

# The relationship between extramural English and learners' listening comprehension, reading comprehension, motivation, and anxiety

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## **Abstract**

Recently, researchers have shown an increased interest in the relationship between extramural English and learners' language proficiency. However, the majority of the studies have focused on vocabulary knowledge. Less is known about extramural English and learners' motivation, reading and listening proficiency. Further, few studies have focused on English-as-a-foreign language learners attending technical education. The main objective of this study is to investigate whether extramural English is related to the motivation, language anxiety, listening and reading proficiency of three distinct groups of participants: grade 6 (age 11-12), grade 8 (age 13-14) and grade 10 (age 15-16) learners. Data were collected from 108 learners. All participants were administered a questionnaire and a listening and reading comprehension test. The findings suggest that learners are frequently exposed to English in their spare time. The results also indicate that grade 6 learners were already capable of performing listening tasks at

the A2 level of the Common European Framework of Reference for Languages, even though they had not had any English lessons in school yet. Watching non-subtitled TV in English appeared to be positively related to both listening and reading proficiency. Finally, relationships were found between various extramural English activities and factors concerning motivation and anxiety.

**Keywords:** extramural English; listening; reading; motivation; language anxiety.

## Résumé

Récemment, les chercheurs ont montré un intérêt accru pour la relation entre l'anglais extrascolaire et les compétences linguistiques des apprenants. Cependant, la majorité des études se sont concentrées sur la connaissance du vocabulaire. On dispose de moins d'informations sur l'anglais extrascolaire et la motivation des apprenants, ainsi que sur leurs compétences en lecture et en écoute. En plus, il y a peu d'études qui se sont concentrées sur les apprenants d'anglais en tant que langue étrangère dans le cadre de l'enseignement technique. Cette étude a pour principal objectif de déterminer si l'anglais extrascolaire est lié à la motivation, à l'anxiété linguistique et aux compétences en lecture et en écoute de trois groupes distincts de participants : la sixième année (11-12 ans), la huitième année (13-14 ans) et la dixième année (15-16 ans). Les collectes de données ont été effectuées auprès de 108 apprenants. Tous les participants ont été soumis à un questionnaire et à un test de compréhension orale et écrite. Les résultats indiquent que les apprenants sont fréquemment exposés à l'anglais pendant leur temps libre. Les résultats révèlent également que les apprenants de 6e année étaient déjà capables de passer des tests d'écoute au niveau A2 du Cadre européen commun de référence pour les langues, même s'ils n'avaient pas encore suivi de cours d'anglais à l'école. Le fait de regarder des émissions télévisées sous-titrées en anglais semblait être positivement lié aux compétences en matière de compréhension orale et écrite. Enfin, on a constaté des relations entre diverses activités d'anglais extrascolaire et des facteurs concernant la motivation et l'anxiété.

**Mots clés :** anglais extrascolaire ; écoute ; lecture ; motivation ; anxiété linguistique.

## 1. Introduction

In recent years, there has been an increasing interest in the relationship between learners' extramural English and their language proficiency (e.g., Bollansée et al., 2021; De Wilde et al., 2020; Hannibal Jensen, 2017; Peters, 2018; Sundqvist, 2019). Extramural English is a term coined by Sundqvist (2019) and refers to different types of engagement with English through out-of-school activities such as viewing TV, reading, playing video games, and using the internet. Research has shown that extramural

English may foster English-as-a-foreign language (EFL) learners' language proficiency (Busby, 2020; Lindgren & Muñoz, 2013; Peters, 2018; Sundqvist, 2019). Additionally, several studies have demonstrated that language learning through extramural English can occur in children prior to formal instruction (De Wilde et al., 2020; Kuppens, 2010; Puimège & Peters, 2019). However, most studies investigating the relation between extramural English and second language (L2) proficiency have focused on vocabulary knowledge, whereas fewer studies have examined listening comprehension, reading comprehension, writing, and speaking (see De Wilde et al., 2020; Lindgren & Muñoz, 2013; Muñoz & Cadierno, 2021; Sylvén & Sundqvist, 2012, for exceptions). Additionally, few studies have explored the relationship between motivation and L2 competence. An exception is Leona et al. (2021). The same holds true for language anxiety. Both motivation and anxiety are learner-related variables that are believed to influence second language acquisition (SLA; Bernaus & Gardner, 2008; Dörnyei, 2005). Finally, the field of SLA has been found to suffer from biased sampling, with most studies collecting data from university students. Younger learners tend to be underrepresented.

The present study aimed to fill these gaps by investigating whether extramural English was related to learners' English listening and reading proficiency, motivation, and anxiety. Further, the present study was conducted with young learners and learners from the technical strand of secondary education in Flanders (the Dutch-speaking region in Belgium) in order to increase the generalizability of findings (Andringa & Godfroid, 2020).

The current research article opens with a literature review, discussing various extramural English activities as well as motivation and language anxiety. The next sections present the research questions, methodology and results. Finally, the paper ends with a discussion of the findings and a conclusion, including the limitations and pedagogical implications.

## **2. Background**

### **2.1. Extramural English**

#### **2.1.1. TV viewing**

Webb (2015) argued that extensive TV viewing might be an effective method to acquire L2 vocabulary and listening skills. He stated that watching L2 television extensively “could help to fill the need for greater L2 input” (p. 159) that is typically lacking in many foreign language learning contexts. Webb defines extensive viewing as “regular silent uninterrupted viewing of L2 television inside and outside of the classroom” (p. 159).

Recent studies have indicated that EFL learners of different ages frequently engage in watching English TV programs and movies outside of the classroom (Bollansée et al., 2021; De Wilde et al., 2020; Kuppens, 2010; Lindgren & Muñoz, 2013; Peters, 2018). Most studies have focused on the relation between watching TV and EFL learners' vocabulary knowledge. For instance, in her study conducted with adolescent EFL learners (16 and 19 years old), Peters (2018) found that viewing non-subtitled TV programs and movies correlated positively with learners' vocabulary knowledge. This finding was corroborated by Warnby (2022), who collected data from Swedish EFL learners aged 16 and 18. Studies have also shown that watching TV and movies may also have a positive effect on learners' knowledge of phrasal verbs (Schmitt & Redwood, 2011) and collocations (González-Fernández & Schmitt, 2015).

Multiple studies have also indicated that watching English TV may be beneficial to the vocabulary knowledge of young learners prior to formal English instruction. For instance, in Kuppens' (2010) study, it was found that watching subtitled television or movies was an important predictor of the Dutch-to-English and English-to-Dutch translation skills of Flemish children in their last year of primary education (grade 6). Puimège and Peters' study (2019), with 560 pupils in grades 4, 5 and 6 (age 10-12), also claimed passive exposure (e.g., watching TV with Dutch subtitles, listening to songs) to be beneficial to vocabulary knowledge. The study by Bollansée et al. (2021) found a positive relationship between extramural English and young Flemish learners' productive word knowledge prior to formal instruction. Watching TV without subtitles appeared to be the most beneficial, whereas watching TV with subtitles in the L1 was negatively correlated with the young learners' word knowledge.

Fewer studies have investigated the relationship between extramural English and reading and listening proficiency (De Wilde et al., 2020; Lindgren & Muñoz, 2013; Muñoz & Cadierno, 2021). A study by Lindgren and Muñoz (2013), with 10- and 11-year-old EFL learners in their fourth year of L2 instruction, found that watching TV and movies in the L2 (with or without subtitles) was an important predictor of learners' listening and reading proficiency. Muñoz and Cadierno (2021) found a significant positive relationship between exposure to audiovisual input with English subtitles and the listening test scores of 14- and 15-year-old Spanish EFL learners. In contrast, De Wilde et al. (2020), who collected data from Flemish children aged 10 to 12 without English instruction, did not find any relationship between watching English-spoken TV with or without subtitles and reading and listening proficiency. However, it remains unclear whether these findings can be extended to older EFL learners in secondary education and EFL learners in technical education in particular.

### **2.1.2. Written input**

Most studies with primary and secondary school EFL learners have shown that EFL learners do not read very often outside of school (e.g., De Wilde et al., 2020; Lindgren & Muñoz, 2013; Peters, 2018). However, some studies have found a positive relationship between extramural reading and vocabulary knowledge. Yet, most of these studies involved EFL learners in secondary education or at university. For instance, in her study with 16-year-old EFL learners and university students, Peters (2018) found a positive correlation between extramural reading and vocabulary knowledge. Similarly, Warnby (2022) showed that reading outside of school was an important predictor of Swedish EFL learners' (age 16 and 18) knowledge of academic vocabulary. A study by Busby (2020) also revealed a positive relationship between the extramural reading habits of Norwegian university students and their scores on a vocabulary test. Similar findings have been revealed for learners' knowledge of multiword items like collocations (González-Fernández & Schmitt, 2015) or phrasal verbs (Schmitt & Redwood, 2011). Another study (De Wilde et al., 2020) with Dutch-speaking children without English classroom instruction (aged 10-12) found a positive relationship between reading English books and listening, reading and writing skills. Yet, in the regression analyses, extramural reading was no longer a significant predictor. Lindgren and Muñoz (2013) explored the correlation between out-of-school exposure and the receptive language proficiency of 10- and 11-year-old European children. However, reading was too infrequent among the children and was therefore not included in their analysis.

### **2.1.3. Computer use**

A third important type of extramural English for EFL learners is computer use, which entails multiple activities such as playing computer games, navigating the internet, and using social media (Sundqvist & Sylvén, 2016). Multiple studies have put forward playing computer games as a potentially effective method to enlarge EFL learners' vocabulary (Bollansée et al., 2021; Busby, 2020; De Wilde et al., 2020; Sylvén & Sundqvist, 2012).

Studies conducted with young learners (ages 6 to 12) all point to the positive relationship between gaming and English language proficiency. The findings of Sylvén and Sundqvist (2012) showed that frequent gamers, aged 11-12, knew significantly more English words and obtained higher scores on reading and listening comprehension than non-gamers. Similarly, Hannibal Jensen (2017) found a positive relationship between gaming with both spoken and written English input and the vocabulary scores of Danish English language learners aged 8 and 10. Several studies have focused on young learners who have not received English instruction yet. These studies corroborated the

positive relationship between gaming and receptive vocabulary knowledge (Puimège & Peters, 2019), productive vocabulary knowledge (Bollansée et al., 2021), and speaking and listening comprehension (De Wilde et al., 2020).

Gaming has also been found to be beneficial for adolescent EFL learners and university learners. Studies conducted by Sundqvist and colleagues (Sundqvist, 2019; Sundqvist & Wikström, 2015) consistently showed a positive effect of gaming on vocabulary knowledge and vocabulary use in writing. These findings were confirmed in Peters (2018) and Peters et al. (2019). In her study with university students, Busby (2020) found a strong positive correlation between their frequency of gameplay in English and their scores on a vocabulary test. In her study, the majority of students stated that they were gaming in English at least sometimes.

Compared to the number of studies on vocabulary, few studies have examined the relation between computer use and listening and reading comprehension (see De Wilde et al., 2020; Lindgren & Muñoz, 2013 for studies focusing on young learners). Little is known about the relationship between extramural English and adolescents' listening and reading comprehension. The present study aims to fill this research gap by focussing on three distinct groups of participants.

#### **2.1.4. Music**

A final extramural English activity is listening to music. Several studies have revealed that EFL learners are frequently exposed to English songs (Bollansée et al., 2021; De Wilde et al., 2020; Peters, 2018). However, it is not yet clear whether listening to English music can predict learners' language proficiency, since studies have yielded contradictory findings. De Wilde et al. (2020) found a negative relationship between listening to music and the receptive vocabulary, as well as the reading comprehension and writing of Dutch-speaking children aged 10 to 12 who had not received English lessons yet. Other studies have found a positive relationship between listening to English songs and language proficiency. A study by Lindgren and Muñoz (2013) with young learners in their fourth year of foreign language instruction revealed a positive correlation between listening to songs with English lyrics and reading and listening comprehension. With regard to secondary school learners and university students, Peters (2018) only found a negligible negative relationship between listening to English music and vocabulary knowledge. Therefore, it appears that the effect of English songs may be dependent on age, years of formal instruction, and type of language proficiency.

### **2.2. Motivation and anxiety**

Motivation towards L2 learning concerns an individual's personal reasons, effort, and willingness to learn a foreign language (Dörnyei & Ushioda, 2011) and is

considered to be one of the most decisive factors influencing L2 proficiency (Gardner, 2006; Dörnyei, 2005). One of the dominant theoretical frameworks that emerged in the study of L2 acquisition is Dörnyei's (2005) L2 Motivational Self System. This model consists of three key components: the Ideal L2 Self, the Ought-to L2 Self, and the L2 Learning Experience. The Ideal L2 Self refers to the L2-specific dimension of the language learner's ideal self and comprises internal desires or wishes. The second component, the Ought-to L2 Self, consists of the learner's more extrinsic motives for learning an L2, for instance, meeting societal expectations and avoiding possible negative outcomes. The third component of the L2 Motivational Self System, L2 Learning Experience, is concerned with the L2 learner's learning environment and past and current experiences, such as interaction with the teacher, the peer group, the experiences of successes or failures, and the curriculum.

Few studies have looked at the relationship between motivation and extramural English. Leona et al. (2021) examined whether various motivational factors mediated the relationship between extramural English activities and the English vocabulary knowledge of Dutch primary school children with and without formal English instruction. Path analyses showed that for children learning English at school, the relationship between extramural English, through entertaining media and family members, and English vocabulary knowledge was mediated by the motivational factor of linguistic self-confidence. In her Ph.D. dissertation, Arndt (2019) studied the interaction between motivation and attitudes towards language learning, engagement in informal L2 practices, and general language proficiency of German secondary school students by means of qualitative and quantitative analyses. Her findings suggest that the language learners' Ideal L2 selves, their reasons for wanting to learn English, and their attitudes towards informal and formal language learning significantly predicted engagement in informal L2 practices. Furthermore, a reciprocal relationship was found between engagement in informal L2 practices and motivation. In an Indonesian university context, Lee and Drajeti (2019) examined the relation between digital learning of English activities, L2 willingness to communicate and multiple affective variables (motivation, self-confidence, L2 speaking anxiety and grit). Their study found significant correlations between L2 willingness to communicate, and informal digital learning of English activities and affective variables. However, the only significant predictors of students' L2 willingness to communicate were found to be grit, self-confidence, motivation, and productive informal digital learning activities (e.g., chatting with others in English via social media). Lee and Lee (2020) studied whether the Ideal L2 Self, the Ought-to L2 Self and digital extramural English activities were related to the foreign language enjoyment of South Korean middle school, high school and university students. The Ideal L2 Self and digital language learning activities were found to be predictive of all groups' foreign language enjoyment.

Language anxiety, which according to Bernaus and Gardner (2008) can be divided into situation specific L2 use anxiety and L2 class anxiety, is believed to have a direct negative effect on L2 acquisition. Foreign language classroom anxiety can be defined as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p. 128)

To date, only a few studies have investigated the relationship between language anxiety and extramural English exposure. An exception is Leona et al. (2021), who found a positive correlation between using English in communication with friends and willingness to communicate with peers for pupils without formal English instruction. Furthermore, for pupils learning English formally, positive relationships were found between formal reading, familial extramural English exposure, and the use of English in interaction with friends, on the one hand, and willingness to communicate with peers on the other. Another exception is the aforementioned study of Lee and Drajeti (2019).

### 3. The present study

Whereas the majority of previous studies have focused on EFL learners' vocabulary knowledge, to date, few studies have investigated the relation between extramural English and learners' listening and reading comprehension. Additionally, little research has been conducted on the relationship between extramural English and learners' motivation and anxiety. In spite of the increasing number of studies on extramural English, only a limited number of studies have focused on language learners in technical secondary education. Furthermore, studies with a cross-sectional design are scarce. To fill these research gaps, the present cross-sectional study includes an underrepresented group of EFL learners, that is, EFL learners from the technical strand of grade 10 (secondary education), in addition to grade 6 pupils without formal English instruction and grade 8 EFL learners who had just started formal English instruction.

The research questions addressed in this study are:

1. To what extent do learners in different grades differ in their engagement with extramural English?
2. What is the relationship between extramural English and EFL learners' listening and reading comprehension?
3. To what extent are motivation and language anxiety related to EFL learners' extramural English exposure?



## 4. Methods

### 4.1. Participants

We used convenience sampling to recruit a total of 108 participants: 36 pupils in grade 6 (age 11-12), 33 pupils in grade 8 (age 13-14), and 39 pupils in grade 10 (age 15-16). Each group of EFL learners was recruited from a different school in Flanders, Belgium. Grade 8 learners attended A-stream secondary education, a preparatory programme for general and technical secondary education. Grade 10 participants attended the technical strand of secondary education.

Participants in grade 6 had not received English classes, as English is not part of primary schools' curricula in Flanders. Participants in grade 8 had received approximately two hours of English classes per week over a period of five months, and participants in grade 10 had received approximately two hours of English classes per week for two years and five months. Table 1 gives an overview of the characteristics of the three groups of participants.

Among the 108 participants, 90 indicated that they mainly spoke Dutch at home, 10 reported speaking Dutch and one or more other languages at home. Finally, eight participants indicated that they did not usually speak Dutch with their parents or siblings. They spoke Portuguese, Polish or Spanish at home instead.

**Table 1:** Summary of characteristics of the three groups of participants

Education level	N	Male-female	Age
Grade 6	36	18 - 18	11-12
Grade 8	39	16 - 23	13-14
Grade 10	33	28 - 5	15-16

### 4.2. Test instruments

#### 4.2.1. Listening test

Listening proficiency was tested by means of an extract of the European Survey on Language Competences (European Commission, 2012a) at the levels A1, A2, B1, and B2 of the Common European Framework of Reference for Languages (CEFR). Since we did not want to fatigue the young grade 6 pupils, we removed the level B2

task from their listening test. For the tasks at level A1 and A2, the participants were asked to listen to short conversations and to answer 4 and 5 questions respectively by selecting the correct pictures.

For the tasks at levels B1 and B2, the participants were required to listen to an interview with a singer-songwriter and a presentation of a former scout leader and answer six multiple-choice questions about each of them. Each question was accompanied by three answers. We did not provide “I don’t know”-options. While the instructions and questions were provided in both English and Dutch, the answers were only made available in English.

#### **4.2.2. Reading test**

Similar to the listening test, the reading test was taken from the European Survey on Language Competences (European Commission, 2012a) and consisted of four tasks at CEFR levels A1, A2, B1, and B2. Again, task level B2 was removed from the reading test for grade 6 pupils. Each of the reading tasks was presented in the same format: a text box was placed at the top of the page with underneath four to six multiple-choice questions. Each question was accompanied by three answers to choose from. The multiple-choice questions and instructions were made available in both English and Dutch, while the text box and the three possible answers were only offered in English.

#### **4.2.3. Questionnaire**

A questionnaire was administered to assess the participants’ current extramural English. The questionnaire was developed in Dutch and consisted of two parts. The first part comprised nine Likert-scale items, one *yes/no* item, and five open-ended questions. The following types of EE activities were addressed: TV and movies (with or without subtitles), video games, music, streaming videos (YouTube), written or spoken communication with family or friends, written texts (books, cartoons, newspapers). With regard to the Likert-scale items, the response categories were the following: never, sometimes, often, always.

One part of the questionnaire focused on the participants’ behaviour when encountering a word whose meaning they did not understand. However, we do not report on this part of the questionnaire, as it is beyond the scope of this study.

The participants in grades 8 and 10 were asked to answer six questions regarding motivation and language anxiety. Grade 6 participants did not have to answer these questions, as some questions focused on classroom instruction. Participants were asked to what degree they agreed with these statements on a four-point scale. Two questions

were related to learners' Ideal L2 Self, two questions to learners' Ought-to L2 Self (Dörnyei, 2005), and two questions to learners' foreign language anxiety while speaking.

#### **4.2.4 Procedure**

The data collection took place in three schools in the Flemish community of Belgium in January 2021. Because the study involved children and underage adolescents, the ethical guidelines developed by the university were strictly adhered to. The participation in the data collection was completely voluntary, and the requirements of the General Data Protection Regulation (GDPR) were met. Before collecting data, participants were informed about the scope of the study and were asked to complete written consent forms. Respondents were instructed to also ask their parents' consent before participating in the study by means of a second consent form.

First, the participants were given approximately 10 minutes to fill in the questionnaire. Due to time constraints, grade 6 participants were instructed to fill in the extramural English questionnaire at home. Second, the listening test was administered and completed within approximately 20 minutes. The participants were allowed to listen to each recording twice while completing the test. Third, they were given 20 minutes to complete the reading test autonomously. To reduce the influence of random guessing on the test results, we instructed the participants to leave blank any questions they could not answer. The tests did not include "I don't know"-options. All participants were able to complete the data collection within the allotted time frame of 50 minutes.

#### **4.3. Data analysis**

The listening and reading comprehension test were scored dichotomously: correct responses received a score of 1, incorrect responses received a score of 0. Missing responses were also coded as 0. A score of at least 80% of the maximum score on a task would be considered full mastery of English at the corresponding CEFR level (European Commission, 2012b).

To determine differences, i.e., whether the three grades differ in their extramural English, Kruskal-Wallis tests were run. To explore the relationship between learners' extramural English and their listening and reading proficiency, on the one hand, and their motivation/anxiety on the other, Spearman's rank correlations were computed. We used Bonferroni correction to control for multiple comparisons. In other words, the p-level of 0.05 was adapted to 0.006 (0.05/9). Multiple regression analyses were used to determine the variables that predicted learners' listening and reading comprehension.

## 5. Analyses

### 5.1. Participants' engagement with extramural English

The results of the extramural English questionnaire showed that Flemish primary and secondary school learners are regularly exposed to English outside the classroom (see Table 2). Listening to English-language music was the most popular extramural English activity for the three groups of participants. The second most popular activity was watching YouTube videos. With regard to watching English TV, a distinction was made between viewing TV programs or movies without subtitles, with Dutch subtitles, with English subtitles, and with subtitles in another language. Watching TV with Dutch subtitles was the most popular one. More than half of the participants of each group indicated that they watched English TV with Dutch subtitles “often or always”. A high percentage of participants reported that they, at least “sometimes”, spoke or wrote in English with family members or friends. Finally, among all groups, extramural reading was less popular: around half of the pupils in each group reported to “never” read English texts. In spite of some differences in frequency of the different extramural English activities, there were no significant differences between the three grades.

**Table 2:** Contingency tables extramural English

Frequency of watching English language TV without subtitles					
	n	Never	Sometimes	Often	Always
Grade 6	36	41.7%	30.6%	13.9%	13.9%
Grade 8	39	23.1%	23.1%	38.5%	15.4%
Grade 10	33	24.2%	24.2%	36.4%	15.2%
Frequency of watching English language TV with Dutch subtitles					
	n	Never	Sometimes	Often	Always
Grade 6	36	17.9%	28.2%	33.3%	20.5%
Grade 8	39	17.9%	28.2%	33.3%	20.5%
Grade 10	33	18.2%	18.2%	27.3%	36.4%
Frequency of watching English language TV with English subtitles					
	n	Never	Sometimes	Often	Always
Grade 6	36	61.1%	19.4%	19.4%	0.0%
Grade 8	39	41.0%	28.2%	20.5%	10.3%
Grade 10	33	42.4%	33.3%	21.2%	3.0%

Frequency of watching English language TV with English subtitles					
	n	Never	Sometimes	Often	Always
Grade 6	36	83.3%	13.9%	0.0%	2.8%
Grade 8	39	82.1%	10.3%	5.1%	2.6%
Grade 10	33	81.8%	15.2%	3.0%	0.0%

Frequency of playing video games in English					
	n	Never	Sometimes	Often	Always
Grade 6	36	8.3%	11.1%	41.7%	38.9%
Grade 8	39	12.8%	20.5%	33.3%	33.3%
Grade 10	33	12.1%	21.2%	36.4%	30.3%

Frequency of listening to English language music					
	n	Never	Sometimes	Often	Always
Grade 6	36	0.0%	5.6%	66.7%	27.8%
Grade 8	39	0.0%	12.8%	25.6%	61.5%
Grade 10	33	0.0%	9.1%	51.5%	39.4%

Frequency of watching streaming videos in English					
	n	Never	Sometimes	Often	Always
Grade 6	36	11.1%	27.8%	36.1%	25.0%
Grade 8	39	5.1%	20.5%	35.9%	38.5%
Grade 10	33	3.0%	27.3%	33.3%	36.4%

Frequency of reading English texts (newspapers, books, online texts, ...)					
	n	Never	Sometimes	Often	Always
Grade 6	36	55.6%	27.8%	11.1%	5.6%
Grade 8	39	43.6%	43.6%	12.8%	0.0%
Grade 10	33	54.5%	33.3%	12.1%	0.0%

## 5.2. Listening and reading comprehension test

The group of grade 10 participants achieved the highest average score on all test levels (A1, A2, B1, and B2), followed by grade 8 participants. Participants obtained higher scores for listening compared to reading. Table 3 and Table 4 give an overview

of the distribution of the participants' highest CEFR attained for listening and reading comprehension respectively, based on the 80% target, as well as the total mean score on the tasks at CEFR levels A1, A2 and B1.

**Table 3:** Distribution of participants' CEFR level and mean score for listening comprehension

	Pre-A1	A1	A2	B1	B2	Mean score (%) A1-B1
Grade 6 (n=36)	0	8	21	7		72.59%
Grade 8 (n=39)	2	5	19	12	1	77.95%
Grade 10 (n=33)	0	3	9	11	10	87.47%
Total (n=108)	2	16	49	30	11	79.07%

**Table 4:** Distribution of participants' CEFR level and mean score for reading comprehension

	Pre-A1	A1	A2	B1	B2	Mean score (%) A1-B1
Grade 6 (n=36)	2	20	7	7		53.97%
Grade 8 (n=39)	4	23	5	5	2	57.88%
Grade 10 (n=33)	1	12	4	9	7	72.94%
Total (n=108)	7	55	16	21	9	61.18%

### ***5.2. Relationship between out-of-class exposure and learners' listening and reading proficiency***

Four extramural English activities correlated with learners' listening comprehension (see All participants in Table 5). The strongest correlation was found for watching TV without subtitles, followed by communicating with family or friends, watching YouTube videos and reading. A multiple regression analysis in SPSS (version 28) was run to determine the predictors of listening. The analysis showed that watching TV without subtitles ( $\beta = 0.33, p < 0.001$ ) and communicating with friends or families ( $\beta = 0.22, p = 0.03$ ) significantly predicted learners' listening comprehension ( $R^2 = 0.23, F(2,105) = 15.42, p < 0.001$ ).

**Table 5:** Summary of correlations (Spearman's rank) between types of extramural English and listening comprehension

	Listening			
	$r_s$ ( $p$ )			
	All participants	Grade 6 (n = 36)	Grade 8 (n = 39)	Grade 10 (n = 33)
TV no subtitles	.44* (<.0001)	.50* (.002)	.43* (.006)	.32 (.07)
TV Dutch subtitles	-.21 (.01)	-.13 (.46)	-.24 (.14)	-.42 (.01)
TV English subtitles	.20 (.02)	.26 (.13)	.17 (.31)	.30 (.09)
TV subtitles in other language	-.04 (.36)	.13 (.46)	-.09 (.57)	-.16 (.38)
Video games	.17 (.047)	.36 (.03)	-.10 (.57)	.37 (.03)
Music	.17 (.04)	.13 (.44)	.20 (.22)	.25 (.16)
Streaming videos (YouTube)	.33* (<.0001)	.44 (.007)	.15 (.36)	.23 (.21)
Communicating with family or friends	.38* (<.0001)	.31 (.07)	.49* (.002)	.26 (.14)
Reading (books, cartoons, newspapers, internet, ...)	.31* (.001)	.45* (.006)	.29 (.07)	.27 (.13)

\*Correlation is significant at the 0.006 level (2-tailed) (with Bonferroni correction for multiple comparisons).

As can be seen in Table 6, there were two (small to moderate) positive correlations: between reading comprehension and watching TV without subtitles and between reading comprehension and communicating with friends or family. The regression analysis showed that watching TV without subtitles ( $\beta = 0.32$ ,  $p = 0.002$ ) was the only predictor of reading comprehension ( $R^2 = 0.16$ ,  $F(1, 106) = \dots$ ,  $p < 0.001$ ).

**Table 6:** Summary of correlations (Spearman's rank) between types of extramural English and reading comprehension

	Reading			
	$r_s$ ( $p$ )			
	All participants	Grade 6 (n = 36)	Grade 8 (n = 39)	Grade 10 (n = 33)
TV no subtitles	.39* (<.0001)	.47* (.004)	.10 (.53)	.54* (.001)
TV Dutch subtitles	-.19 (.03)	-.22 (.19)	-.02 (.92)	-.34 (.05)
TV English subtitles	.22 (.01)	.09 (.59)	.31 (.06)	.24 (.17)

TV subtitles in other language	-.05 (.29)	.10 (.56)	.02 (.91)	-.09 (.61)
Video games	.23 (.008)	.43* (.008)	-.05 (.77)	.41 (.02)
Music	.04 (.35)	-.13 (.46)	.11 (.49)	.09 (.63)
Streaming videos (YouTube)	.24 (.007)	.26 (.13)	.13 (.44)	.21 (.25)
Communicating with family or friends	.26** (.003)	.10 (.57)	.31 (.06)	.41 (.02)
Reading (books, cartoons, newspapers, internet, ...)	.21 (.016)	.24 (.17)	.24 (.14)	.30 (.10)

\*Correlation is significant at the 0.006 level (2-tailed) (with Bonferroni correction for multiple comparisons).

#### ***5.4. Relationship between extramural English and motivation and anxiety***

The results revealed that all participants believe that they will need English in the future. However, grade 8 participants agreed more with this statement than grade 10 pupils. The results regarding their future L2 self were more varied: about one in ten participants could not imagine themselves speaking English fluently in the future.

Furthermore, the majority of the participants indicated that they did not feel anxious when speaking English in class, while about one third of both the grade 8 and grade 10 learners agreed with the statement regarding in-class anxiety.

Fewer learners indicated that they felt anxiety when speaking English outside the classroom: 13% of the grade 8 and 24% of the grade 10 participants agreed with the statement concerning out-of-class anxiety.

Because the third research question is exploratory in nature, only correlation analyses are reported (see Table 7). With regard to the components of Dörnyei's (2005) L2 Motivational Self System, some significant positive relationships were found. For instance, exposure to English language TV and movies without subtitles and reading related positively to two of the four factors included in the questionnaire. Furthermore, positive correlations were found regarding speaking English with family and friends, and three of the four motivation factors, while listening to music was only related to the Ideal L2 Self Future Need.

We also found multiple significant correlations concerning in-class and out-of-class anxiety. Watching TV without subtitles and with English subtitles, watching streaming videos (YouTube), speaking English with family or friends and reading English texts, all of these extramural activities correlated negatively with the participants' anxiety levels. This means that learners who engaged more frequently with English outside of school tended to have lower anxiety levels.



**Table 7:** Summary of correlations (Spearman's rank) between extramural English and factors regarding motivation and anxiety (n = 72)

	Ideal L2 Self Future Need	Ideal L2 Self Future Image	Ought-to L2 Self Parents	Ought-to L2 Self Friends	Anxiety classroom	Anxiety use
	<i>r<sub>s</sub></i> ( <i>p</i> )	<i>r<sub>s</sub></i> ( <i>p</i> )	<i>r<sub>s</sub></i> ( <i>p</i> )	<i>r<sub>s</sub></i> ( <i>p</i> )	<i>r<sub>s</sub></i> ( <i>p</i> )	<i>r<sub>s</sub></i> ( <i>p</i> )
TV no subtitles	.29 (.01)	.46** (<.001)	-.03 (.82)	.39** (<.001)	-.39** (<.001)	-.42** (<.001)
TV Dutch subtitles	-.17 (.16)	-.26 (.03)	.21 (.07)	-.15 (.21)	.26 (.03)	.32 (.01)
TV English subtitles	.22 (.06)	.24 (.04)	-.05 (.70)	.06 (.64)	-.16 (.18)	-.36** (.002)
TV subtitles in other language	.08 (.52)	-.12 (.30)	-.07 (.55)	.15 (.21)	.08 (.53)	-.06 (.61)
Video games	.12 (.32)	.22 (.07)	-.03 (.82)	.15 (.20)	-.20 (.09)	-.30 (.01)
Music	.38* (<.001)	.31 (.009)	.12 (.31)	.39* (<.001)	-.12 (.33)	-.26 (.03)
Streaming videos (YouTube)	.21 (.08)	.32 (.01)	.03 (.82)	.19 (.11)	-.27 (.02)	-.45* (<.001)
Communicating with family or friends	.38* (.001)	.45* (<.001)	.15 (.21)	.39* (<.001)	-.42* (<.001)	-.56* (<.001)
Reading (books, cartoons, newspapers, internet, ...)	.20 (.09)	.34* (.004)	.06 (.61)	.28 (.02)	-.40* (<.001)	-.40* (<.001)

\*Correlation is significant at the 0.006 level (2-tailed) (with Bonferroni correction for multiple comparisons).

## 6. Results

### 6.1. Summary of findings

The results of this study showed that the three groups of participants were regularly exposed to English in their spare time. We also found that they did not differ in their engagement with extramural English. The findings suggest that Flemish learners are mainly exposed to spoken English input: songs, streaming videos, video games, movies and TV, and communicating with family or friends. Reading English texts appeared to be the least popular extramural English activity among the three

groups of participants. Our findings are in agreement with previous research that has shown that EFL learners are frequently exposed to songs, video games and audiovisual input, but rarely engage in reading English texts (e.g., Bollansée et al., 2021; De Wilde et al., 2020; Lindgren & Muñoz, 2013; Puimège & Peters, 2019; Sundqvist, 2019)

This study suggests that a great number of primary school pupils had already achieved level A2, and some even level B1, for listening prior to formal English instruction. These findings are in line with those of De Wilde et al. (2020), who reported that a quarter of the grade 6 participants in their study could already perform listening tasks at the A2-level before the start of formal English instruction. Additionally, grade 8 learners, who attended a technical school, had already achieved a high level of listening proficiency at the start of formal English instruction. Finally, grade 10 participants had the highest scores and most obtained a B1 or B2 level, even though they had only received approximately two hours of English classes per week for two years and five months. This finding is also in line with Peters et al.'s (2020) results, which showed a ceiling effect (90%) for listening at B1 level in grade 10.

Compared to the listening comprehension scores, the reading comprehension scores were lower. This holds true for all three grades. Nevertheless, 20 learners in grade 6 obtained an A2 and seven learners even attained a B1 level without ever having had an English lesson. This finding is consistent with that of De Wilde et al. (2020), who reported that 10% of the participants obtained an A2-level for reading and writing, even though the results in the present study point to a slightly higher level.

## ***6.2. Relationship between out-of-class exposure and learners' listening and reading proficiency***

The present study shows that there were positive correlations between several types of extramural English activities and learners' listening or reading comprehension.

We found that watching TV without subtitles, communicating with friends and family, watching YouTube clips, and reading correlated positively with participants' listening comprehension. Our findings extend those of Peters (2018), who focused on learners' vocabulary knowledge in the academic strand of secondary education. The regression analysis showed that two activities were significant predictors of listening comprehension: watching TV and communicating. These findings provide further support for the positive effect of watching English TV on learners' L2 proficiency (Bollansée et al., 2021; Kuppens, 2010; Lindgren & Muñoz, 2013; Puimège & Peters, 2019). Furthermore, in line with Bollansée et al. (2021), the findings suggest that non-subtitled TV may be more beneficial than L1-subtitled TV. As has been shown in previous research (De Wilde et al., 2020), using English outside of school is an important predictor of learners' language proficiency.

We also found positive correlations between reading comprehension and watching TV without subtitles on the one hand, and between reading comprehension and communicating with friends or family, on the other. However, the correlations were less strong compared to the listening comprehension. A possible explanation for this might be that these extramural English activities involve very little textual input. The findings are in line with those of De Wilde et al. (2020), who tested reading and writing in an integrated fill-in-the-gap test. Watching TV without subtitles was the only significant predictor of reading comprehension. Our results confirm those of Lindgren and Muñoz (2013), who focused on younger language learners and found that TV was the most important predictor of the extramural activities they investigated.

### **6.3. Relationship between extramural English and motivation and anxiety**

Spearman's rank analyses indicated that there were multiple relationships between extramural English activities and factors regarding motivation and anxiety, even though caution is warranted given the limited number of questions about motivation and anxiety. For instance, watching English TV without subtitles, listening to English music, using English with family or friends, and reading English texts were all positively associated with at least one aspect related to the Ideal L2 Self. In other words, participants who often engaged in these extramural activities were more likely to believe that they would speak English fluently in the future or that they would need English in the future.

Our results corroborate the findings of Leona et al. (2021), who found a positive relationship between exposure to entertaining media and the motivational factor Linguistic Self-Confidence for a group of primary school pupils with formal English instruction. Furthermore, using English in communication with family was positively related to Linguistic Self-Confidence for this English-at-school group. The findings of this study are also in accordance with those of Arndt (2019), who found a reciprocal relationship between L2 learners' motivation and their engagement in informal L2 practices.

With regard to Ought-to L2 Self, the aspect "parental attitude" towards English did not correlate with any of the extramural English activities. The factor perceived attitudes of friends towards English, in contrast, was positively related to watching English TV without subtitles, listening to English music, and using English in interaction with family or friends.

Finally, the results showed negative relationships between EFL learners' out-of-class anxiety and five extramural activities included in the analyses. Learners who engaged more frequently in watching TV without subtitles or with English subtitles, watching YouTube videos, communicating with family or friends, or reading English-language books showed lower anxiety levels. Our findings concerning language anxiety

are in agreement with those of Leona et al. (2021). In their study, a positive relationship was found between using English to interact with friends and the factor Willingness to Communicate with Peers for primary school pupils with and without formal English instructions. Willingness to Communicate with Peers may partially overlap with the factor out-of-class anxiety included in the analyses of the present study.

## 7. Conclusion

The purpose of this study was to explore learners' extramural English and whether extramural English was related to the listening and reading proficiency of Flemish primary and secondary school learners. One-hundred and eight participants from three different grades were administered a questionnaire and a listening and reading comprehension test.

The results indicated that a great number of the primary school learners could already perform listening tasks at the A2 level of the CEFR prior to formal English instruction. The results of the questionnaire revealed that the three groups were frequently exposed to English-language media. The most popular extramural English activity was listening to English music. Watching TV without subtitles outside of school predicted both learners' listening and reading comprehension scores. Listening comprehension was also affected by the frequency with which learners communicated in English outside of school. In general, the in-class speaking anxiety of secondary school pupils appeared to be higher than their out-of-class anxiety. Finally, multiple relationships were found between extramural English and factors concerning motivation. We also found lower anxiety levels among learners who engaged more frequently with English outside of school.

However, this study inevitably has a few limitations. First, the extramural English questionnaire focused on a limited number of extramural English activities. With regard to written input, no distinction was made between reading English books, newspapers, magazines, or websites. Although suggested by Kuppens (2010), the questionnaire did not differentiate between different types of video game environment. Future studies could treat these types of input as separate variables to explore the relationship between extramural English and L2 proficiency more extensively.

Second, the motivation and language anxiety questions aimed at assessing L2 Motivational Self System and L2 speaking anxiety, but they were limited in scope, as the questionnaire included only six items. The current findings are, thus, exploratory in nature. A more elaborate and standardized questionnaire, such as the Motivation and Attitudes Questionnaire by Arndt (2019), the English Learner Questionnaire (ELQ; Dörnyei & Taguchi, 2010), or the Attitude/Motivation Test Battery (AMTB;

Gardner, 2004), can be adopted in future research to study the effects of motivation and anxiety on L2 acquisition in depth.

Finally, although this study yielded some results regarding the listening and reading proficiency of three age groups prior to and with formal English instruction, future research could adopt a longitudinal approach to obtain a more comprehensive picture of the potential long-term effects of extramural English, motivation, and anxiety on L2 proficiency.

The findings of this study have implications for SLA and pedagogy. For instance, since the present study found a positive relationship between watching TV without subtitles outside of school and listening and reading comprehension, it is recommended that L2 teachers integrate this activity in in-class or out-of-class assignments. Furthermore, based on the findings of this study, L2 teachers should acknowledge the importance of motivational factors and language anxiety in language acquisition and could ask their pupils to reflect on their Ideal L2 Self Image, as well as potential factors causing language anxiety. L2 teachers may also try to create a positive learning environment in order to decrease their pupils' speaking anxiety.

## 8. References

Andringa, S., & Godfroid, A. (2020). Sampling bias and the problem of generalizability in Applied Linguistics. *Annual Review of Applied Linguistics*, 40, 134–142. <https://doi.org/10.1017/s0267190520000033>

Arndt, H. L. (2019). *Informal second language learning: The role of engagement, proficiency, attitudes and motivation*. [Doctoral dissertation, Department of Education, St. Hilda's College, University of Oxford].

Bernaus, M., & Gardner, R. C. (2008). Teacher motivation strategies, student perceptions, student motivation, and English achievement. *The Modern Language Journal*, 92(3), 387–401. <https://doi.org/10.1111/j.1540-4781.2008.00753.x>

Bollansée, L., Puimège, E., & Peters, E. “Watch out! Behind you is the enemy!” An exploratory study into the relationship between extramural English and productive vocabulary knowledge. In V. Werner & F. Tegge (Eds.), *Pop Culture in Language Education: Theory, Research, Practice* (pp. 199–214). London: Routledge. <https://doi.org/10.4324/9780367808334>

Busby, N. L. (2020). Words from where? *ITL - International Journal of Applied Linguistics*, 172(1), 58–84. <https://doi.org/10.1075/itl.19018.bus>

De Wilde, V., Brysbaert, M., & Eyckmans, J. (2020). Learning English through out-of-school exposure. Which levels of language proficiency are attained and which types

of input are important? *Bilingualism: Language and Cognition*, 23(1), 171-185. <https://doi.org/10.1017/S1366728918001062>

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. New York, NY: Routledge. <https://doi.org/10.4324/9781410613349>

Dörnyei, Z., & Taguchi, T. (2009). *Questionnaires in second language research: Construction, administration, and processing* (Second Language Acquisition Research Series) (2nd ed.). New York, NY: Routledge. <https://doi.org/10.4324/9780203864739>

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). London: Routledge. <https://doi.org/10.4324/9781315833750>

European Commission. (2012a). *First European survey on language competences: Final report*. Publications Office of the European Union. <https://doi.org/10.2766/34160>

European Commission. (2012b). *First European survey on language competences: Technical report*. Publications Office of the European Union. [https://ec.europa.eu/assets/eac/languages/policy/strategic-framework/documents/language-survey-technical-report\\_en.pdf](https://ec.europa.eu/assets/eac/languages/policy/strategic-framework/documents/language-survey-technical-report_en.pdf)

Gardner, R. C. (2004). *Attitudes/Motivation Test Battery: International AMTB research project*. Canada: The University of Western Ontario. <https://publish.uwo.ca/~gardner/docs/englishamtb.pdf>

Gardner, R. C. (2006). The socio-educational model of Second Language Acquisition: A research paradigm. *EUROSLA Yearbook*, 6(1), 237-260. <https://doi.org/10.1075/eurosla.6.14gar>

González Fernández, B., & Schmitt, N. (2015). How much collocation knowledge do L2 learners have? *ITL - International Journal of Applied Linguistics*, 166(1), 94-126. <https://doi.org/10.1075/itl.166.1.03fer>

Hannibal Jensen, S. (2017). Gaming as an English language learning resource among young children in Denmark. *CALICO Journal*, 34(1), 1-19. <https://doi.org/10.1558/cj.29519>

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>

Kuppens, A. H. (2010). Incidental foreign language acquisition from media exposure. *Learning, Media and Technology*, 35(1), 65-85. <https://doi.org/10.1080/17439880903561876>

Lee, J. S., & Drajeti, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(5), 168-182. <https://doi.org/10.14742/ajet.5177>

Lee, J. S., & Lee, K. (2020). The role of informal digital learning of English and

L2 motivational self system in foreign language enjoyment. *British Journal of Educational Technology*, 52(1), 358–373. <https://doi.org/10.1111/bjet.12955>

Leona, N. L., van Koert, M. J. H., van der Molen, M. W., Rispens, J. E., Tijms, J., & Snellings, P. (2021). Explaining individual differences in young English language learners' vocabulary knowledge: The role of Extramural English Exposure and motivation. *System*, 96, 1–13. <https://doi.org/10.1016/j.system.2020.102402>

Lindgren, E., & Muñoz, C. (2013). The influence of exposure, parents, and linguistic distance on young European learners' foreign language comprehension. *International Journal of Multilingualism*, 10(1), 105–129. <https://doi.org/10.1080/14790718.2012.679275>

Muñoz, C., & Cadierno, T. (2021). How do differences in exposure affect English language learning? A comparison of teenagers in two learning environments. *Studies in Second Language Learning and Teaching*, 11(2), 185–212. <https://doi.org/10.14746/ssl.t.2021.11.2.2>

Peters, E. (2018). The effect of out-of-class exposure to English language media on learners' vocabulary knowledge. *ITL-International Journal of Applied Linguistics*, 169(1), 142–168. <https://doi.org/10.1075/itl.00010.pet>

Peters, E., Noreillie, A-S., Heylen, K., Bulté, B., & Desmet, P. (2019). The impact of instruction and out-of-school exposure to foreign language input on learners' vocabulary knowledge in two languages. *Language Learning*, 69(3), 747–782. <https://doi.org/10.1111/lang.12351>

Peters, E., Noreillie, A-S., Puimège, E. (2020). Frans eerste vreemde taal en Engels tweede vreemde taal? Of toch niet? Een blik op de Engelse en Franse taalvaardigheid van jongeren in Vlaanderen. In W. Coudenys (Ed.), *Taal en de wereld* (pp.53-70). Leuven: Leuven University Press.

Puimège, E., & Peters, E. (2019). Learners' English vocabulary knowledge prior to formal instruction: The role of learner-related and word-related variables. *Language Learning*, 69(4), 943–977. <https://doi.org/10.1111/lang.12364>

Schmitt, N. & Redwood, S. (2011). Learner knowledge of phrasal verbs. A corpus-informed study. In F. Meunier, S. De Cock, G. Gilquin, & M. Paquot (Eds.), *A taste for corpora: In honour of Sylviane Granger* (pp. 173–209). Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/scl.45.12sch>

Sundqvist, P. (2009). *Extramural English matters. Out-of-school English and its impact on Swedish ninth graders' oral proficiency and vocabulary*. [Doctoral dissertation, Faculty of Arts, Karlstad University].

Sundqvist, P. (2019). Commercial-off-the-shelf games in the digital wild and L2 learner vocabulary. *Language Learning & Technology*, 23(1), 87–113. <https://doi.org/10.125/44674>

Sundqvist, P., & Sylvén, L. K. (2016). *Extramural English in Teaching and Learning*. London: Palgrave Macmillan. <https://doi.org/10.1057/978-1-137-46048-6>

Sundqvist, P., & Wikström, P. (2015). Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. *System*, 51, 65–76. <https://doi.org/10.1016/j.system.2015.04.001>

Sylvén, L. K., & Sundqvist, P. (2012). Gaming as extramural English L2 learning and L2 proficiency among young learners. *ReCALL*, 24(3), 302–321. <https://doi.org/10.1017/s095834401200016x>

Warnby, M. (2022). Receptive academic vocabulary knowledge and extramural English involvement - is there a correlation? *ITL - International Journal of Applied Linguistics*, 173(1), 120–152. <https://doi.org/10.1075/itl.21021.war>

Webb, S. (2015). Extensive viewing: language learning through watching television. In D. Nunan & J. C. Richards (Eds.), *Language learning beyond the classroom* (pp. 159–168). New York, NY: Routledge.



Appendix 1: Contingency tables Motivation and Anxiety

**“I will need English in my future.” (Ideal L2 Self)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	36	0.0%	0.0%	48.7%	51.3%
Grade 10	39	0.0%	0.0%	63.6%	36.4%

**“When I look at my future, I imagine myself speaking English fluently.” (Ideal L2 Self)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	36	2.6%	12.8%	53.8%	30.8%
Grade 10	39	0.0%	9.1%	48.5%	42.4%

**“My parents think English is an important language.” (Ought-to L2 Self)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	36	2.6%	23.1%	59.0%	15.4%
Grade 10	39	3.0%	18.2%	48.5%	30.3%

**“My friends think English is an important language.” (Ought-to L2 Self)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	36	0.0%	23.1%	59.0%	17.9%
Grade 10	39	3.0%	30.3%	54.5%	12.1%

**“I find it scary to speak English during class.” (L2 speaking anxiety)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	36	25.6%	46.2%	23.1%	5.1%
Grade 10	39	15.2%	51.5%	27.3%	6.1%

**“I find it scary to speak English outside the classroom.” (L2 speaking anxiety)**

	n	Strongly disagree	Disagree	Agree	Strongly agree
Grade 8	41.0%	46.2%	7.7%	5.1%	51.3%
Grade 10	33.3%	42.4%	21.2%	3.0%	36.4%

Appendix 2: Questionnaire for secondary school pupils (Translation)

(For primary school pupils, sections [C] and [D] were eliminated).

Name: \_\_\_\_\_

Sex: boy / girl

Date of birth: \_\_\_\_\_

Class: \_\_\_\_\_

At home, I usually speak \_\_\_\_\_ (Dutch, French, English, Turkish, Italian, ...)

Answer the questions as honestly as possible!

[A] How often...

1. How often do you watch English-language television programmes, films, cartoon films, documentaries (on TV, tablet, computer, mobile phone...)?	Never	Sometimes	Often	Always
Without subtitles				
With Dutch subtitles				
With English subtitles				
With other foreign-language subtitles				
Which programmes/films do prefer/do you watch most?				

2. How often do you play video games in English (at computer, tablet, PlayStation, Xbox, mobile phone, ...)?	Never	Sometimes	Often	Always
Without subtitles				
Which video games do you prefer?				

3. How often do you listen to English songs?	Never	Sometimes	Often	Always

4. How often do you watch or listen to English-language YouTube clips/videos?	Never	Sometimes	Often	Always
Which clips/videos do you prefer/do you watch most?				

5. How often do you speak or write in English with family, friends or online (to chat, on social media, on websites...)?	Never	Sometimes	Often	Always

6. How often do you read in English (books, strips, e-books, newspapers, magazines, internet...)?	Never	Sometimes	Often	Always
What do you read most?				

Are there some other ways in which you come in contact with English? (e.g. language holiday, internet (Twitch)...)? Yes / No

If yes, in what way?

**[B] When you encounter an English word that you do not understand, how often do you do the following ...**

	Never	Sometimes	Often	Always
I do nothing if I come across an English word I do not understand				
I try to think of the meaning of the English word myself				
I look up the English word in a dictionary or on the Internet				
I ask someone else to explain the English word				

Is there anything else you do when you hear or see an English word you do not understand? Yes / No

If yes, what do you do?

**[C] Please indicate to what extent you agree or disagree with the following statements.**

	Strongly disagree	Disagree	Agree	Strongly agree
I need English for my future life				
I could imagine myself speaking English fluently in the future.				
I find it scary to speak English during class.				
I find it scary to speak English outside the classroom.				
My parents think English is an important language.				
My friends think English is an important language.				

[D] Please indicate to what extent the teacher encourages contact with English.

	Never	Sometimes	Often	Always
The English teacher gives us reading assignments				
The English teacher gives us assignments that require us to watch an English movie, series or YouTube video.				
The English teacher uses authentic materials during the lesson (e.g. a Youtube video, music, series or movie, game ... in English)				



*Thank you for your participation!*