				
22. Comprender audios en inglés [understanding audios in English]				
23. Escribir en inglés [writing in English]				