Agata Wolanin

University of the National Education Commission, Krakow

https://orcid.org/0000-0002-8513-2154

agata.wolanin@uken.krakow.pl

In the webs of the Internet:
Generation Z and their informal exposure to English

Generation Z, a cohort born into the digital age, benefits from unprecedented access to informal English exposure, facilitating implicit language learning and development. However, research on the extramural English (EE) habits of proficient EFL learners in the Polish context remains limited. To address this gap, this study explored the frequency and nature of EE exposure, the types of input learners engage with, and their self-perceived language competence in the context of the informal learning environment. The study involved 120 participants who completed a questionnaire and a vocabulary size test. Subsequently, 10 participants engaged in a qualitative stage by keeping a language diary for 14 days, documenting their informal English exposure in detail, reflecting on their experiences, and participating in follow-up interviews. The findings align with previous studies, highlighting consistent trends in the type and frequency of EE exposure. Notably, the qualitative data provided insight into a wide range of EE activities and revealed that English has become not only the *lingua franca* of the Internet but also a tool for mediating between other languages. The participants also recognized discrepancies between language input in formal settings and language used in their informal exposure. These findings underscore the importance of integrating EE activities into EFL learning strategies to bridge the gap and introduce more authenticity into the language classroom.

1. Introduction

The 21st century, often referred to as the digital age, has brought unprecedented access to the Internet, making it a ubiquitous and affordable resource for billions of users worldwide. This democratization of the Internet has transformed not only the means of communication but also language education, particularly in the context of affordances for language learning. English, as the *lingua franca* of the Internet, plays a central role in this transformation. With the estimated majority of online content available in English, users around the globe are exposed to the language in diverse and authentic contexts, often outside formal educational settings. This exposure has the potential to significantly influence language development, providing learners with opportunities for individualized, engaging, and authentic language use (Arndt, Woore, 2018).

The distinction between formal and informal education is particularly pertinent in this context. While formal education often relies on standardized curricula and structured learning environments, informal interactions with English, through gaming, social media, streaming platforms, and other online activities, are characterized by authenticity, personal relevance, and higher engagement. This dynamic can create a disconnect between the English used in classrooms and the English encountered in real-world, digital contexts, often leaving students demotivated and discouraged by the inauthenticity of the language input used in formal education (Sundqvist, Olin-Scheller, 2013: 332).

Since research on informal exposure to language in the Polish educational context is scarce, the aim of this paper is to map the habits and activities the new generation of proficient users of English, born in the 21st century, engage with in their informal setting, and explore their perspective on the perceived impact of this informal exposure on their L2 competence.

2. Informal exposure to language and its role in implicit learning: literature review

In the abundance of a variety of terms used in the literature to describe the informal language learning setting, Benson (2011) identified four distinct

dimensions of what he calls *Language Beyond Classroom*, in an effort to dis-ambiguate and organize key concepts. According to Benson (2011), informal exposure to language is characterized by the following features: (a) it takes place out of class (*location*), (b) it is usually set in a non-formal setting (*for-mality*), (c) it is carried out without the teacher's instruction (*pedagogy*), and (d) it depends on the learners' autonomy and self-regulation (*locus of con-trol*).

Another umbrella term used to describe all the informal out-of-class-room activities that expose a student to English, and provide them with an opportunity to learn, is *Extramural English* (EE), a term proposed by Sundqvist (2009), which points to all activities with English that take place outside the walls of the school and are unrelated to school(ing) (Sundqvist, 2024: 2). Such EE activities might take various forms and could involve dif-ferent media or tools. Sunqvist and Uztosun (2023) reported on two inter-national studies in which they validated an EE scale and identified different categories of EE activities. As a result, eight factors emerged from their re-search.

First, *EE Internalized* embraces all the activities that involve the learn-er's personal sphere and internal dialogue, such as daydreaming in English. Next, *EE Gaming* represents all the activities connected to playing video-games, in both single- and multiplayer modes. Any activity involving creative endeavours online, such as creating a vlog or recording a podcast can be found in the *EE Digital Creativity* category. *EE Viewing* emphasizes the role of audiovisual input in informal exposure to language.

Another category, *EE Social Interaction* may involve both speak-ing and writing activities whose aim is to communicate or socialize with an interlocutor/a community. Since listening to music, and all its accom-panying activities, is one of the most popular EE activities (e.g., Sundqvist, 2009; Kuppens, 2010; Lindgren, Muñoz, 2013; De Wilde, Eyckmans, 2017), *EE Music* was proposed as a separate category. *EE Reading and Listening* is a broad category connected to activities focusing on those two skills, includ-ing reading books, listening to the radio, or reading online. And finally, *EE Niche Activities* represent what Sundqvist and Uztosun (2023: 15) call "ex-tremely context-dependent" and unique endeavours, which cannot be easily identified as belonging to any of the aforementioned EE categories.

It is also important to consider the process of language development as a result of an EE exposure. In contrast to the formal educational context, the informal setting is characterized by naturalistic learning conditions and *implicit* learning, which means that the language is learned without con-scious effort, naturally acquired through frequent and meaningful exposure (Laufer, Hulstijn, 2001; Elgort, Warren, 2014). A conducive informal learning

environment contributes to language development through *incidental learning*, defined as the "acquisition which occurs in the absence of a conscious intention to learn, or rather when learners' attention is focused not on language learning, but on understanding the material they engage with" (Arndt, Woore, 2018 :125). Indeed, incidental learning can also be referred to as *contextual language learning* (De Wilde et al., 2020), which emphasizes the importance of context in the meaning-making process.

The extent and scope of implicit learning in the informal setting are dependent on several factors. First and foremost, it is the frequency and quality of *input* that impacts the language learning process (Sun et al., 2016). It might be assumed that learners exposed to the language in an "input-rich environment" (Muñoz, Cadierno, 2021: 186) would acquire the language more effectively. According to Mayers' cognitive theory of multimedia learning, owing to the fact that the human brain processes information through two main channels, the most optimal learning occurs when we actively select and synthesize the information from the audiovisual input, activating both channels (Mayer, 2001). Indeed, the popular free-time activities EFL learners are exposed to nowadays, from watching TV series on streaming platforms, to following the lyrics of their favourite song, to merely scrolling through social media, offer highly multimodal input. Yet, mere frequency of exposure to multimodal input is not the only factor, as the process of implicit learning also relies on the *depth of processing* required to decode meaning (Craik, Lockhart, 1972). It was observed that input that requires deep processing is more likely to be encoded in the long-term memory, and the probability of successful recall is much higher (Laufer, Hulstijn, 2001).

Another significant factor in the process of implicit learning due to informal exposure is learner motivation and engagement. Since learners exhibit task-induced involvement (Laufer, Hulstijn, 2001) and there is an inner locus of control (Benson, 2011), i.e. learners choose what they want to engage with, their agency and self-efficacy increase. This also affects the possible language development, especially vocabulary size. Indeed, as Arndt and Woore (2018: 135) observed, "[w]hen engaging with these media in their free time, individuals choose what content to attend to, presumably leading to higher levels of motivation and allowing for individualisation of the vocabulary learned".

Although there are many studies investigating the impact of the EE exposure on EFL young learners' language competence (see, e.g., Kuppens, 2010; Sylven, Sundqvist, 2012; Hannibal Jensen, 2017; Muñoz, Cadierno, 2021), research involving teenage and/or young adult EFL learners is scarce. Considering the amount of exposure of young adults, born in the digital era, it might be assumed that they are exposed to English on a daily

basis. Consequently, investigating EE habits of representatives of Generation Z has become one of the research objectives of the study presented below.

3. The study

3.1. Aims and research questions

There are few studies that investigate the exposure to English and the EE habits of the new generation of proficient users of English, i.e. Generation Z. A substantial number of quantitative studies on informal exposure to English offer a generalized picture of trends and tendencies; it is, therefore, imperative to obtain more qualitative data in an effort to get a more nuanced description of the type and context of EE activities the new generation of EFL users is exposed to in their free time. The aim of the present research project was, thus, to bridge this gap and get a deeper insight into the informal exposure to English of young adults in Poland. The aim of the study is threefold: first, to measure the type and frequency of the EE exposure based on a sample of representatives of Generation Z in Poland; second, to take a closer look at the new EE habits of proficient EFL users by confronting the quantitative results with qualitative data obtained through language diaries and interviews with selected participants; and third, to investigate the perspective of proficient users of English on their EE exposure, as well as their beliefs regarding the impact of this exposure on their L2 proficiency.

In order to address the research aim, three research questions were formulated:

RQ1:   What is the type and frequency of the EE exposure of proficient young adult EFL users in Poland?

RQ2:   What is the EE profile of proficient EFL users representing Generation Z and what new EE habits do they engage with?

RQ3:   What is the participants' perspective on the impact of EE on their language proficiency?

3.2. Method, instruments and procedure

A mixed-methods approach was adopted in the study design. The quantitative data was obtained through a questionnaire and a vocabulary size test (Nation, 2012). The questionnaire was designed to inquire about the time

spent on various EE activities, the language preference in engaging with free-time activities, as well as other factors that might have had an influence on the process, such as age of the start in EFL, cultural capital, or the respondents' travelling experience. The questionnaire comprised twelve questions. The first question inquired about the participants' average time spent on EE activities, expressed in the number of hours per week. In the second question the respondents were asked to rate five statements describing their language preference in EE activities on a 5-point Likert scale. Next, there were additional questions inquiring about the participants' cultural capital, expressed by the number of books read and the number of books in their home library, the quality of access to the Internet, their travelling experience, both for leisure and studying, the number of foreign languages spoken and the age they began their formal education in English. Three demographic questions asked about the respondents' age, gender and place of residence. The time for completing the questionnaire ranged between 7 and 10 minutes.

The data collection procedure began in May 2024 with administering the questionnaire and the vocabulary size test to a group of EFL users born after the year 2000, representing a proficiency level oscillating around C1-C1+. Both the questionnaire and the test were administered online. There was a question at the end of the questionnaire which inquired about the respondents' willingness to participate in the later stages of the study; those interested in keeping a language diary and giving an interview were asked to leave their email address. The questionnaire and test results were anonymous, except for those who volunteered to take part in the further stages of the research.

Since informal exposure to English is highly individualized and context-dependent, there was also a need to collect qualitative data to investigate the participants' specific EE habits and the context in which the language is used in their free time. As Reinders and Benson (2017: 7) suggest, language diaries offer an invaluable insight into language use "in the moment", allowing for both introspective and retrospective reflections. The qualitative data was, thus, collected by means of a language diary and follow-up semi-structured interviews. The language diary was designed to collect more contextual information about the type of EE activities, their frequency, content and the type of media used. The diary took the form of a table (see Figure 1 below) with five categories to be completed by the participants:

   a) type of EE activities – to specify any activity they engaged in (e.g., watching a film, listening to a podcast, reading posts, etc.) during the day;

❀ MY LANGUAGE DIARY ❀

DAY 3. [date: 17 / 06 / 2024]

	type of activities	context	type of content	medium	time spent
My today's English language use	Listening to music	Free time while commuting to work	Random music	Spotify	20 minutes
	Talking to customers from abroad	Work	Customer service	F2F	15 minutes
	Playing a vocabulary game "Words of Wonders"	To kill time	Vocabulary building	Online game	10 minutes
	Scrolling through social media	Free time/a break in work	memes	Instagram	10 minutes
	Watching a bit of the newest episode of "House of the dragon"	Free time	Fantasy/Action/Drama	Online	20 minutes

My observations: Some words in "Words of Wonders" appear from time to time, but I still do not remember their meaning, e.g., 'rye' – I know it is some kind of grass but I do not even differentiate them in Polish or words like "reed" – it has so many translations …

Figure 1. An example of a diary entry
Source: own study.

b) context – to specify the context in which English was used (e.g., at work, at home, outdoors);

c) type of content – to specify the type of content they engaged in, focusing on the specific topic/theme of the EE activity;

d) medium – to specify the medium/tool used during the activity (e.g., Instagram, YouTube, mail, book, radio, etc.);

e) time spent – to specify the amount of time spent on the activity (in minutes/hours).

The participants were encouraged to write down their free comments and observations concerning their language use, the vocabulary they used or anything they paid attention to in a dedicated space below the table with their daily EE exposure. They could also leave this space empty.

The participants were asked to fill in the diary entries daily for 14 days. The diary could be kept in either Polish or English, yet all of the participants decided to complete the diary in English. They could start keeping the diary at their own convenience, yet it was important that once they filled in the first entry, they would keep the diary on a regular basis. The participants were informed about the procedure of keeping a diary and were asked for consent; after receiving their written consent the diary, in digital format with instructions, was sent to the volunteers. The participants were asked to contact the researcher when they were ready with their diary. The next step was to invite them for a follow-up interview.

The aim of the semi-structured interview was to obtain more information about the process of completing the diary, as well as to learn about the participants' beliefs regarding their perceived competence in English and the potential impact of the EE exposure on their language proficiency. The interviews were conducted in Polish. Upon consent, the interviews were recorded and later transcribed. The interviews took between 7 and 15 minutes. At the end of the interview the participants were given a voucher as an expression of gratitude for the time spent on keeping the diaries. The final interview took place in September 2024.

3.3. Data analysis

The questionnaire and test data were subjected to both descriptive and inferential statistical analysis, including Spearman's rho correlation analysis and one-way ANOVA, using the IBM SPSS Statistics 29 software. Emphasis in this article will be placed on the results of the descriptive statistical analysis and the qualitative data.

The open character of the diary allowed for a more detailed description of the exposure to English and for new activities to emerge from the process. Prior to the analysis, all private information was removed from the diary entries and each diary was given a code to ensure data confidentiality. The analysis of the diaries focused on four key areas: the type of EE activities, the time spent on each activity, the context and medium used in a given activity, and individual observations made by the participants. The first round of analysis involved the list of predefined EE activities used in the questionnaire, which was expanded by the new activities that the participants engaged with in the process of self-observation. Next, the total time (in hours) spent on each activity was calculated per day, per week and per 14 days. Additionally, the number of hours of informal exposure was calculated for each participant, per day and in total. Then, each EE activity was assigned to a specific EE category, according to the typology presented in Sunqvist and Uztosun (2023) and the total number of hours spent for each category was also calculated. Both the context of the given EE activities and the observations made by the participants at the end of each entry were analysed following the premises and steps of content analysis (see Krippendorff, 2003; Saldana, 2009), with emerging themes and common threads. As a result, a list of themes that reoccurred in the diary entries was created. Finally, the interview scripts were coded, with emphasis placed on four major code categories: (i) self-perceived L2 competence, (ii) self-perceived language confidence, (iii) the impact of informal exposure on L2 competence, and (iv) insights into the process of keeping a language diary.

3.4. Participants

Since the research aims and questions target a specific group of EFL users, representing the new generation of young adults, purposive sampling was used. The participants had to meet three criteria: they had to be speakers of Polish as their native language, they had to represent Generation Z (born between the years 2000 and 2005) and they had to be proficient users of English on approximately C1+ level. A total of 120 young adults filled out the questionnaire and the vocabulary size test. Participation in the study was voluntary. Out of the 120 respondents, 22 declared their willingness to take part in the qualitative part and left their e-mail address; they were contacted and asked if they would agree to participate in the further stages of research. Consent was collected from 13 participants who agreed to keep the language diary. In the end, 10 participants sent back their completed diaries and participated in the follow-up interviews. More information about the participants who kept the diaries can be found in Table 1 below.

Table 1. Details concerning the participants who completed the language diary

	GENDER	AGE	BACKGROUND	VST RESULT
P1	female	23	from a large city (more than 100,000 inhabitants), with very good access to the Internet at home, spending time abroad more than twice a year, speaking two foreign languages (English and Spanish);	12K
P2	female	24	from a large city (more than 100,000 inhabitants), with very good access to the Internet at home, having read 8 books the previous year, spending time abroad twice a year, speaking two foreign languages (English and Italian)	11K
P3	female	21	from a large city (more than 100,000 inhabitants), with good access to the Internet at home, having read 24 books the previous year, rarely spending time abroad, speaking one foreign language (English)	13K
P4	female	21	from a small town (less than 5,000 inhabitants), with very good access to the Internet at home, having read 11 books the previous year, rarely spending time abroad, speaking one foreign language (English)	7K
P5	female	21	from a small town (less than 5,000 inhabitants), with very good access to the Internet at home, having read 40 books the previous year, rarely spending time abroad, speaking two foreign languages (English & Spanish)	8K
P6	female	22	from a small town (less than 5,000 inhabitants), with good access to the Internet at home, having read 5 books the previous year, spending time abroad more than twice a year, speaking two foreign languages (English & Russian)	9K
P7	female	24	from a small town (less than 5,000 inhabitants), with very good access to the Internet at home, having read 10 books the previous year, rarely spending time abroad, speaking one foreign language (English)	12K
P8	male	24	from a small town (less than 5,000 inhabitants), with good access to the Internet at home, having read 5 books the previous year, rarely spending time abroad, speaking one foreign language (English)	12K

	GENDER	AGE	BACKGROUND	VST RESULT
P9	male	25	from a small town (less than 5,000 inhabitants), with very good access to the Internet at home, having read 13 books the previous year, spending time abroad once a year, speaking two foreign languages (English & Italian)	14K
P10	female	22	from a small city (5,000-20,000 inhabitants), with very good access to the Internet at home, having read 19 books the previous year, spending time abroad twice a year, speaking one foreign language (English)	8K

Source: own study.

4. Results

4.1. Taking a broader perspective – the questionnaire data

The quantitative data analysis revealed that the participants spend the largest amount of their free time listening to music, with an average of almost 20 hours in a week, and using social media, with an average of more than 18 hours weekly (see Table 2 below). Gaming, though pursued by 54% of the respondents, is the third most time-consuming free-time activity (almost 13h/week). The least popular and least frequently pursued activity is watching traditional TV, with 15% of the participants spending less than 2.5 hours a week on average.

Table 2. Time spent on particular informal EE activities on average in a week

INFORMAL EE ACTIVITIES	n	h/WEEK
Listening to music	116	19.90
Using social media	120	18.16
Gaming	65	12.82
Using communicators (e.g., Whatsapp, Messenger)	114	11.64
Watching films/TV series	106	8.93
Watching YouTube	109	8.71
Reading books	101	6
Reading online	117	4.94
Watching TV	18	2.44

Source: own study.

Looking at the extramural exposure to English from the perspective of the broader EE categories (Sundqvist & Uztosun, 2023) where the individual activities are aggravated, EE Viewing dominates the other activities, with more than 40% of the time spent on engaging with the audiovisual content (see Figure 2 below). Music occupies over 20% of the time of an average participant. The third category is EE gaming (14%), followed by EE social interaction (12%) and finally, EE reading and listening (12%). When asked about their language preference when engaging with free-time activities, the majority of the participants (almost 80%) stated they choose content in English, their L2, over content in Polish, their L1.
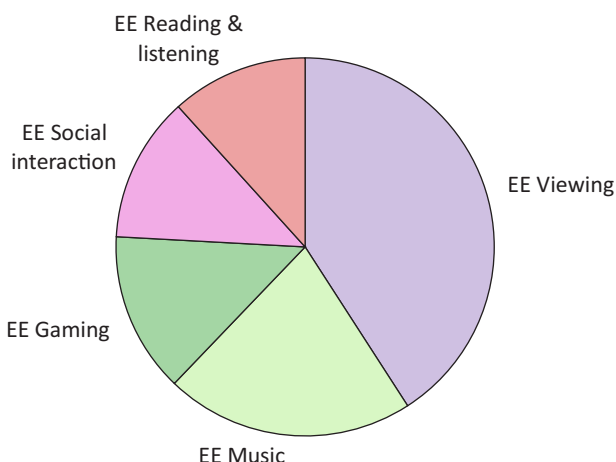

Figure 2. Time spent on average on EE activities – questionnaire results

Source: own study.

As regards the participants' Vocabulary Size Test (VST) results, Figure 3 below illustrates the distribution of points scored by the respondents. The test results were multiplied by 200 and later classified into categories between 1K (1,000) and 20K (20,000), representing the 20 levels of vocabulary size. The participants' final scores ranged between 2K and 18K, with the mean score=10.96, median=11, and SD=2.71. The results of the inferential statistical analysis revealed that it is not the number of hours spent on a given activity, but the type of input that a respondent is exposed to that correlates with their VST scores.[1]

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[1] The detailed results of the inferential statistical analyses investigating the potential correlations between particular EE activities and the respondents' vocabulary size are presented in a separate article (in review).
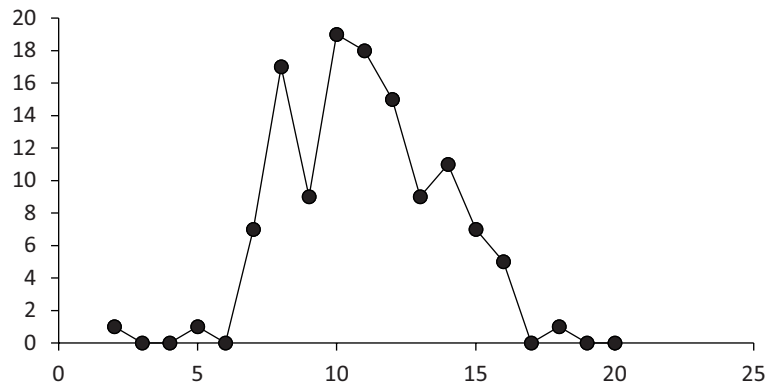
Figure 3. Vocabulary Size Test results – distribution of points

Source: own study.

4.2. A deeper insight into the EE exposure – the language diary data

The quantitative results served only as a backdrop for the qualitative data obtained through the detailed language diary entries kept by 10 participants over the course of 14 days, focusing on even the smallest activities spent in the informal context with exposure to English. The diary data was analysed from three angles: (1) the time spent on EE exposure, (2) the types of EE activities the participants engaged in, and (3) the observations made in the comments section. With regard to the duration of the EE exposure, the total time spent on EE activities ranged between 34.4 hours and 87.4 hours, with a mean score of 52.8 hours. On average, the participants spent approximately 2.7 hours per day on the EE activities.

Exploring the specific EE activities the participants engaged in, Table 3 presents the list of all the activities the participants noted down in their language diaries. Two activities that involved the use of English for professional purposes were removed from the analysis as the main emphasis was placed on the informal context of the EE exposure. The analysis of the diaries reveals that the top eight most common free-time activities represent typical EE activities, but the remaining less popular activities lead to interesting observations. It can be observed that the participants engaged in a wide spectrum of EE activities in their free time, including also EE Niche activities, like singing, working out or learning additional languages with the use of English, which emerged in the analysis. The particular activities that were not considered in the questionnaire are highlighted in Table 3 below in bold.

Table 3. Total time spent on particular free-time activities

Informal EE activities	N	Total[1]
Watching films & TV series (streaming platforms)	9	85h24m
Communicating with people	8	70h34m
Scrolling social media	8	60h14m
Reading a book	8	52h52m
Listening to music	5	46h20m
Watching youtube	9	36h10m
Playing computer games	3	21h10m
Reading online	7	19h35m
Writing & notetaking	**2**	**13h**
Playing online games	**3**	**12h40m**
Listening to the radio/podcasts	**3**	**10h21m**
Taking an online course	**2**	**5h40m**
Working out (a training video in English on YouTube)	**3**	**3h15m**
Listening to an audiobook	**1**	**3h**
Singing	**1**	**2h27m**
Doing research online	**2**	**2h10**
Learning an additional language with English	**2**	**4h**
Watching traditional TV	1	2h
Playing board/card games	**1**	**1h40m**
Watching sports	**1**	**1h40m**

[1] The total number of hours in 14 days spent on the given activity by all the participants.

Source: own study.

Looking at the particular EE categories, the diary data offers a different insight into the EE activities, than the questionnaire results (see Figure 4). Although EE Viewing is still the most popular category, the remaining EE activities differ in distribution. EE Reading and listening appears to take up almost 20% of the participants' free time, whereas in the questionnaire results this category was marked as the least popular. The data also reveals that music can no longer be considered the most popular activity, with only 11% of free-time devoted to this activity. However, what is worth noting is the representation of the EE Niche activities category (6%).

The qualitative thematic analysis of the diary entries, in particular the free comments made by the participants, allowed a more nuanced perspective on the type of EE exposure and its specific context. There are several interesting observations and common threads that could be traced in the
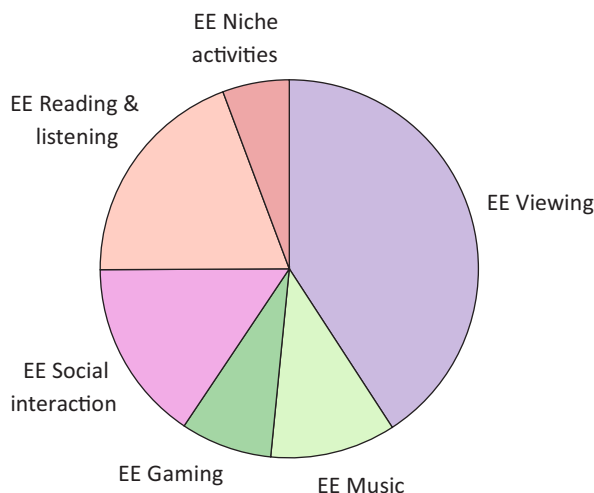
Figure 4. Time spent on average on EE activities – diary results

Source: own study.

diary entries. The first issue worth noting is the use of English as a mediating tool for other foreign languages, which could be observed in four diary entries: two instances of learning Italian with the use of English, e.g., by translating words or grammatical rules [P6 & P9], and two instances of watching TV series in Korean with English subtitles [P2 & P4]. Another commonly recurring theme was putting more trust in English content than in Polish content online. This issue appeared in four diaries: when the participants did some online research to solve mundane, technical problems, such as fixing a printer or fixing problems with pdfs [P1 & P2], and when they did their workout routines [P1, P4 & P6], claiming that the English workout routines on YouTube are better than their Polish equivalents. Moreover, two participants [P5 & P6] made a distinction between listening to music in general and following the lyrics of an artist – the latter often involving intentional listening to an album of a particular artist, such as Taylor Swift or Billie Eilish, in an effort to understand and interpret their lyrics. One of these participants engaged in composing some songs in English herself. The wide range of EE activities that the participants engaged with in their free time exemplifies the input richness and the multimodality of their EE exposure. The format of the language diaries encouraged the participants to note down their own reflections in the self-observation form, which was later elaborated on during the interviews.

4.3. The impact of the EE exposure on the participants' self-perceived L2 competence: interview data

The interviews revealed that the participants view their overall L2 competence in English as either good or very good. They claim they are proficient in English, particularly in reading and listening; yet, they still do not feel confident enough in communicative situations and with spoken language. As regards the *EE Internalized* category, all of the participants admitted they sometimes think in English and occasionally speak to themselves in English when they are alone. Additionally, three interviewees reported having experienced of dreaming in English.

When asked about the possible impact of their informal exposure to English on their L2 competence, the participants made several noteworthy observations. First and foremost, the participants acknowledged the importance of being exposed to everyday language, which introduces them to expressions that could be used in informal settings. This can be best summarized by one participant,

> Actually, I've noticed that I use English more often than, honestly, Polish, when it comes to listening to something or even reading (…) and it also gives me a lot when I watch series because I hear different idioms or words related to everyday life, not so 'academic'. [P6][2]

The participants also emphasized the frequency of exposure to certain phrases and chunks that they either guess from context or explore further. This was often the case with watching films and TV series – if a given word or phrase reappeared in different contexts, the probability of recalling the word was higher. This can be illustrated by the following observation,

> I've definitely learned a lot of vocabulary, and I always noticed that when a word comes up in one series, I don't check it. But when I see it in another, I immediately check it, like I remember that it was from that episode. [P2]

Yet, it was not only vocabulary that the participants noticed being affected by EE exposure. Some participants also considered exposure to the sound of the language to be beneficial in their listening skills and concluded that it allowed them to familiarize themselves with a variety of accents and dialects. As one participant shared,

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[2] All quotes from the interviews were translated from Polish to English by the author.

> Especially activities related to watching or listening to something in the background, where the language is just kind of noise. I think that translates into my ability to listen and pick up phrases and words from audio, even if the quality of the recording is questionable. And I think in those casual conversations with friends, I pick up a lot of slang by watching different series, listening to podcasts, and so on. [P7]

All of the participants expressed the belief that informal exposure to English has an impact on their language competence and confidence in using the language. They pointed to the significance of contextual learning and focusing on meaning. One participant also observed the discrepancy between learning in the formal setting and learning in the out-of-school context. He admitted,

> I feel like I've learned more in life outside of school, but that's not necessarily a bad thing because it seems more natural to me (...) I have the impression that I opened the dictionary on my phone more often while scrolling through social media than when I was sitting here [at university]. [P8]

To conclude, the new generation of English users positively evaluate their L2 competence and value extramural exposure to English in their free time as an important factor in developing their language skills. It should also be mentioned that all of the interviewees perceived keeping the language diary as an enriching and eye-opening experience.

5. Discussion

Both the frequency and type of EE exposure (RQ1) experienced by the participants are characterized by the general dominance of audiovisual input, i.e. *EE Viewing* (see also Peters et al., 2019), including watching YouTube, or scrolling through social media. However, it is listening to music that appears to be the most time-consuming and popular EE activity, which is corroborated by other findings (see, Sundqvist, 2009; Kuppens, 2010; Lindgren, Muñoz, 2013; De Wilde, Eyckmans, 2017). However, it should be noted that it is the type of exposure, rather than the time spent being exposed to the input, that impacts vocabulary range (see also De Wilde et al., 2020). In essence, the more multimodal the input, the more likely there will be vocabulary gains, which can be explained by the cognitive theory of multimedia learning (Mayer, 2001).

The qualitative data obtained by means of the diaries confirmed the trends observed in the questionnaire data, yet it also allowed for a more

nuanced insight into the EE habits of proficient EFL users (RQ2). The results revealed that the participants spend much of their free time on a wide range of EE activities, predominantly those requiring their receptive skills. They are exposed to English through both old and new media, though the vast majority of the out-of-classroom input is provided by Internet-based activities. The diary results point to the emergence of *EE Niche* activities (Sundqvist, Uztosun, 2023), which offer unique ways in which the participants could engage with English in their free time, from doing workouts with an English-speaking instructor online, to playing boardgames with a group of friends. Out of the seven categories of EE activities, the only category missing in the study findings is *EE Digital Creativity*. This might be explained by the limited time of self-observation and the emphasis placed on receptive skills rather than productive skills.

It also needs to be emphasized that the participants admitted to engaging more with English content online, rather than Polish, choosing English as the default language of the internet. More importantly, English also serves an auxiliary function as mediator between other foreign languages, for example, by watching Korean TV series with English subtitles or learning Italian vocabulary through English. It might be concluded that the multimodal input the participants were exposed to offers plurilingual potential. Owing to the inner locus of control (Benson, 2011) in informal exposure to language, the participants exhibited higher levels of motivation and agency, as expressed in the interviews. The focus on meaning, and the freedom of choice in deciding on the type of input contribute to increased self-confidence and perceived self-efficacy in language use, which concurs with the observations made by Arndt and Woore (2018).

Considering the participants' perspective on the impact of the EE exposure on their self-perceived language proficiency (RQ3), it can be concluded that all of the interviewees observed a substantial influence of the informal exposure on their vocabulary range and confidence. They particularly emphasized the relevance of the acquired language and its practical use in everyday situations. In particular, the interviewees' self-evaluation of their receptive skills was positive, yet they assessed their productive skills as insufficient, an observation which would be interesting to explore further in future research projects by confronting their self-reported assessment of their L2 competence with external assessment criteria.

The participants highlighted the role of frequency of occurrence and contextual learning as contributing factors in retaining and recalling new vocabulary items, which supports the claims by Laufer and Hulstijn (2001), and aligns with findings by Elgort and Warren (2014). The participants also appreciated the opportunity to get accustomed to different language accents

and varieties through the audiovisual input. In contrast, the inauthenticity of the input used in their formal education, as compared to their informal exposure, was an issue raised by several students. It seems they recognize the discrepancy between the formal and out-of-classroom setting, also observed by other scholars (see, e.g., Thorne, 2008; Sundqvist, Olin-Scheller, 2013). Finally, almost all participants pointed to the transformative role of keeping a language diary, impacting on the way they attended to the language input they had been exposed to. It might be interesting to further explore the potential of language diaries in raising metalinguistic awareness both inside and outside the language classroom.

6. Concluding remarks

The primary aim of this paper was to explore the range of EE activities and the type of input the new generation of proficient EFL users are exposed to in their free time. These representatives of Generation Z, characterized by extensive engagement with diverse activities across new and traditional media, admit to have benefited from multimodal language exposure. Such exposure provides opportunities for authentic, individualized, and context-rich interactions with the language, which formal education often lacks.

The study is not without limitations. The questionnaire offers a limited insight into the more nuanced EE activities that the participants engaged in in their free time. The data collected by means of the diary and interviews might help in improving the instrument in future research endeavours and provide ideas for more possible EE activities to be included. Another limitation lies in the translingual input of the online content – by scrolling through social media, the users are exposed to content in many languages. It is, thus, impossible to measure the exact time spent on a particular activity solely in English. However, the translingual practice exercised in these EE activities might be an interesting research area to investigate.

The findings highlight the potential of integrating multimodal resources into formal education to foster a more seamless transfer of language skills from informal to structured settings. To bridge the gap between informal and formal learning, educational practices must prioritize incorporating authentic materials, promoting real-life language output, and incorporating extramural English (EE) activities into language programmes to enhance engagement and motivation. The use of language diaries to track the frequency and intensity of EE exposure in itself could serve as an interesting way for teachers to encourage their students to capitalize on the language input they are exposed to outside the language classroom.

BIBLIOGRAPHY

Arndt H.L., Woore R. (2018), *Vocabulary learning from watching YouTube videos and reading blog posts*. "Language Learning & Technology"*,* No 22(1), pp. 124–142.

Benson P. (2011), *Language learning and teaching beyond the classroom: An introduction to the field*, (in:) Benson P., Reinders H. (eds.), Beyond the language classroom. Basingstoke: Palgrave Macmillan, pp. 7–16.

Craik F.I.M., Lockhart R.S. (1972), *Levels of processing: A framework for memory research*. "Journal of Verbal Learning and Verbal Behavior", No 11, pp. 671–684.

De Wilde V., Brysbaert M., Eyckmans J. (2020), *Learning English through out-of-school exposure: How do word-related variables and proficiency influence receptive vocabulary learning?*. "Language Learning", No 70(2), pp. 349–381.

De Wilde V., Eyckmans, J. (2017), *Game on! Young learners' incidental language learning of English prior to instruction*. "Studies in second language learning and teaching", No 7(4), pp. 673–694.

Elgort I., Warren P. (2014), *L2 vocabulary learning from reading: explicit and tacit lexical knowledge and the role of learner and item variables*. "Language Learning", No 64(2), pp. 365–414.

Hannibal Jensen S. (2017), *Gaming as an English language learning resource among young children in Denmark*. "CALICO Journal", No 34(1), pp. 1–19.

Krippendorff K. (2003), *Content analysis: an introduction to its methodology*. Thousand Oaks, CA: Sage.

Kuppens A.H. (2010), *Incidental foreign language acquisition from media exposure*. "Learning, media and technology", No 35(1), pp. 65–85.

Laufer B., Hulstijn J. (2001), *Incidental vocabulary acquisition in a second language: The construct of task-induced involvement*. "Applied linguistics", No 22(1), pp. 1–26.

Mayer R.E. (2001), *Multimedia learning*. Cambridge: Cambridge University Press.

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", No 11(2), pp. 185–212.

Nation P. (2012), *The Vocabulary Size Test*. Online: https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-tests/the-vocabulary-size-test/Vocabulary-Size-Test-information-and-specifications.pdf [Accessed 09.03.2025].

Niitemaa M. L. (2020), *Informal acquisition of L2 English vocabulary: Exploring the relationship between online out-of-school exposure and words at different frequency levels*. "Nordic Journal of Digital Literacy", No 15(2), pp. 86–105.

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", No 69(3), pp. 747–782.

Reinders H., Benson P. (2017), *Research agenda: Language learning beyond the classroom*. "Language Teaching", No 50(4), pp. 561–578.

Saldana J. (2009), *The coding manual for qualitative researchers*. London: Sage.

Sun H., Steinkrauss R., Wieling M., De Bot K. (2018), *Individual differences in very young Chinese children's English vocabulary breadth and semantic depth: Internal and external factors*. "International Journal of Bilingual Education and Bilingualism", No 21(4), pp. 405–425.

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

Sundqvist P. (2024), *Extramural English as an individual difference variable in L2 research: Methodology matters*. "Annual Review of Applied Linguistics", pp. 1–13.

Sundqvist P., Olin-Scheller C. (2013), *Classroom vs. extramural English: Teachers dealing with demotivation*. "Language and Linguistics Compass", No 7(6), pp. 329–338.

Sundqvist P., Uztosun M. S. (2023), *Extramural English in Scandinavia and Asia: Scale development, learner engagement, and perceived speaking ability*. "TESOL Quarterly", No 58(4), pp. 1638–1665.

Sylvén L.K., Sundqvist P. (2012), *Gaming as extramural English L2 learning and L2 proficiency among young learners*. "ReCALL", No 24(3), pp. 302–321.

Thorne S.L. (2008), *Transcultural communication in open Internet environments and massively multiplayer online games*, (in:) Magnan S. (ed.), Mediating discourse online. Amsterdam: John Benjamins, pp. 305–327.