



Extramural English and English Proficiency in European EFL/ESL Youth

Exploring the Role of Out-of-School Exposure in Language Development.



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Abstract

In today's globalized society, the English language dominates much of the western digital media landscape. Language exposure occurring outside of formal education, or Extramural English (EE), has become a central factor in shaping the proficiency levels of EFL/ESL learners across Europe and the majority of the world. This literature review explores the relationship between EE and English language development among young learners, with a particular focus on vocabulary, writing, and oral skills. This study analyses studies from 10 empirical sources conducted between 2010 and 2025, identifying clear patterns that link early and frequent engagement with EE to improved language proficiency. The studies show that productive activities, such as reading, writing, and speaking tend to yield stronger benefits than passive activities, such as watching subtitled shows or listening to music. The impact of gaming is contested, showing positive, negative or no significant effects depending on the context. Key factors such as age, existing proficiency levels, and cultural impacts play a significant role in influencing outcomes. Overall, the evidence suggests that EE plays a vital and increasingly influential role in the language learning.

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1 Introduction

In an increasingly digital and interconnected world, language learning no longer begins or ends within the classroom. Children and youth around the world are increasingly more immersed in English through digital media, gaming and music, often unknowingly. This exposure to English beyond formal education, commonly referred to as “Extramural English” (EE) or “Out-of-classroom English”, has gained growing interest among both educators and researchers.

During the 21st century, English has become the lingua franca of the digital age due to the growing need for a shared language for global communication. As English continues to become the global lingua franca, it becomes essential to understand how these extramural activities contribute to language development and what implications they have for language education. English foreign language (EFL) proficiency around Europe has seen a substantial rise in the last decades, with most of Europe reaching a high level of language proficiency; according to statistics published by Education First (2024). This raises the question of what differentiates countries with higher proficiency apart from others? A common factor among those of higher EFL standing is how they engage with the language outside of structured learning environments commonly referred to as Extramural English (EE). The aim of this review is to explore current research on the effects of Extramural English (EE) on the English language proficiency of EFL/ESL-students around Europe using 10 peer-reviewed empirical sources conducted in various European countries. This review aims to compare and contrast the findings of selected sources in order to determine the impact of EE on English language proficiency.

The European nations addressed in this review have exhibited similar trends in out-of-classroom English learning. Therefore, the results found in these studies can reasonably be expected to reflect similar trends in other European countries. This review addresses various aspects of English proficiency such as speaking, writing, and vocabulary. The study is divided into two main chapters following the “Introduction”. The second chapter, “Findings”, presents the studies and summarizes their key conclusions, with a focus on the forms of EE investigated in each study. The third chapter, “Discussion and Pedagogical Implications”, discusses the findings in relation to education and explores the insights that can be drawn for teaching and learning. The study concludes with a final chapter, “Conclusions”, which presents the key findings of the review.

1.1 Background

1.1.1 The Role of Out-of-Classroom Learning in the Syllabus

According to the English syllabus for upper secondary school students in Sweden (Skolverket, 2011), “[t]eaching should also help students develop language awareness and knowledge of how a language is learned through and outside teaching contexts” (p. 1). The statement from Skolverket (2011) directly supports the idea of out-of-classroom learning or Extramural English (EE) being an important part of language education. This means that teachers are expected to be aware of and incorporate students’ out-of-school English experiences into their teaching; this highlights the importance of EE in education.

This is further supported by another guideline from the syllabus, which states that “[t]eaching should make use of the surrounding world as a resource for contacts, information and learning [...]” (Skolverket, 2011, p. 1). This highlights the importance of integrating Extramural English knowledge into formal language education, further emphasizing that the integration of EE is both beneficial and consistent with curricular goals. Several European nations, including Sweden, emphasize the importance of out-of-school learning and its integration into formal education, many European countries that make up the European Union (EU) share this perspective as well. The European Council (2018) highlights this in its Council Recommendation on Key Competences for Lifelong Learning, which explicitly states that learning outside the classroom is a legitimate and valuable factor for competence development.

"Key competences are those which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship. They are developed in a lifelong learning perspective, from early childhood throughout adult life, and through formal, non-formal and informal learning in all contexts, including family, school, workplace, neighborhood and other communities" (p. 7)

1.1.2 Theoretical Background

Extramural English (EE) was originally known as Extramural Studies, a term that did not relate to out-of-school language activity. Instead, it referred to courses or lectures that were offered by universities such as Oxford to students in England that were not enrolled as internal students, according to the University of Oxford (N.D). These studies were usually held off-campus in nearby towns, which is why the term extramural, meaning “outside the

wall”, was used. Oxford was not the only institution to employ extramural studies, Freeman’s (2023) book, which was reviewed by Cunningham (2024), highlights that institutions beyond Oxford, such as the University of Cambridge, also implemented extramural studies. This form of education gained popularity during the 19th and early 20th centuries, as it provided learning opportunities to the working class during a time of rapid industrialization brought by the industrial revolution. Society shifted from a primarily agrarian structure to an industrialized one; so the demand for formal education for adults increased, making extramural studies a valuable tool for helping individuals adapt to the new societal situation (Brake, 2024).

Over time, the term Extramural Studies became outdated and, in the modern digital age, became replaced by Extramural English (EE). The term Extramural English was primarily popularized by Pia Sundqvist, who has written numerous studies exploring the relationship between EE and its effects on language learners. She is the author of the book *Extramural English in Teaching and Learning* together with Liss Kerstin Sylven and has also written numerous other empirical studies about the topic. Sundqvist & Sylven (2014) define Extramural English (EE) as “[...] all types of English-related activities that learners come in contact with or are engaged in outside the walls of the English classroom, generally on a voluntary basis” (p. 4). Examples of activities that fall under EE include playing video games, watching TV or streaming movies, using social media and reading books (Rød & Calafato, 2023). The definition does not exclude any activities as long as English is actively being used and it is not connected to formal education. Furthermore, this paper will not make any distinction between similar definitions such as Out-of-School Exposure brought up by Tran & Miralpeix (2024) due to the terms being interchangeable.

Extramural English (EE) has become increasingly important overtime, particularly in relation to the ongoing rapid digital transformation of youth culture. English has become the primary language through which people from different linguistic backgrounds communicate. This is partly due to the Internet becoming an integral part of individuals’ daily lives as a significant portion of online content is written in English. The Internet has become a necessary tool for communicating and sharing ideas worldwide, resulting in youth engaging with English daily. This is particularly evident through the growing influence of, for example, AI-driven tools and platforms such as TikTok and Duolingo, which have fundamentally shaped how young people engage with English language outside of formal education. They make English both easily accessible and essential for full participation on the Internet and, more broadly, the global arena. These factors shape learners’ motivations and language development within formal educational contexts.

In some of the studies used, the β value refers to the standardized regression coefficient, which measures the strength and direction of the relationship between different predictor variables (Tran & Miralpeix, 2024). Specifically, a positive β means that a variable is associated with higher English grades, while a negative β is an association with lower English grades. Two additional terms used in the studies are Productive Extramural English (EE) and Receptive EE. According to Peters (2018), Productive EE refers to forms of EE that involve active participation, such as gaming, speaking and writing. Receptive EE involves passive engagement, such as reading, listening to music or watching TV and movies.

1.2 Aim and Research Questions

This study aims to examine the effects of EE on English language proficiency among young EFL/ESL learners in Europe with a particular focus on vocabulary acquisition, writing proficiency, and speaking proficiency in the context of a rapidly evolving landscape of out-of-school language. In addition to examining the overall impact of EE, this review aims to investigate how different forms of EE (e.g., gaming, reading, speaking, listening to music) contribute to English language development. The paper aims to explore not only whether EE supports English proficiency but also how its effectiveness varies based on the type of EE activity and learners' English language background.

Furthermore, the review aims to evaluate the role of age in shaping the effects of EE, as age is a critical factor influencing language development. The research suggests that younger learners may benefit differently than older learners due to various contextual factors, such as cognitive development, lexical coverage and the type of engagement. In this literature review, we mainly aim to explore the relationship between Extramural English (EE) and technology- and media-driven out-of-classroom language exposure, with a particular focus on its effects on speaking proficiency, writing proficiency and vocabulary.

As future EFL teachers, exploring the ways our students use English can help us adjust our teaching to meet the needs of students' varying proficiency and help us find ways for students to reach their fullest potential. The studies presented will primarily focus on the impact of Extramural English (EE) on European youth and children, with a particular focus on youths in primary school education. The review exclusively considers empirical studies conducted between 2010 and 2025, as we consider these years to represent the modern digital era, during which access to English-language media and EE activities has significantly increased.

The study aims to answer the following research questions:

1. Does Extramural English affect proficiency differently based on the age of the learner?
2. How does Extramural English effect the language development of young learners?
3. To what extent do different forms of Extramural English influence the language proficiency and academic performance of young learners?

1.3 Method

Before starting the search for sources, it was clear that we would have a substantial body of research on Extramural English (EE) available, due to its relevance in recent times.

Our inclusion criteria were that the source be an empirical study or contain empirical research, be peer-reviewed, directly address the topic of Extramural English (EE) and its impact on English proficiency, be conducted between 2010 and 2025, and focus on young learners that are EFL/ESL (English as second/foreign language) learners in a European country or countries. We did not set any limitations regarding the learners' level of English proficiency; our focus was solely on analyzing the impact of EE on their learning.

Therefore, in our search for sources, we prioritized studies that directly addressed these aspects.

We also included studies that examined other forms of EE and English proficiency that were not directly related to technology- and media-driven out-of-classroom language exposure, as we believed they could provide a greater understanding of EE's impact and contribute to a more comprehensive analysis. In our search, we prioritized studies focusing on students in upper secondary school, as we believe this age group would yield the most insightful and relevant findings. However, this approach presented challenges, as there were few research studies that met our criteria and specifically focused on upper secondary school students. As a result, we decided to broaden our scope to include studies conducted on youths and children more generally; we did not set a strict age limit. However, we aimed to focus on individuals under the age of 18. Studies involving participants over 18 were generally excluded unless they presented some interesting findings, as that age group falls under a different area of research.

We believed that this approach would not only provide a better understanding of how different age groups are affected by different forms of Extramural English (EE) but also help us answer our research question regarding the extent to which EE influences the learning trajectory of young learners, as we would be able to see various patterns in the research. As

expected, a substantial amount of research met our criteria. Following the selection process, we started reviewing the material, taking general notes on mainly each study's methodology and results. When compiling our sources, we aimed to ensure diversity in terms of geographic location, as we wanted to see if what we are seeing is a general trend across various European countries. This allowed us to learn about geographic and cultural variations that exist in these countries, providing us with a more nuanced understanding of our topic.

We used a wide range of pedagogical databases to find relevant empirical studies, ensuring that we have a comprehensive selection of sources. Rather than restricting our search to a limited number of pedagogical platforms, we aimed to use as many as possible, including Google Scholar, SwePub, ERIC, and the University of Gothenburg's library. We also used the snowball technique, which involves looking in the reference lists of relevant texts to identify additional sources. This approach was applied to student essays and literature reviews that we encountered during our research. We applied this strategy to optimize our time, allowing us to spend less time searching for suitable sources and instead focusing more on analyzing the material and writing the paper.

We used keywords such as "English proficiency," "Extramural English," "speaking/writing ability", "EFL/ESL" and "youths" to find relevant research. Furthermore, we intentionally tried to avoid reading other literature reviews/student papers that were closely related to our topic to prevent our conclusions from being influenced by other's interpretations of the data. We aimed to independently analyse the data and draw our own conclusions. In total, we found 8 empirical studies that met our criteria, 2 books comprised of empirical studies conducted by the authors, alongside an additional 6 sources used to provide background context. The review uses a total of 16 sources, including 10 empirical sources spanning 824 pages.

2 Findings

2.1 Methods of the Studies

The empirical studies included in this review utilized a variety of research methods to collect and analyze data. While some shared similarities, others were different in their approach. This section showcases how each study conducted its research and obtained its data. Most sources used similar methodologies, usually centered around collecting data from students through questionnaires and language diaries. Most studies also employed direct observations, interviews or tests/exams, making their methods more varied.

2.1.1 The Method Table

Date	Conducted by	Title	Goal	Method(s)
2024	Linh Tran and Imma Miralpeix	Out-of-School Exposure to English in EFL Teenage Learners: Is It Related to Academic Performance?	To examine out-of-school English exposure, self-efficacy, and external factors influencing English learning among Norwegian upper-secondary students.	Questionnaires, language diaries, tests/exams.
2024	Elizabeth Peterson and Kristy Beers Fägersten	English in the Nordic Countries: Connections, Tensions, and Everyday Realities.	To provide an overview of the role of English in Nordic countries.	Interviews, observations and surveys.
2023	Alison Jones Rød and Raees Calafato	Exploring the relationship between extramural English, self-efficacy, gender, and learning outcomes: A mixed-methods study in a Norwegian upper-secondary school.	As the title suggests, they study aims to explore the impact of EE on self-efficacy, gender differences and learning outcomes	Questionnaires, language diaries, tests/exams.
2022	Kumpulainen et al	Nordic Childhoods in the Digital Age: Insights into Contemporary Research	Examine how digital technologies influence	Video recordings, interviews and observations.

		on Communication, Learning and Education.	childhood experiences in the Nordic region.	
2021	Carmen Muñoz and Teresa Cadierno	How do differences in exposure affect English language learning? A comparison of teenagers in two learning environments.	To investigate weather differences in out of-school learning and differences in distance from the language influence ESL learners in Spain and Denmark.	Questionnaires, tests/exams
2020	Aurelija Daukšaitė-Kolpakovienė	Out-of-Class English Language Learning Among Upper-Intermediate Level Students	To investigate how Lithuanian university students learn and use English outside the classroom.	Questionnaires.
2018	Elke Peters	The effect of out-of-class exposure to English language media on learners' vocabulary knowledge	To examine how frequently EFL youths from the Netherlands are exposed to English language media outside the classroom and how that affects their vocabulary knowledge.	Tests and questionnaires
2017	Signe Hannibal Jensen	Gaming as an English Language Learning Resource among Young Children in Denmark.	Examine the role of gaming as an English language learning resource for young learners in Denmark.	Language diaries and tests.
2014	Pia Sundqvist and Liss Kerstin Sylvén	Language-related computer use: Focus on young L2 English learners in Sweden.	To investigate how young Swedish learners of English engage in language-related computer use.	Questionnaires and language diaries.
2012	Eva Olsson	"Everything I read on the Internet is in English". On the impact of extramural English on	To look into what impact EE has on the school writing skills of Swedish 16-year-olds.	Text writing, questionnaires, language diaries, interviews and tests.

		Swedish 16-year-old pupils' writing proficiency.		
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2.2 Productive Extramural English

2.2.1 Gaming

In Jensen's (2017) study, which examined the role of gaming as a resource for English language learning in Danish classrooms, Jensen states in relation to pupils who started formal education at later age: "The later starters [...] scored significantly better than the early starters. This finding supports the importance of EE, as later starters' knowledge of English can only have been gained outside school." (p. 15). The study found that engaging with games both orally and by writing was linked to higher vocabulary scores in school, particularly among boys. Jensen's study used language diaries and vocabulary tests.

The claim that gaming has an overall positive effect is supported by Sundqvist & Sylvén (2014) citing previous research indicating that playing games had a positive effect on vocabulary acquisition and provided avenues to improve reading comprehension and develop conversational fluency. Furthermore, students who frequently played games demonstrated a greater confidence in speaking English compared to those that rarely or never played. Sundqvist & Sylvén's (2014) study examined how young Swedish learners engage in language-related computer use. Their data were collected through questionnaires and language diaries, which are based on self-reported data.

However, according to Tran & Miralpeix (2024), who conducted a study to examine various out-of-school factors influencing English learning among Norwegian upper-secondary students, certain forms of gaming can have a negative effect on academic performance ($\beta = -0.093$). Their methodology included the use of questionnaires, language diaries and tests. Muñoz & Cadierno (2021) came to similar conclusions in their study that studied the effects of EE on two groups of EFL students, one Danish and one Spanish, both being between 14–15-years-old. Their findings revealed that gaming showed mostly negative correlations with academic performance, specifically among Spanish learners who played Massively multiplayer online games (MMOs). Tran & Miralpeix's (2024) findings differ a great deal from those of Rød & Calafato (2023); who found that gaming showed no significant effect on vocabulary performance. In their study, they aimed to explore the impact

of EE on self-efficacy, gender differences and learning outcomes. Their methodology included questionnaires, language diaries, and tests/exams.

The finding that gaming has no impact on academic performance is contested by Kumpulainen et al (2022) in the book *Nordic Childhoods in the Digital Age*, which aims to examine how digital technologies influence childhood experiences in the Nordic region. Kumpulainen et al (2022) observe that gaming is an ideal form of EE. According to them, “[g]aming provides ideal input for children’s language acquisition [...] more interactive than, for example, the input received when watching videos and shows online or on streaming providers.” (p. 85). However, it is important to note that the findings from Kumpulainen et al. (2022) about gaming are primarily based on data collected through questionnaires. The other studies used more extensive and varied methods.

Another study that supports the idea that gaming has a positive effect on language development is Daukšaitė-Kolpakovienė’s (2020) research on Lithuanian university students, 70% of whom were aged 18-19 years old. The study concludes that gaming contributes to the development of vocabulary and communication skills, supporting the idea that gaming can contribute to the development of English skills. However, it is important to note that the study relied exclusively on questionnaires for data collection. Additionally, the sample used in the study was predominantly female (85.1%), the study does not provide an explanation for this gender imbalance.

In contrast, Olsson (2012) reported that gaming was found to have no correlation with greater vocabulary knowledge, although Peters (2018) notes that this could be explained by a difference in age or participants not being separated by frequency of gameplay. Olsson’s (2012) study investigated the impact of EE on the writing skills of Swedish 16-year-olds. The methodology included text writing tasks, questionnaires, language diaries, interviews and tests. Peters’ (2018) study, on the other hand, aimed to examine how frequently Dutch EFL learners are exposed to English-language media outside the classroom and how this exposure affects their vocabulary development. The methodology consisted of vocabulary tests and questionnaires.

According to the studies reviewed, there is no clear consensus regarding the effects of gaming on language proficiency. Some sources, such as Jensen (2017), Sundqvist and Sylvén (2014), Kumpulainen et al. (2022) and Daukšaitė-Kolpakovienė (2020), suggest a positive correlation between gaming and vocabulary acquisition, language development and fluency, all of which contribute positively to various aspects of English proficiency. On the other hand, other studies suggest differing results. For example, Olsson (2012) found no significant correlation between gaming and vocabulary knowledge, whilst Tran & Miralpeix (2024) and

Muñoz & Cadierno (2021) reported a negative correlation between gaming and academic performance. These mixed findings suggest that the impact of gaming as a form of EE may depend on contextual factors such as the type of game, the nature of the interaction, and the learners characteristics.

2.2.2 Speaking and Writing

According to Tran & Miralpeix (2024), productive activities such as speaking and writing have the strongest positive impact on academic performance ($\beta = 0.30$). Compared to watching TV/movies and listening to music, both measured in the same study, speaking and writing were found to have a significantly stronger impact on academic performance. Specifically, speaking and writing activities had approximately 4.6 times greater effect than listening to music or watching short videos, and about three times greater effect than watching subtitled movies or series. This is further supported by a study conducted in Kumpulainen et al. (2022, p. 76), which states that writing, specifically story making, has a positive impact on children's communicative skills, contributing to the development of their English proficiency.

Olsson (2012) research showed a link between written proficiency and the frequency of student engagement with EE. The type of engagement was divided into six different categories: reading, traveling, speaking, writing, watching tv, and playing games. Olsson based their results on students' grade in the writing section of the Swedish national test in English and found that students with the highest grades engaged twice as frequently with EE than those of the lowest passing grade. Furthermore, students that achieved higher scores in the test spent significantly more time reading, speaking, writing, and playing games outside school hours.

The idea that speaking and writing significantly support the development of English proficiency is also supported by Daukšaitė-Kolpakovienė (2020). In the study, students reported that speaking with native speakers helped them become more fluent, construct sentences more quickly and learn daily slang. Additionally, writing on platforms such as Instagram or engaging in online chats contributed to improvements in grammar, vocabulary, creative expression, and the ability to write in a more native-like manner. However, it is important to note that these findings are based on self-reported testimonies from learners, which may be less reliable than results from studies that combine self-reporting with objective measures such as standardized tests.

Based on the studies reviewed, there is a clear consensus that various forms of speaking and writing have an overall positive impact on academic performance, communicative skills, grammar and vocabulary; all of which indicate a positive effect on English proficiency, no reviewed study contradicts this finding. Compared to other EE activities, one study reports that speaking and writing are the most beneficial in terms of academic performance (Tran & Miralpeix, 2024). However, it is important to consider contextual factors, specifically the types of speaking and writing involved, as many studies discussed focus on particular forms of these activities which may influence their effectiveness.

2.2.3 Non-specific findings regarding productive Extramural English

In a study conducted by Rød & Calafato (2023), the findings suggest that productive EE has no significant effect on vocabulary performance. Rød & Calafato (2023) is the only study among those reviewed that reports no impact from productive EE on English proficiency. They do not provide detailed analysis regarding the specific effects of each productive activity, except for gaming.

2.3 Receptive Extramural English

2.3.1 Watching TV/Movies and Listening to Music

According to Tran & Miralpeix (2024), watching subtitled movies or series ($\beta = 0.099$), as well as listening to music and watching short videos ($\beta = 0.065$), have a positive impact on academic performance, although the effects are relatively modest compared to speaking and writing. Muñoz & Cadierno (2021) came to similar conclusions in their study. They found that watching videos without subtitles was positively associated with test scores, whilst viewing with subtitles showed either a negative or no correlation with academic performance. Their study utilized questionnaires and tests or exams. Particularly noteworthy for the effect of EE is the prevalence of English in everyday social life, as Muñoz & Cadierno (2021) state: “In Denmark, English television programs and films are seen in the original language with L1 subtitles, whereas in Spain, English audio-visuals are dubbed into the country’s home language” (p. 7).

According to Peters’ (2018) study, most receptive forms of EE, such as watching non-

subtitled movies or TV programs had a positive impact on vocabulary scores. In contrast, no significant effects were observed from watching subtitled movies or TV shows, and listening to music was found to have a negative effect on vocabulary scores. When it comes to the frequency of engagement in EE activities, Daukšaitė-Kolpakovienė's (2020) study revealed the following patterns: 77% of learners listened to music or radio, which positively influenced listening skills, pronunciation, and vocabulary. 66% regularly watched films or TV shows, which positively influenced listening, vocabulary, pronunciation, and, when subtitles were used, spelling.

Based on the studies reviewed, there is a general consensus that watching TV and movies without subtitles has a positive impact on English proficiency. This activity has been linked to improved test scores, vocabulary, listening skills, and pronunciation, all of which contribute positively to English proficiency. However, findings are more mixed when it comes to watching TV/movies with subtitles and listening to music. According to Tran and Miralpeix (2024) and Daukšaitė-Kolpakovienė (2020), both subtitled media and music have a positive influence on English proficiency. In contrast, Muñoz & Cadierno (2021) and Peters (2018) report that watching subtitled TV or movies has either no significant effect or an outright negative one. Additionally, Muñoz & Cadierno (2021) found that listening to music negatively affects vocabulary scores. Watching television shows and movies without subtitles appear to have a consistently positive effect on English proficiency, while the benefits of subtitled media and music seem to vary depending on contextual and methodological factors.

2.3.2 Reading

According to Tran & Miralpeix (2024), receptive activities such as reading books, magazines or blogs have the strongest positive impact on academic performance ($\beta = 0.30$), equal to the effect of productive activities like speaking and writing. This suggests that reading may be the most effective form of receptive EE activity in terms of supporting academic achievement.

Peters (2018) study also observed a positive effect on vocabulary knowledge from various forms of EE. When looking at specific EE activities, Peters found the largest effect on vocabulary from using the Internet, followed by watching non-subtitled media, and reading books. The conclusion that reading has one of the strongest effects on English proficiency is similarly supported by Daukšaitė-Kolpakovienė's (2020) study. According to their findings, reading books or blogs significantly contributed to vocabulary development

and phrase recognition. However, they also note that a relatively small proportion of learners actively engage in reading activities, a mere 36% of learners reported regular involvement.

Reading books, blogs, or magazines is not the only form of reading that can enhance English proficiency, as noted by Kumpulainen et al. (2022, p.100) in *Nordic Childhoods in the Digital age*. The book discusses the concept of playful learning and the integration of the video game *Minecraft* into educational environments. According to their observations, “[w]hile playing, students developed their storying and enhanced their digital literacy in explorations, and relations of everyday life animated literacy events.” (p. 100). This suggests that reading in English through in-game instructions, explorations and interactive elements can meaningfully contribute to the development of English literacy. These observations were made in a classroom setting and do not directly align with the definition of EE; however, similar outcomes can reasonably be expected in EE contexts as supported by other empirical findings.

Based on the studies reviewed, there is a general consensus that reading has a positive impact on academic performance, vocabulary development, phrase recognition, and overall literacy, all of which indicate a positive English proficiency development. This applies to various forms of reading, including blogs, books, magazines and even simple instructions encountered in video games. However, as Daukšaitė-Kolpakovienė (2020) points out, active engagement in reading is relatively low, with only 36% actively participating in it as an EE activity. Despite this, Kumpulainen et al. (2022) highlight that reading is already embedded in many other EE forms, such as gaming, social media, or general online communication. This suggests that learners still benefit from reading-related activities even if they do not actively engage in traditional reading activities.

2.3.3 Non-specific findings regarding receptive Extramural English

Rød & Calafato (2023) also address receptive forms of EE in their study, concluding that these activities have a statistically significant negative impact on vocabulary performance ($\beta = -4.59$). However, they do not provide distinctions regarding which specific types of receptive EE, such as watching television, listening to music, or reading, contribute to this effect.

This contrasts with the findings of Peterson & Fägersten (2024) in the book *English in the Nordic Countries: Connections, Tensions, and Everyday Realities*. According to their research, engagement with English language popular culture is often credited as one of the main factors contributing to the high levels of English proficiency observed in the Nordic

countries. This includes all forms of EE interactions, such as gaming, speaking and writing, and other media-based EE activities. Given the varying conclusions presented by previously mentioned studies regarding the effects of EE, these findings suggest that individuals who frequently engage with EE may consistently assume it always has a positive impact on their English skill, an assumption that is not always supported by empirical evidence. Peterson & Fägersten (2024) collected their findings using a combination of interviews, observations and surveys.

2.4 Extramural English (EE) and its effects on different ages

In many of the studies used, the issue of age is frequently discussed, particularly in relation to how learners of different ages are affected by exposure to EE and how this influences their learning trajectory. In this section, we present the relevant findings to provide a clearer understanding of how EE impacts language development across various age groups. Based on the studies, there is a clear difference in how EE affects students of different ages. The impact of EE is influenced by several factors, most notably the age at which young learners begin engaging with various forms of Extramural English.

In the study by Tran & Miralpeix (2024), the discussion section highlights that one possible reason why certain types of EE do not greatly influence vocabulary development is the learner's level of proficiency. Specifically, the authors note: “It is crucial that learners attain a certain level of proficiency or ‘a minimum lexical coverage’ in order to notice and, consequently, comprehend input without further support in informal settings” (p. 12). This implies that a foundational level of vocabulary is needed in order to fully benefit from EE exposure. In general, as learners acquire more vocabulary knowledge through education, their ability to engage and learn from different types of language input increases. As a result, more advanced learners are likely to gain more from EE exposure compared to beginners. This level is usually only reached after a certain stage in one’s language development, which, in a school setting, means a learner needs to reach a certain proficiency level at which they attain a “minimum lexical coverage”. It is unclear whether the same applies to adult learners.

This assertion is further supported by Kumpulainen et al. (2022, p. 84–85) in *Nordic Childhoods in the Digital Age*, which presents evidence showing that younger children typically exhibit more receptive than productive English skills. This applies to all forms of English, including formal English. However, as children become more advanced learners, their use of English becomes more productive. This receptive to productive English use

begins to increase notably among children aged 6-12, with many beginning to be exposed to English media at ages 3-5. There are also significant observable effects of EE exposure on academic performance. A study by Muñoz & Cadierno (2021) found that Danish students outperformed their Spanish counterparts in terms of academic performance, despite being less advanced learners. This performance difference is attributed to the fact that Danish students engage with various forms of Extramural English much earlier than Spanish students.

This indicates a clear link between the age at which youths begin engaging with EE and their academic performance. Early exposure to EE seems to provide learners with a significant advantage in developing language proficiency, which can positively influence academic performances later in life. This is likely due to increased exposure to the English language, which naturally leads to improved academic performances later in life. The assertion that increased exposure to English positively effects academic performances is further supported by Peters' (2018) study, which compared Flemish 16-year-olds and 19-year-olds in terms of vocabulary knowledge. According to Peters, "[t]he effect of current out-of-class exposure on learners' vocabulary knowledge was larger than the effect of instruction" (p. 159). The findings indicate that the effects of EE on both 16-year-olds and 19-year-olds are largely the same, with minimal differences between the two groups.

Additionally, Muñoz & Cadierno (2021) found that Danish students who were exposed to EE at an earlier age outperformed their Spanish peers in academic performance, despite being less advanced learners in terms of formal education. Similarly, Peters (2018) found that the positive effects of EE exposure on vocabulary knowledge were more significant than those of classroom instruction, with both 16- and 19-year-olds benefiting similarly from EE. These findings generally suggest that early and consistent exposure to EE can accelerate language development and academic success over time, but its effectiveness still depends on various factors, such as the learner reaching a certain level of language proficiency.

3 Discussion/Pedagogical implications

Based on the studies reviewed, there is a strong indication that the effects of EE on language development vary considerably depending on age and proficiency level. Both Tran & Miralpeix (2024) and Kumpulainen et al. (2022, p. 84-85), emphasize that a certain threshold of vocabulary, referred to as a “minimum lexical coverage” is needed in order to fully benefit from EE activities, especially in informal learning settings without instruction (Tran & Miralpeix, 2024, p. 12). This means that young learners or beginners may not fully benefit from EE until they acquire the foundational language skills needed through formal education. Kumpulainen et al. (2022) further support this by showing that younger children typically exhibit more receptive than productive English skills, and that the shift to produce language usually begins to increase between the ages of 6 and 12.

Through the research examined in our findings, we identified several common ways EFL-students interacted with EE in terms of gaming, speaking, writing, reading, watching media in English (television, movies and videos on social media) with or without subtitles, and listening to music, with these being the most frequently reported activities.

Young learners who regularly engage in several hours of receptive EE activities such as watching television, YouTube, reading, and productive activities such as writing, playing video games, and conversing in English generally performed better in school and scored much higher on vocabulary tests than those with less frequent contacts. However, our findings indicate that certain activities contribute significantly more to the development of EFL learners English proficiency with speaking, reading, writing, playing games, or watching media in English having the most positive effects overall. Music was the most common way for many students to engage with English; however, Tran & Miralpeix (2024) and Peters (2018) found no significant impact from listening to music. A possible reason for this could be the tendency of youths not to listen attentively to the lyrics in songs, a perspective supported by Tran & Miralpeix (2024).

However, the effects of EE activities seem to be inconsistent depending on several factors, such as the country of residence or age. When viewing the findings of Muñoz & Cadierno (2021), Danish EFL students are shown to outperform Spanish students in a majority of tests. These results are explained in part by linguistic distance to English being a strong predictor for average language proficiency and Danish students being exposed to English earlier due to the prominence of English media in the country.

Notably, among the extramural activities in our findings, the most divisive impact was that of gaming. Gaming is often cited as a positive contributor to early development of both

vocabulary and writing proficiency for youth. Muñoz & Cadierno (2021) and Tran & Miralpeix's (2024) found gaming to negatively affect academic performance. They make particular note of engaging with MMOs resulting in lower grades. However, the authors did not examine other forms of gaming or whether the students primarily communicated in English or Spanish with other players in the game, which could further explain the observed effect. Similarly, Muñoz & Cadierno (2021) saw frequent gaming being associated with lower academic performance for Spanish EFL students. Such findings could be explained by students with lower grades engaging more frequently with gaming over other more beneficial activities.

The negative impact of gaming is strongly challenged by Jensen (2017), Sundqvist & Sylvén (2014), Kumpulainen et al. (2022), Peters (2017) and Daukšaitė-Kolpakovienė (2020), arguing that gaming helps develop many aspects of language proficiency, such as vocabulary and conversational fluency. Additionally, playing games was cited as an effective method for practicing reading, writing, and listening comprehension. It should also be noted that those who played several hours a week, reported being less anxious and more confident when speaking in English; moreover, they were highly motivated to engage with other extramural English activities as well.

This supports the argument that gaming may exert a meaningful influence on language development even with the potentially negative impact on academic performance. Furthermore, the varied results contest the long-held belief that gaming is always a positive on EFL development. Taking this into account, the question of which genres of games are helpful or what type of engagement is required for them to be positive is raised.

Reading is one such essential skill, as it is necessary for engaging with various forms of Extramural English and, as noted earlier, requires a certain level of proficiency to be beneficial. Unsurprisingly, the general consensus in our findings was that reading positively influenced several aspects of language development, such as vocabulary and literacy. Although reading is generally agreed to be beneficial, with Tran and Miralpeix (2024) claiming it had the most significant impact on academic performance, our findings indicated that it was one of the least popular activities for students to engage in on a consistent basis, especially reading books. This aligns with the decline in youth engagement with literature in recent years. However, if we consider non-traditional activities that heavily involve reading, such as using social media, chatting, and playing various types of games, what they manage to do, which traditional reading media do not effectively achieve, is to motivate engagement. Material that engages and motivates students has consistently been identified as a strong predictor of learning, as students interact with it voluntarily rather than out of obligation in a

classroom setting. Building on this, the argument for making learning feel stimulating and being willing to incorporate playful learning where games are used in an educational setting could help motivate student classroom engagement (Kumpulainen et al., 2022).

3.1 Pedagogical Implications

The research discussed in our findings shows a trend of EE having a more significant impact than traditional education in terms of vocabulary growth, and both productive and receptive English skills. Although beneficial for English language learners, we believe that EE cannot completely replace support found in structured learning environments or replace the benefit of a teacher. As previously stated by Tran & Miralpeix (2024), a certain level of language proficiency is required to comprehend any external input without further support, such as the one provided by education. Such a claim aligns with our own experiences teaching in upper primary schools. At first glance, students who frequently engage with Extramural English often have a large vocabulary and good oral proficiency as supported by many of the studies presented. However, after reaching a certain level of proficiency students seem to benefit less from EE and could struggle to understand the more metalinguistic aspects of languages. A possible explanation for this is the absence of instruction and contextualised learning that education facilitates, as well as much of their exposure being informal. Muñoz & Cadierno (2021) support this explanation, where the longer classroom instruction of Spanish EFL students indicated a more advanced understanding of languages compared to their Nordic counterparts.

Given that students spend considerable amount time outside of school engaging with English and, in turn, develop their communicative language skills outside of the classroom, teachers need to adapt their education to accommodate the changing needs of EFL students and help address errors made as a result of out of classroom learning. As the Swedish Department of Education states in the syllabus for English: “Students should be given the opportunity, through the use of language in functional and meaningful contexts, to develop all-round communicative skills” (Skolverket 2011, p 1). It is widely acknowledged that a certain amount of lexical knowledge is still required to fully benefit from EE. This may explain why certain studies have shown that activities such as listening to music and gaming benefit some EFL students while showing little to no effect on others. The same theory could be applied when examining the varying results of students engaging with EE activities such as watching media with or without L1 subtitles. Those who have already acquired enough English literacy through their activities or studies could benefit to a greater extent when

engaging with materials they can understand and digest while students with less advanced English, such as younger children, still benefit from media with L1 subtitles, which could be reduced in tandem with their increasing proficiency. In turn, when examining the researchers' test groups, the activities that previously contributed to positive growth showed varying results across different age groups. This could give teachers the option to specifically target lexical knowledge that can accelerate out-of-school learning and help all students utilise the wealth of extramural resources around them. Nevertheless, if the benefits of EE are indisputable, why does the proficiency vary so greatly around Europe when viewing the statistic presented by Education First (2024) instead of remaining static?

A possible explanation is the prevalence of translations or dubbing of media consumed by youths in the country. A commonality between countries like Sweden, Denmark, and Norway is the absence of dubbing of the English language. The Nordic countries have instead opted to use subtitles in their L1s on the majority of English-speaking media, leading to English being prevalent in many parts of Nordic society. In contrast to countries such as France, Germany, and Spain, where most English media is dubbed into their native language, leading to fewer interactions with authentic English (Sundqvist & Sylvén, 2014). The more limited access to EE could explain differences of EFL-proficiency around Europe and further explain the impact EE has on European youth. One could argue that the presence of extramural English in classrooms teaching cannot co-exist with a formal education due to the varying definitions of EE; however, the impact of EE can only be contextualised when compared to the learning taking place in classrooms. If certain lessons are better taught outside of the classroom, teachers can capitalise on this learning to promote more advanced language growth than either type could provide by itself. The Swedish syllabus for the English subject states the following:

“In teaching students should meet written and spoken English of different kinds, and relate the content to their own experiences and knowledge. Students should be given the opportunity to interact in speech and writing, and to produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media. Teaching should make use of the surrounding world as a resource for contacts, information and learning, and help students develop an understanding of how to search for, evaluate, select and assimilate content from multiple sources of information, knowledge and experiences.” (Skolverket 2011, p.1).

This goal can only be achieved by applying the tools learned in the classroom to contextualize lessons gained outside of it. Something we believe, based on the research cited in this review, is facilitated by the teacher.

4 Conclusions

The studies used in this literature review all show that English language acquisition extends outside of the classroom and that Extramural English plays a definitive part in furthering the learning process of EFL students. Those who frequently interact with English outside of educational environments are generally at a significantly higher level of English proficiency compared to those who do not.

Younger learners appear to benefit more from early EE exposure than older learners, primarily due to the consistent and sustained nature of their early engagement. This exposure is often motivated by a genuine interest in interacting with the language as part of media. However, to fully capitalize on the language acquisition that EE can provide a certain level of proficiency is required to assimilate the external input into language proficiency. This level is usually reached with age, when learners become more advanced and their learning becomes more productive than receptive, as Kumpulainen et al (2022) point out.

Based on the studies used, activities such as speaking, writing, and reading have the strongest positive impact on proficiency, the studies show that they all positively affect, among others: vocabulary, academic performance, and comprehension among young English learners. Watching TV shows/movies and listening to music have a small yet still positive effect. In contrast, gaming has demonstrated mixed outcomes, likely due to various contextual factors. In general, productive activities had a much greater effect than most receptive ones, and EE has a positive effect on young learners' language development.

It is important to note that this review draws on a limited body of empirical research conducted primarily in the Nordic region, Lithuania, and Spain. Given the vast diversity of countries within Europe and the broader body of research available, the conclusions reached in this review may not be applicable across all European countries due to various factors such as local and cultural differences. However, we believe the findings presented here are fairly indicative of the EE landscape in the Nordic countries, as a significant portion of the studies used were conducted within that region. The studies used have primarily focused on smaller groups of students making a definitive answer for what types of EE help students the most difficult to ascertain. Furthermore, access to English media is not consistent across Europe with different cultures choosing to engage with their L1 in extramural activities rather than English. While the abundance of contacts with English over L1 languages can lead to L2 language proficiency, the long-term effects on native language production warrants further research as fewer L1 resources are available to students and are replaced by English.

While this review generally concludes that EE has a positive influence on English

proficiency, it does not outweigh the benefits of formal education. However, this balance may shift in the future thanks to the growing influence of AI in education. As AI tools become more sophisticated and easily accessible, and as new tools such as “AI text humanizers”, for instance, blur the line between human and AI generated content, it raises questions about the future of learning, especially in areas like research and writing. While teachers currently appear able to identify AI-generated work on their own, it is uncertain how long this will be the case considering the evolving AI systems. This raises the question: if many students begin relying heavily on AI-generated content for assignments, will they continue to meaningfully engage with the learning process? In such a scenario, could EE eventually become more influential than formal education? Possible future research could investigate the actual effects of AI on learning, does AI positively influence educational outcomes? Or does it make engagement with education lazier?

References

- Brake, L. (2024). "In our time: Adult education and Birkbeck: Extra-Mural — An experiment 1988–2009". 19: *Interdisciplinary Studies in the Long Nineteenth Century*, 36. <https://doi.org/10.16995/ntn.16324>.
- Council of the European Union. (2018). Council Recommendation of 22 May 2018 on key competences for lifelong learning. *Official Journal of the European Union*, C189, 1–13.
- Cunningham, P. (2024). *The Vital Message: Continuing Education and the University of Cambridge 1945–2010*: By Mark Freeman. Pp 320. St Albans: Regents Court Press. 2023. £12.99 (pbk). ISBN 978-1-916308-48-0 (pbk). *British Journal of Educational Studies*, 72(3), 379–381. <https://doi.org/10.1080/00071005.2024.2331883>.
- Daukšaitė-Kolpakovienė, A. (2020). "Out-of-Class English Language Learning Among Upper-Intermediate Level Students". *Sustainable Multilingualism*, 17, 124–146. <https://doi.org/10.2478/sm-2020-0016>.
- EF EPI EF (Education First) English Proficiency Index: A Ranking of 116 Countries and Regions by English Skills. (2024). <https://www.ef.se/assetscdn/WIBIwq6RdJvcD9bc8RMd/cefcom-epi-site/reports/2024/ef-epi-2024-english.pdf>.
- Jensen, S. H. (2016). "Gaming as an English Language Learning Resource among Young Children in Denmark". *CALICO Journal*. 34. 1-19. 10.1558/cj.29519. <https://files.eric.ed.gov/fulltext/EJ1143385.pdf>.
- Jones Rød, A., & Calafato, R. (2023). "Exploring the relationship between extramural English, self-efficacy, gender, and learning outcomes: A mixed-methods study in a Norwegian upper-secondary school". *Studies in Educational Evaluation*, 79, 101302. <https://doi.org/10.1016/j.stueduc.2023.101302>
- Kumpulainen, K., Kajamaa, A., Erstad, O., Mäkitalo, Å., Drotner, K., & Jakobsdóttir, S. (Eds.). (2022). *Nordic Childhoods in the Digital Age: Insights into Contemporary Research on Communication, Learning and Education* (1st ed.). Routledge. <https://doi.org/10.4324/9781003145257>

- 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, 185–212. <https://doi.org/10.14746/ssllt.2021.11.2.2>.
- Olsson, E. (2012). "Everything I read on the Internet is in English": On the impact of extramural English on Swedish 16-year-old pupils' writing proficiency. In Institutet för svenska som andraspråk, Institutionen för svenska språket, & Göteborgs universitet, ROSA (Rapporter Om Svenska Som Andraspråk). https://gupea.ub.gu.se/bitstream/handle/2077/30417/gupea_2077_30417_1.pdf?sequence=1&isAllowed=y.
- Oxford University Department for Continuing Education. (n.d.). Acquisition of Rewley House. University of Oxford. <https://www.conted.ox.ac.uk/about/acquisition-of-rewley-house>.
- 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, 142–168. <https://doi.org/10.1075/itl.00010.pet>.
- Peterson, E., & Fägersten B, K. (2024). *English in the Nordic countries: Connections, tensions, and everyday realities* (1st ed.). Routledge. <https://doi.org/10.4324/9781003272687>.
- Skolverket. (2011). English: Syllabuses for the compulsory school, preschool class and the recreation centre 2011. Swedish National Agency for Education. <https://www.skolverket.se/download/18.4fc05a3f164131a74181450/1535467234532/English-swedish-school.pdf>.
- Sundqvist, P., & Sylvén, L. K. (2014). "Language-related computer use: Focus on young L2 English learners in Sweden". *ReCALL : The Journal of EUROCALL*, 26(1), 3-20. <https://doi.org/10.1017/S0958344013000232>.
- Tran, L., & Miralpeix, I. (2024). "Out-of-School Exposure to English in EFL Teenage Learners: Is It Related to Academic Performance? *Education Sciences*", 14(4), 393. <https://doi.org/10.3390/educsci14040393>

