

# Exposure to the English language on the internet: comparing Croatian and French university students

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**Volarić Horvat, Laura**

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IZLOŽENOST ENGLJESKOM JEZIKU NA INTERNETU: USPOREDBA FRANCUSKIH I HRVATSKIH  
SVEUČILIŠNIH STUDENATA

Diplomski rad

Studentica: Laura Volarić Horvat

Mentorica: doc. dr. sc. Stela Letica Krevelj

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University of Zagreb

Faculty of Humanities and Social Sciences

Department of English

TEFL Section

EXPOSURE TO THE ENGLISH LANGUAGE ON THE INTERNET: COMPARING CROATIAN AND  
FRENCH UNIVERSITY STUDENTS

Master's thesis

Student: Laura Volarić Horvat

Supervisor: dr. Stela Letica Krevelj, assistant professor

Zagreb, July 2023

Examining committee:

Dr. Renata Geld, associate professor

Jasenska Čengić, M. Ed., teaching and research assistant

Dr. Stela Letica Krevelj, assistant professor (supervisor)

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## **Abstract**

The widespread use of the internet has resulted in an increasing number of individuals engaging in various online activities. This surge in internet usage has also provided language learners with numerous opportunities to immerse themselves in their target language, leading to exposure and potential language acquisition. Previous research has demonstrated positive effects of such exposure on language learning. Hence, this study aimed to investigate the English language proficiency, level of exposure, and reasons behind exposure among 120 university students from France and Croatia. Additionally, the study sought to determine whether exposure levels were correlated with self-assessed proficiency. The findings revealed contrasting self-assessment results, with Croatian participants rating their English proficiency at the C1 level, whereas French participants assessed themselves at the B1 level. Moreover, the Croatian participants reported higher levels of online exposure across seven out of eight exposure factors. The French students displayed a preference for dubbed internet TV content, primarily due to a lack of focus on the content otherwise or to an inadequate comprehension of English. Conversely, the Croatian students did not exhibit a preference for dubbing, except when it came to animated movies, as they aimed to preserve the content's authenticity. Furthermore, a positive correlation was observed between exposure and self-assessed English proficiency across all exposure factors, except for listening to the radio and playing video games.

Key words: exposure to English, L2, the internet, proficiency, self-assessment, out-of-classroom learning

## 1. Introduction

Over the past decade, there has been a significant increase in global internet usage. In 2021, approximately 4.9 billion people, accounting for 63% of the world's population, were internet users, compared to only 2.2 billion people (31%) in 2011 (International Communication Union, 2021). This growth has been further accelerated by the COVID-19 pandemic, with a more than 10% increase in the number of internet users worldwide during the first year of the pandemic, marking the largest annual increase in a decade (2021). In terms of content language, English continues to dominate the World Wide Web, with 63.6% of websites featuring content in English as of January 2023 (Web Technology Surveys, 2023). This dominance can be attributed to its widespread use in various domains, such as mass entertainment, information and communication technologies, academia, trade, and diplomacy (Northrup, 2013). French ranks fourth, representing 2.5% of content on the internet, while Croatian, expectedly, has a minimal presence, with only 0.1% of websites featuring content in the Croatian language as of January 1, 2023 (Web Technology Surveys, 2023).

The concept of language exposure is commonly discussed among the general public. For instance, in Croatia, it is often claimed that individuals or people they know have learned to speak German by watching German cartoons during childhood, or that individuals living near Slovenia can manage in Slovenian, unlike those residing in other parts of the country. Another prevailing belief is that the French and Germans struggle with English because they dub English content into their native language on TV or in cinema. These examples highlight non-institutional exposure to foreign languages. However, significant differences in foreign language exposure through the internet, television, and films still exist between countries (Lindgren & Muñoz, 2014, p. 107). In France, for instance, it is common to hear people claim that "the French are dummies when it comes to English," implying a national tendency or lack thereof for a specific skill. Given the contextual and individualized nature of language access, comparing independent learners can be challenging (Tyne, 2012). Nonetheless, this thesis aims to compare the exposure to the English language among two distinct groups of university students: French and Croatian. The study seeks to determine whether one group assesses their English proficiency more accurately than the other and ascertain if they differ in their degree of



exposure to English. Furthermore, the research aims to identify disparities and reasons for their exposure to English-language internet TV content and examine the correlation between self-assessed exposure and proficiency in the language. It is anticipated that French university students have less exposure to English compared to their Croatian counterparts. No available data on the extent and types of exposure in the general French or Croatian population, or among university students in either group, has been found. Additionally, no previous research has compared these two populations in terms of English language exposure. Thus, this paper aims to contribute to the field by uncovering differences in English exposure between the two groups.

The paper begins with a presentation of a theoretical background relevant to the topic, providing an in-depth discussion of key terms. It is followed by a review of empirical studies similar to ours. Next, we present the methodology, results, and discussion of our study. We also consider limitations of the study and offer suggestions for further research.

## **2.Theoretical background**

### **2.1. Out-of-classroom exposure**

In the present digital era, learners have unprecedented access to authentic sources of exposure to their target language, particularly when it comes to English. According to Berns et al. (2007), school is no longer the sole or most significant source of contact with English, as the omnipresence of the language in the lives of young people and its multifunctional role have substantial implications for language teaching (p. 115). Muñoz and Cadierno (2021) highlight that increased exposure to foreign languages through the internet, audiovisual media, and social platforms offers opportunities for language learning outside the traditional classroom context (p. 186). Exposure, in this context, refers to the act of encountering and engaging with the target language (Azzolini et al., 2020; Peters, 2018; Peters, 2019).

Out-of-classroom language exposure is “any kind of learning that takes place outside the classroom and involves self-instruction, naturalistic learning or self-directed naturalistic

learning” (Benson, 2011, p. 8). It is considered crucial for the development of language proficiency (Verspoor et al., 2011, p. 165). Exposure to input can be viewed as the initial stage of a learning cycle. Although second language acquisition involves significant individual differences, some researchers have proposed an ideal learning cycle to maximize learning outcomes. Kolb (1984), as cited in Dörnyei and Skehan (2003), suggests that the learning process ideally begins with concrete experiences, where exposure to input can be seen as representing the concrete experience (p. 605). Peirce (1995), in his study on the importance of social context in second language acquisition (SLA), argues that exposure to and practice in the target language are essential for successful SLA (p. 15). The benefits that learners expect to derive from language acquisition are influenced by their day-to-day social interactions (Hurst et al., 2013). Therefore, increased exposure to the target language provides learners with more opportunities to acquire it (Krashen, 2003, as cited in Rodrigo, 2006, p. 12).

The difficulty with defining exposure is that many researchers refer to it, yet without further defining it. Krashen (1985), for example, refers to exposure to comprehensible input when arguing that “languages are acquired in order to be used only through exposure to comprehensible input under non-threatening conditions” (as cited in Benson 2011, p. 11). Indeed, Azzolini et al. (2020) deem “exposure to this informal way of acquiring a second language” very important, only to hasten to add in the very same context that “higher levels of input are usually needed for acquiring good levels of proficiency” (p. 7), as if exposure and input referred to the same concept. Todeva and Cenoz (2009), however, do differentiate between exposure and input; they infer that, unlike exposure, input is comprehensible and negotiated (p. 59). Kozhevnikova (2019), who studies exposure and vocabulary acquisition, says that exposure is a crucial element for vocabulary acquisition even with individuals with high aptitude for language learning. She claims that “even those who possess good memory tend to forget words (...) since learners mostly study in a monolingual environment with insignificant exposure to their second language” (p. 433). Similarly, for Sorace (2003), continuous exposure is key to maintaining good levels of competence. In her chapter on near-nativeness, she argues that adult learners can be assumed to have progressed to the furthest attainable proficiency levels once

they have become virtually undistinguishable from native speakers but all the while continuing to benefit from full exposure to the second language (L2) (p. 131). Ellis (2003) reminds that for constructivists language is just another form of learning and that, as such, “it is acquired using generic learning mechanisms”. He further elaborates that “we learn chunks from the very beginning of learning a second language” and that with increasing exposure the intake of chunks gradually improves in all respects (pp. 74-75). A more lenient outlook is presented by De Angelis (2007). By complaining that in general SLA literature, “some of the second language learners used in research may have been exposed to some other non-native language in their lives” and that, subsequently there is a “possibility that third or additional language learners may have been used in place of L2 learners in some occasions” (p. 6), she might be inferring that mere prior exposure to an L2 prior to an L3 should in fact qualify such learners as L3 learners.

Exposure is a term mostly used by researchers in the context of informal, unplanned, incidental, naturalistic or implicit learning. They are at times used interchangeably. For Kerka (2000) this type of learning is called “unplanned” learning, and she uses the term synonymously with unintentional and incidental learning. She says that it is a result of engaging in other activities, such as social interactions, problem-solving or being forced to accept or adapt to situations, in the workplace or during the use of computers. Kuppens (2010) calls exposure to various media a form of incidental language acquisition. Incidental learning is “learning without the intent to learn or the learning of one thing (e.g. grammar) when the learner’s primary objective is to do something else (e.g. communicate) (Schmidt 1994 as cited in Schwarz, 2013, p. 17). Rodrigo (2006) concluded based on her study that “grammar can be acquired incidentally at the intermediate level through extensive exposure to listening and reading, when language acquirers do not focus on form” (p. 12). Schwarz (2013) sums it up best: “foreign language vocabulary acquisition can benefit from activities in which learners take up words as a by-product, similar to the acquisition of their first language (p. 17). Azzolini et al. (2020) use informal exposure and informal learning interchangeably. What Kerka (2000) defined as incidental, unplanned or unintentional learning, De Wilde et al. (2018) name informal learning, unlike formal learning, which is “structured by a teacher who presents and explains the learning

content in a systematic way” (p. 3). They further describe it as arising from everyday activities. In this type of learning, people learn from peers, which means that the learning content is undefined because it arises from the social context. Besides that, it is therefore not assessed. The idea that foreign language acquisition proceeds best through naturalistic learning is supported by Krashen (1985), who argues that languages are acquired in order to be used only through exposure to comprehensible input under non-threatening conditions (as cited in Benson 2001, p. 16).

Even if exposure is a strong link in SLA, even when abundant, it is not sufficient for perfection. Sorace (1993) says that unlike children, who can perfectly master any language they are exposed to, adults usually show imperfections when compared to native speakers even after long periods of exposure. She explains further than “even those who are capable of nativelike performance often have knowledge representations that differ considerably from those of native speakers” (as cited in Sorace, 2003, p. 130)”. In the same vein, Gass (2003) warns that while for children, be it for L1 or L2, “given adequate exposure, normal intelligence and normal social conditions children can be expected to learn the language(s) of their caregivers incidentally and fully”, for adult SLA it is not so. She informs that “L2 instruction is likely to be necessary for some aspects of SLA” (p. 258).

### **2.1.1 Degree of exposure**

With early bi- and trilingual acquisition, there are claims that language maintenance and exposure are closely related: “the higher the exposure to the minority language, the more likely is language maintenance” (Braun & Cline, 2010, as cited in Braun, 2012, p. 425). For sequential SLA, there is more discussion. Second language acquisition is a complex system with multiple variables. According to the Dynamic Systems Theory (DST), second language development is a dynamic process, which means it is self-organizing, dependent on initial conditions, sometimes chaotic, with changes over time and what is more, it shows discrepancies between input and effects (De Bot, 2008). The complexity is manifest in multiple factors of SLA, such as the level of overlap between L1 and L2, instructional context, motivation, age and aptitude and the amount and type of interaction and exposure to input (Larson-Freeman, 1997 as cited in De Bot, 2008). This is why to claim what amount of exposure to an L2 is needed for the process to be successful

is a true challenge. Whereas there are some who boldly suggest “to estimate the exposure to different languages in absolute hours as well as in relation to each other” (De Houwer, 1995 as cited in Cantone 2019, p. 3) so as to reach an exact solution, others claim the answer has not yet been reached at all: “the exact amount of hours of exposure necessary to acquire a language is still undefined” (Cantone, 2019, p. 1). Researchers, however, generally agree that exposure is beneficial since “the language that second language learners produce and understand changes as they have more exposure to the language” (Lightbown & Spada, 2013, p. 72)”, which Azzolini cites in a slightly different manner by stating that “the degree of exposure to this informal way of acquiring a second language is very important” (Lee 2002; Rodrigo et al., 2004 as cited in Azzolini, 2020, p. 7). Cantone (2019) wonders if quantitative differences might even prove crucial for L2 acquisition, especially for young learners: quantitative differences in exposure could lead to “becoming monolingual or at best a receptive bilingual or just not speaking the language” (p. 2). For some learners, or to use Rodrigo’s (2006) term, “acquirers” (p. 13), the only opportunity for exposure is in the classroom, thus receiving no out-of-classroom exposure whatsoever. That is especially true for older learners: “older learners, especially students in foreign language classrooms, receive far less exposure, perhaps only a few hours a week. Indeed, a typical foreign language student will have no more than a few hundred hours of exposure, spread out over a number of years. (Lightbown & Spada, 2013, p. 38). Even then, complain Lightbown and Spada (2013), teachers might deprive learners by switching to their students’ L1 for classroom management (p. 39). In favor of the idea of how beneficial exposure is, is the finding that indicates the opposite: L1 speakers of German who left Germany earliest showed the highest degree of language attrition. Not those who moved to a non-German speaking country, but those who haven’t been exposed to it the longest. (Pavlenko, 2012, p. 462).

However, instead of the overall amount of exposure, which was just proven important, the type and quality of input may hold the key to positive learning outcomes (Lopriore & Mihaljević Djigunović, 2011). There are various ways learners may be exposed to a language outside of the classroom. Many of these have their online counterpart, a means of consumption that has replaced the traditional, original types of exposure. The types can be listening to English

programs on the radio, watching English programs and movies on TV, speaking with native speakers of English online, surfing the internet using English, reading books, magazines and newspaper in English, playing video games, using social media, listening to songs etc. (Al Zoubi, 2019; Azzolini et al., 2020; De Wilde, 2018; Munoz, 2011; Peters, 2018, 2019).

### **2.1.2. Age of exposure, bilingualism and multilingualism**

There is a hypothesis according to which unless exposure to a language begins before the offset point of the critical period, “proficiency in that language will never be identical to that manifested by those whose exposure began at birth” (Aronin & Singleton 2012, p. 102). Critical Period Hypothesis (CPH) is thus “the hypothesis that animals, including humans, are genetically programmed to acquire certain kinds of knowledge and skill at specific times in life” (Lightbown & Spada, 2013, p. 29) and it “closes abruptly at a particular maturational point” (Aronin & Singleton, 2012, p. 102). CPH is usually associated with L1 acquisition, but there are also hypotheses “that there is a critical period for second language acquisition just as there is for first language acquisition” (Lightbown & Spada, 2013, p. 92).

A child might only be exposed to a single language from birth. According to Cook, there are two perspectives on the matter, a monolingual and a bilingual one. The monolingual perspective sees L2 users from the point of view of the monolingual first language (L1) user. When, having already acquired their L1, a learner takes on another language, an L2 user’s proficiency is compared to an L1 user’ one: “the second language is added on to the speaker’s first language, something extra; the L2 user’s proficiency in the second language is measured against the sole language of the monolingual” (Cook, 2016, para. 2).

However, Aronin and Singleton (2012) point to the facts about the extent of multilingualism in the world so as to propose that a very high proportion of children are inevitably exposed to more than one language from their earliest years (p. 99). In fact, it has been estimated that most children across the globe speak more than one language as they grow up (Tucker, 1998 as cited in Paradis, 2007, p. 15). Age of exposure might however not be the same for all of these bi- and multilingual children, so that eventually this affects their ultimate proficiency in each of the languages (Paradis 2007, p. 15).

A frequent matter of discussion is whether the age at which exposure to a given language “begins is a (or indeed *the*) determinant of the level of ultimate attainment in the language in question” (Aronin & Singleton, 2012, p. 102). A distinction has thus been made by researchers between simultaneous bilinguality and sequential or consecutive bilinguality. “Simultaneous bilingual children are those whose dual language learning experiences began at birth or at least before the age of 3” (de Houwer, 1995; McLaughlin, 1978 as cited by Paradis, 2007, p. 15)”. Sequential or consecutive bilinguality “refers to situations where an additional language or additional languages are acquired later in childhood (...) or indeed in adolescence or adulthood” (Baker, 2006 p. 7), and there are no exact boundaries between simultaneous and sequential bilingualism” (p. 11). As previously mentioned, Cook observes there is also the bilingual perspective, and it refrains from comparing an L2 user’s competence to that of an L1 user, as whether L2 user’s final ability is identical to that of a monolingual native speaker is beside the point. Instead, notes Cook (2016), “the other languages are part of the L2 user’s total language system, each language potentially differing from that of someone who speaks it as a monolingual” (para. 3). What is important is the so-called multi-competence, or “the knowledge and use of two or more languages by the same individual or the same community” (para. 4).

In this paper we are dealing with sequential bilinguals, i.e. with users of a language to which they have not been exposed to from birth. There has been a lot of discussion on the level of acquisition a person needs to reach to be called a bilingual. Lin and Li (2012) notice that it is not languages but people that come into contact and “when speakers of one language are exposed to another language over a sustained period of time, they will become bilingual, albeit to differing extents” (p. 470). Aronin and Singleton (2012) confirm that the state of development of a certain language by a multilingual user will depend on the extent to which they have had occasion to be exposed to and to interact in the language in question relative to his/her other languages (p. 115)”.

The element in common to many of the attempts at reaching an answer to how a sequential bilingual comes about seems to be exposure to the target language out of the classroom.

## **2.2. Previous research on the effects of exposure to English in an online environment**

The internet has become a more heterogeneous place and the effects of exposure to popular media changed over time (Verspoor et al. 2011, p. 162). This technological pluralism, coupled with the novelty of tools in language education and the scarceness of empirical data so far highlights the complexity of the field (Zourou, 2012, p. 2). Today, vocabulary development is both mediated and shaped by digital technologies, such as the internet, personal computers, and mobile devices (Elgort, 2018, p. 2). In 2018, Elke Peters reported on a study she had conducted on the effect of out-of-class exposure to English language media on learners' vocabulary knowledge. She aimed at determining the participants' exposure to as many media as possible, she focused on: listening to songs, watching movies and TV programs with and without subtitles, playing computer games, reading books, magazines and comics and most importantly visiting websites, all of the mentioned in English. The author claims that in spite of the many studies done on a similar sample and on similar topics, the relation between length of instruction such cohorts receive, gender and their out-of-classroom exposure is still to be determined.

First, an answer to the question of frequency and types of exposure to English language media the participants received needed to be reached. Then, the author explored whether there was a relationship between learners' vocabulary knowledge and their current out-of-class exposure. 79 Flemish participants were part of the study, out of which 50 were in their fourth year of high school and 32 the first year of university. A frequency questionnaire was distributed, where they were asked to tick off a statement on a frequency scale to indicate how often they came into contact with English through media. They were also given a vocabulary test. It was a frequency-based test called VocabLab test. 120 vocabulary items from a corpus were equally distributed into four frequency levels and the right answer was meant to be indicated among five possible answers for each word as a means of classification. The participants turned out to be regularly exposed to songs in English, to movies and TV programs in English with and without subtitles, they were also exposed to English while playing computer games and browsing the internet. Among all of the types of exposure in question, the internet,



audio-visual content, computer games and songs were by far more consumed than books and magazines. The same tendency was found with both age groups, however when it comes to gender, a single difference was identified, that significantly more male participants reported playing computer games. When it comes to vocabulary test results, university students performed better both on the test as a whole and on each test section. The author found a positive correlation between the results on the VocabLab test and the following types of exposure to the English language: browsing websites in English, watching movies and TV programs without subtitles, reading books and magazines. Gender did not play a role, and out-of-class exposure was proven beneficial for the learners' vocabulary knowledge.

The following year, in 2019, the author did an analogous study, this time intending to ascertain whether Flemish Dutch L1 foreign language learners' out-of-school exposure differs for their two different foreign languages, French and English. Peters (2019) wondered what impact types of out-of-school exposure have on learners' vocabulary knowledge in French and in English. Just as in the previous study, a questionnaire on their exposure to both L2 languages was distributed, followed by a vocabulary test for each of the languages. The participants proved to be significantly more exposed to online media in the English language (playing online computer games, visited English language websites and used English more often online) than to French language media. When it comes to the vocabulary test, the participants' score on the English test was consistently higher than on the French vocabulary test, although the participants had received three more years of formal instruction of French.

Let us now present studies investigating L2 proficiency in English but for specific types of exposure.

### **2.2.1. Exposure to audiovisual content in English**

Various studies have already shown benefits of exposure to audiovisual content in a foreign language, both with and without subtitles. Previous research on adults has shown that watching foreign-language television shows with subtitles can result in inadvertent foreign-language learning (d'Ydewalle & Van de Poel, 1999). Icelandic primary school students who had no prior exposure to English learned words and phrases by watching English-language films with

Icelandic subtitles (Lefever 2010, as cited in Lindgren & Muñoz 2014, p. 107). Subtitling is not only beneficial for word learning but also for expressions and sentences, but also different pronunciations (Koolstra & Bentjes, 1999). However, children tend to learn a foreign language more quickly than adults do when only soundtracks, rather than the subtitles, are used (d'Ydewalle et al., 1999). Mitterer and McQueen (2009) back this finding by confirming in their study that native-language subtitles could create lexical interference, while foreign language subtitles boosted speech proficiency.

Over the last couple of decades, internet television has become more and more popular. Modiano (2005) finds that students' access to English outside school "increased dramatically from the mid-1990s with the widespread use of information technology" (as cited in Sundqvist, 2009, p. 2). One of the most popular streaming services, Netflix, is said to be "altering viewers' expectations of what, how, and when they watch TV by offering a wide selection of TV shows and movies, providing ad-free streaming, and delivering episodes seamlessly after they have been finished watching them" (Matrix 2014, p. 120). In March 2019 PwC service surveyed a nationally representative sample of 1000 Americans between the ages of 18 to 64. According to the survey, consumers used their subscription-based video on demand services the most such as Hulu, Netflix, or Amazon Prime, with 57% reporting daily usage. (*Streaming ahead*, 2019). In Europe similar data was found when it came to adolescents (Te Velde et al., 2007), and in Croatia as well, where adolescents watch TV around 3 hours a day. (*Kako djeca gledaju*, 2015). As a result, concludes Matrix, "viewers not surprisingly are watching more television, including in larger doses at a time" (Matrix, 2014, p. 120).

In 2018, three researchers, Ashcroft, Garner and Hadingham, did a study on incidental learning through watching movies, with a particular interest in vocabulary acquisition. According to the authors, learning vocabulary is essential to becoming fluent in a language, and abundant access to audiovisual, especially streamed video content, can be used to facilitate incidental vocabulary learning. The aim of the study was to assess how watching a single English-language movie with English subtitles affected the capacity of Japanese students to remember a set of terms from the script (Ashcroft et al., 2018, p. 138). The one research question was whether a full-length movie with captions in English results in an immediate increase in word knowledge

for Japanese learners of English as a foreign language. The participants were 187 undergraduate students from a Japanese university who were all native Japanese speakers enrolled in an integrated skills English course. They were divided into two groups: the experimental (N=143) and the control (N=44). All participants had received formal English instruction for at least seven years. 85 participants were male and 102 female, with ages ranging from 18 to 23. Results of self-reported English proficiency tests were also gathered. *Back to the Future* was chosen for the experiment, for researchers thought the participants would be familiar with and motivated by the movie, which therefore serves as "meaning-based input" (Nation, 2007 as cited in Ashcroft et al., 2018, p. 138). Using a web-based vocabulary profiling tool, the movie script was examined to determine the frequency of occurrence of the words within the script and two corpora. Words having a combination of higher frequency in the script and lower frequency in the corpora were given priority when creating a list of words. The test had 42 items total. The same pre- and post-tests were administered to verify vocabulary gain. Each item contained the target word's L1 translation, a contextual English sentence without the target word, and the target word's head letter so as to prevent the participants from proposing synonyms or guessing.

From the list of 42 words, the analysis showed a substantial mean gain of 1.77 (4.2%) words per student, that might be attributed to seeing the movie. This study supports the hypothesis of the authors that incidental vocabulary learning can occur when watching movies with captions.

In the Croatian context, a case-study was done in 2019, on a 9-year-old L2 learner of English (Hendrih & Letica Krevelj, 2019). The aim of the study was to examine the effect of extensive exposure to TV content in L2 on child L2 vocabulary acquisition. It was done on a highly motivated little girl born to a family who are all proficient in English, and raised in an urban environment. Prior to the study, one of the authors had been carrying out play sessions in English with the girl in order to sustain and develop the knowledge she had reportedly acquired due to high exposure to the English language from various sources. Her exposure started when she was three and she reportedly watched TV for three hours on weekdays and half the amount on weekends. She only began her formal instruction of English when she was seven. Her parents provided the researchers with information on her learning background, and the data on the

learner's production was gathered in six recorded individual sessions of unstructured play and conversations on everyday topics, in the learner's home. The conditions were made as usual as possible. The vocabulary knowledge the girl manifested was the strongest both in the areas of the learner's interest and consequently on TV content she had most been exposed to. The evidence they provide for that conclusion are that the learner avoided metalinguistic questions as she was not familiar with the English, or any, meta-language, nor was she able to elaborate why a certain form may or may not be said. Besides, she mostly used informal vocabulary and spoken discourse, which the authors link to typical features of cartoon language. The authors therefore conclude that the learner's above-average L2 vocabulary knowledge was a result of exposure to L2 media.

### **2.2.2. Exposure to music in English**

The Competition and Markets Authority, a UK's government department, conducted a study on listening habits in the UK in 2022. According to the study, more and more people stream music, meaning they do not possess it but instead only have online access to it. Not only is streaming now the primary means for artists and labels to distribute music, but "today music streaming accounts for more than 80% of music sales. This has nearly doubled since 2017" (*Music and streaming*, 2022, p. 3). Younger people stream music the most, with 77% of 15-34-year-olds streaming music on a weekly basis compared with just 19% of those aged 55 or more (pp. 3-4). Similar results were published by the French national music center CNM. In their 2022 study on listening trends, they note an expansion of the scope of audio and video streaming (*Le Centre national*, 2022). While not one activity in itself is a guarantee of a successful SLA, neither is listening to music itself. However, some researchers have claimed listening to songs in a target language can prove beneficial for a successful SLA. Grau (2009) and Summer (2010) indicate that music is the most frequent source of English outside school exposure type. The research evidence on the impact of out-of-school English input that is available so far thus indicates that music and other media may play a crucial role in providing students with learning opportunities and that their English skills can indeed benefit from such additional exposure (Schwarz, 2013, p. 25). Moreover, Berns, et al. (2007) point to a general beneficial influence of English songs (p. 107). Another aspect related to music when it comes to SLA is that of feeling good about oneself

or inducing a positive attitude towards the target language: “there is a solid relationship between music and continuing motivation: unmotivated learners became motivated because of the presence of music” (Israel, 2013, p. 1362).

A study conducted by Schwarz (2013) explores whether intermediate Austrian learners of English as a foreign language acquire vocabulary incidentally, by listening to and engaging with English pop songs outside school. She also intended to ascertain which factors influenced incidental vocabulary acquisition from pop songs. 74 Austrian secondary school students aged 13 to 15 were engaged in this project. They had either German (82.4) or other languages other than English as their L1. The study was comprised of a lexical and curricular analysis of pop song lyrics so as to ensure the target words were not taught explicitly in school, then a survey and a quasi-experiment. A quasi-experiment is an experiment lacking one of the key features, such as, random participant allocation to experimental groups and control groups, featuring control groups altogether, pre- and post- tests, interventions to the experimental groups, and isolation and control of independent variables (Cohen et al., 2011 as cited in Schwarz, 2013). A vocabulary pre-test was handed out to the participants. Then a questionnaire was distributed in order to gather background information about them and their habits of music consumption. Finally, since this study concerns incidental vocabulary acquisition in out-of-school contexts, it means the learning had already taken place before the study. This is why priming was used as an elicitation method for retrieving meanings of lexical target items because text and tune were probably heard at once, presumably many times as well. Musical stimuli from the pop songs in which the target words occur were used as primes, all the while taking caution so as not to play extracts containing the target words themselves. This is why finally a vocabulary post-test with the intervention of musical primes was done by the participants. The same vocabulary items were used in the pre- and post-test. The results showed that for 91.9% of participants English was the most frequent language of songs they listen to. There was also a statistically significant difference between students’ performance on the vocabulary pre- and post-tests. Since the students recalled the target words significantly better when reminded of the connection to a song through a musical prime, the author claims “it can be inferred that in all likelihood they encountered these words in the context of the pop songs and learnt them through repeated

exposure to and engagement with these songs (Schwarz, 2013, pp. 36-37). The results indicate that students do learn vocabulary incidentally from English out-of-school input, though not to a great extent. However, it is a valuable tool to support or explicit levels of vocabulary knowledge, especially if the students are genuinely interested in such a content.

### **2.2.3. Reading online: surfing the internet, reading blogs, e-books and news and chatting in English**

Whether reading in a foreign language can be a source of incidental language has already been discussed and pointed to by various researchers, such as Brown (2008) and Horst (2005, Horst et al., 1998). They all focused on vocabulary acquisition. Rodrigo also found that at the intermediate level, through extensive exposure to listening and reading, grammar can be acquired incidentally as well, when language acquirers do not focus on form (2006, p. 12). There have been studies from the more recent decades, which took into consideration the popularity of the internet and the subsequent trends of online written consumption of English. Sundqvist (2009) investigated the impact of out-of-classroom English on vocabulary and oral competence. She found that surfing the internet, reading and playing video games had greater effects than music, television, or movies. For her research, the author gathered information on the teenagers' exposure to English outside of school using questionnaires and language diaries. Using the internet, reading, watching TV or movies and listening to music were among the activities mentioned by the participants. Several international speaking exams were used to measure the participants' oral skills, and two vocabulary tests to verify their vocabulary knowledge. Exposure had a considerable and favorable impact on both speaking and vocabulary, but vocabulary was more influenced.

Researcher Eva Olsson from Gothenburg University is a secondary school teacher. She reports in her 2012 paper "Everything I read on the internet is in English" that her Swedish pupils keep amazing her with the fluency and range of vocabulary they demonstrate. She is doubtful the two hours of school English might explain this proficiency. The author then wondered whether it was about the impact of extramural English on Swedish 16-year-old pupils'

writing proficiency and what differences were manifested in two different text types they produced, between pupils whose frequency of exposure to extramural English differs. 37 16-year-old pupils participated. They were asked to report on what kind of and how often they had contacts in English; on the one hand whether they chatted, sent e-mails, sent text messages in English, or on the other hand whether they read blogs and other websites or manuals and magazines in English. A frequency scale was given. A total score was calculated for each pupil. The majority of the pupils, 76%, claimed that they surfed the internet every day. Nearly half had written contacts in English. Most importantly, 22% of all pupils read newspapers in English. Slightly more than a half of the boys and 73% of the girls regularly read blogs and visited other websites in English. Then the participants were asked to fill in a language diary, where they were asked about their extramural contacts in English, both actively, using English, and passively, being exposed to English. They were later given two written tasks to do, a letter and a newspaper article. A collection of texts written by the pupils was created so as to create a learner corpus. Learner corpora are made up of continuous stretches of words, both erroneous and correct, along with information on design criteria, such as task settings and background information on the learner (Granger, 2002 as cited in Olssen, 2012, p. 51). 74 texts were collected from two other classes on the same topic, but their exposure background information was not collected.

The criteria looked into text length, sentence length, word length, variation of vocabulary, use of infrequent words. The clearest results were found in the analysis of sentence length and in the use of infrequent vocabulary. There was no significant correlation when analyzing text length and reported frequency of extramural contacts in English. There was, however, a correlation found in the first written assignment, letters: “pupils with many extramural contacts are more likely to write longer sentences than pupils with few such contacts” (Olssen, 2012, p. 58), but there were no such findings in newspaper articles. Word length, on the other hand, seemed to correlate with extramural contacts in the newspaper articles. Almost all students having had many extramural contacts varied their vocabulary to a great extent. Finally, many pupils do not use any unusual words in their texts. In articles, unlike in letters, there was a correlation found between frequency and the use of infrequent

vocabulary. In conclusion, the results of the corpus-based analysis point to an impact of extramural English on writing proficiency. Pupils with frequent extramural contacts excelled in informal contexts, such as a letter, they wrote longer sentences and varied their vocabulary more than those with a less frequent exposure to extramural English. They also used more unusual and longer words and showed a greater register variation.

#### **2.2.4. Exposure to English playing online video games**

Several studies have questioned and confirmed benefits of playing video games in English on language proficiency. Peterson (2010) mentions claims regarding the importance of playing internet-based games for vocabulary acquisition and the development of communicative competence (p. 429). Jensen (2017) conducted a study on gaming as an English language learning resource among young children in Denmark and his results back Peterson's claim, as his results show that gaming with both oral and written input are significantly related to vocabulary scores (p. 10).

Pia Sundquist's study from 2009 on out-of-classroom exposure to English as L2 was already mentioned in this paper. In that study, she analyzed the many types of content to English L2 learners might be exposed to, and found that surfing the internet, reading and playing video games meant a lot for vocabulary knowledge and oral competence in English. In 2012, along with Liss Sylvén, she did a study focusing specifically on gaming as out-of-classroom English L2 learning and L2 proficiency among young learners. The authors set off by saying that thanks to digital games, massively multiplayer online role-playing games (MMORPGs), L2 English learners have a "linguistically rich and cognitively challenging virtual environment" (Sylvén & Sundquist, 2012, p. 302), where they have vast opportunities for scaffolded interaction in L2. For the study, 86 11–12-year-old L2 English learners in Sweden were asked to fill out a questionnaire on their out-of-school contact with English as well as on their demographic background information (L1, travelling abroad, self-confidence in English), keep a language diary over one week's time, measuring how much time the learners spent doing out-of-classroom activities (playing digital games, watching TV, listening to music, watching films, using the internet, reading books, reading newspapers/magazines and other activities), and do three



proficiency tests: on reading, listening comprehension and vocabulary. The language diary revealed that on average the group spent 9.4 hours per week on out-of-school activities in English. Playing digital games was the most popular activity among the students. This and other studies show an uneven gender participation in the games, in favor of boys (Sundquist, 2009; Olsson 2012; Jenssen, 2017). According to the results of the questionnaire, the most frequently mentioned games were Call of Duty, Counter-Strike, WoW, The Sims, Restaurant City and Zoo Tycoon. The participants were divided into three groups based on their self-reported activities: the “non-gamers”, who did not play anything at all, the “moderate gamers” who played some but not much (the largest group) and the “frequent gamers”, with an average of 9.7 hours a week spent on gaming. The vocabulary test indicated that with each digital group the total score improves; frequent gamers had a higher score than moderate gamers, who had a higher score than the non-gamers, with a statistically significant difference. When it comes to the reading and listening comprehension tests, the scores resemble those on the vocabulary tests for all the three digital groups respectively: again, the higher the frequency of gaming, the higher the test scores. The results, in conclusion, back the popular claim that there is indeed a positive correlation between English L2 proficiency and the time spent playing digital games. Authors do warn that there are many variables, such as prior English knowledge, aptitude or preferred learning style, that need to be controlled for if the study wanted to be more reliable.

### **3. The study**

The aim of the study was to examine whether learners in two different sociolinguistic contexts estimate their own proficiency in the English language in a different way. We wondered if the two groups had different degrees of exposure to the English language in an online environment. We also judged whether depending on the context the two groups had different reasons for the exposure to internet TV content in English, and if the exposure they had received correlated with how they estimated their own proficiency in English.

#### **3.1. Research questions**

- I. Do French and Croatian university students self-assess their proficiency in the English language differently?
- II. Are university students in French and Croatian universities exposed to English to a different degree?
- III. Is there a difference between the two groups' preferences and reasons as to how they watch internet TV content in English?
- IV. Is there a correlation between self-assessed proficiency in English and the exposure to English at the sample level?

#### **3.2. Croatia and France as language learning contexts**

Let us first illustrate the two contexts with official data on the relations the respective peoples have with languages. In 2016, 19% of the Croatian population over the age of 15 watched TV programs on the internet (Agencija za elektroničke medije , 2016, p. 11), and in 2019, 18% of the French reported the same thing (Insee, 2019, p. 1). At the same time, according to Eurostat, 73.2% of the Croatian population aged 25 to 64 self-reported that they spoke at least one foreign language, and the same can be said for 60.1% of the French (Eurostat, 2019).

When it comes to formal education, in 2019 both countries have received EU Council Recommendation on a comprehensive approach to teaching and learning of languages, whereby the multilingual competence has been pushed to the forefront of the European education

vision, encouraging learning at least two foreign languages in school (*Council Recommendation*, 2019, para. 3). In Croatia, by enrolling in the 1st grade of primary school (at 6 or 7 years of age), the student begins to learn a foreign language, which is compulsory until the end of primary school education, and from the 4th grade of primary school (age 9 or 10) students can take up another foreign language class (*Uputa ravnateljicama i ravnateljima*, 2020, p. 2). In the last two centuries, German and Italian had mostly been taught in Croatian schools, and English joined them only before the beginning of WWII, and so to a lesser extent. After the war, Russian was mostly taught in Yugoslavia, and in the 1950s, English and Russian became the leading languages in Yugoslav schools. Already in the 70s, Russian was giving way to German, so that in 1974, 40% of primary school students learned English, 30% German and less than 25% Russian. (Kapović, 2022, p. 286). Officially, France offers its students a wide choice of languages, yet in practice, the choice concentrates on English as a first language and Spanish as a second language. German is reduced to a bare minimum, Italian, Portuguese and Russian are almost ignored (Legendre, 2022, p. 7). Finally, in Croatia in 2003, learning a foreign language became mandatory from the first grade of primary school (ages 6 or 7), and in the same year, France was among the seven countries of the European Union which imposed two compulsory modern languages in their education system (Le Sénat, 2003). In Croatia, over 86% of students chose English as their first foreign language, and in 2019 95.8% (Kapović, 2022, p. 287). In French schools English has become the most taught language: 95% of students in secondary education (11 – 15 years of age) have chosen English as their first foreign language. (Le Sénat, 2003). By the age of 15, on the weekly basis, pupils in Croatia receive an average of 112.5 minutes of English classes (Ministarstvo znanosti i obrazovanja, 2019, p. 367) and in France 136 minutes of English classes, when English is taught as a first foreign language (Ministère de l'Éducation Nationale et de la Jeunesse, 2019; Le Service public, 2021).

By the end of elementary school, i.e. at the age of 14 or 15, an average student of a Croatian school is expected to participate in a simple unplanned conversation on a familiar topic, write a medium-length structured text on a familiar topic of a lower level of complexity, and demonstrate understanding of the main message of a medium-length text of a familiar topic in listening and reading (Ministarstvo znanosti i obrazovanja, 2019, p. 54). While the curricula

are not entirely comparable, the French education ministry does not list outcomes but rather refers to the CEFR. The program stipulates that by 2025 at least 80% of students reach the A2 level of English by the end of *collège* (first level secondary school, i.e. 14 or 15 years of age). An average student should be able to understand, in speech, phrases and expressions related to areas of most immediate priority (e.g. very basic personal and family information, shopping, local geography, employment), understand short, simple texts containing the highest frequency vocabulary, give, in speech and writing, a short list of simple sentences to describe people, living or working conditions, daily routines, likes/dislikes, educational background, or present or most recent job (Council of Europe, 2020, p. 13).

The data listed so far do not indicate any radical contextual differences between the two countries. However, audiovisual content and its transfer to the respective languages do point to a discrepancy. In Europe, there are two main transfer means for audiovisual works into the national language: subtitling and dubbing. How much content requires translation depends on the content each country broadcasts. In the UK, only 35% of films released in cinemas needed translation. In countries with a lucrative film industry this percentage might also be comparatively low: in France around 54% of movies did not need translation. Croatia, on the other hand, is placed on the opposite extreme of the map, along with Iceland, Bulgaria, and Estonia, who provide translations for more than 90% of the content they broadcast (*Study on the use of subtitling*, 2011, p. 6). 53% of cinemas dub European films and 82% do so for American films (p. 7).

The audiovisual content might or might not be on the internet, yet the data on the internet content itself shows asymmetrical proportions of language presence. As of January 1, 2023, 63.6% of internet content was in English, 7% in Russian and 4% in Spanish. As already mentioned, French scored very highly, on the fourth place, with 2.5% of content in that language. Croatian was among the least represented languages on the internet. It is used by 0.1% of all the websites whose content language is known on January 1, 2023 (Web Technology Surveys, 2023).

### **3.3.**

### 3.4. Sample

A total of 131 participants initially responded to the study, with 63 participants from France and 68 participants from Croatia. However, it was discovered that several participants did not meet the criteria of being university students, despite efforts to ensure the inclusion of only university students in the study. Therefore, their responses were excluded from the final sample. In France, nine participants' answers were disregarded, and in Croatia, two participants' responses were not considered. As a result, the final sample consisted of 54 participants from France and 66 participants from Croatia, totaling 120 university students. Table 1 provides an overview of the participants' age, gender, and language proficiency.

Table 1: Sample characteristics

N = 120	The French	The Croatian
Age span	18 - 28	19 - 26
Mean age	24.18	20.27
Women	50%	75.8%
Men	46.3%	22.7%
Non-binary and other	3.7%	1.5
Monolingual	31.4%	3%
Bilingual	37%	36.4%
Trilingual	20.4%	31.8%
Quadrilingual	5.6%	19.8%
Pentalingual and beyond	5.6%	9%

The age range of Croatian participants was from 19 to 26 years old, while in France it was from 18 to 28 years old. The mean age for French participants was 22.18, and for Croatian participants 20.27. In terms of gender distribution, 75.8% of Croatian participants were women, 22.7% were men, and the remaining participants chose not to provide their gender. Among the

French participants, 50% were women, 46.3% were men, and 3.7% identified as non-binary or preferred not to respond.

Regarding language proficiency, 3% of Croatian participants reported speaking only their first language, compared to 31.4% of the French participants. The percentage of participants who spoke two languages was similar between the two groups. However, there were more Croatians who spoke three languages, with a difference of 11%, and a similar difference was observed for those who spoke four languages. The Croatian participants were students at Zagreb, Rijeka, and Zadar Universities, while the French participants studied at Artois, Tours and Orléans Universities.

In terms of self-assessed proficiency in English, none of the Croatian participants rated their English level as A1, while 13% of the French participants did. Only 1.9% of the French participants believed they had a C2 level of English, compared to 18.2% of the Croatian participants. The majority of French participants (35.2%) reported having a B1 level of English, while the majority of Croatians (42.4%) claimed to have a C1 level. These proficiency levels are defined according to the Common European Framework of Reference for Languages (Council of Europe, 2020, p. 9). Table 2 provides a detailed overview of how participants from each group assessed their English language proficiency.

### **3.3. Methodology**

This is a mixed method research as the questionnaire was comprised of both closed and open questions. Answers to closed questionnaire items were then coded numerically, while answers to open questions were gathered for a qualitative analysis. A pilot study was conducted for both groups with two most important aims: to determine whether there had been some questions left unclear, and to train for coding of qualitative data provided by the piloting sample. The questionnaire in French was first piloted by two native speakers of French in order for them to verify whether the language in the questions sounded natural and whether all was clear for the French counterpart of the participants. The suggestions were considered for the final version of the questionnaire. The questionnaire in Croatian was first distributed to two

people, their responses and feedback were also taken into account. Some items were then modified if unclear or removed altogether.

A questionnaire was conceived and distributed, and it consisted of 40 questions. The first seven questions concerned the participants' demographic data, among which the disqualifying one was whether participants were university students or not. Other questions in the section concerned age, sex, field of study, number of languages spoken and self-assessment of proficiency in English. The main part was divided into five sections: audiovisual content, music, internet community, reading online and podcasts, radio, and audiobooks in English. Questions sought to gather information on frequency and ways the participants usually consume contents originally produced in English. The only section where participants were asked to provide an open answer was on the consumption of audiovisual content. They were first asked about their preferred choice of consuming content originally in English and for each of the combinations they were asked to provide an explanation of their choice.

The questionnaires were in French for the French group and in Croatian for the Croatian group. The questionnaire was first distributed to the French group. Over the course of a week, students at Artois University were interspersed on the campus, in lecture halls, in the dormitory and the restaurant to scan a QR code linking them to the questionnaire online, or asked online to do fill it out. The questionnaire destined to the Croatian group was distributed online, via groups on various social platforms. It was made sure the questionnaire, originally designed in English, was translated as closely as possible in the two languages, so that eventually it is considered the groups received the same questionnaire. Before the onset of the questionnaire, participants were assured that the data were collected anonymously and would be analyzed on a group level, they were explained the purpose of the study and eventually warned that they were giving their consent to participating once they started filling out the questionnaire.

Once the data were gathered, quantitative and qualitative data were dealt with separately. A t-test was done to compare the two groups and a correlational analysis was carried out to measure the correlation among the variables. A qualitative analysis was also done so as to better illustrate quantitative data.

### 3.4. Results

This section presents the findings of our study on English language exposure among university students in France and Croatia in an online environment. We investigated the extent of exposure to English through various online channels, such as music and radio listening, online community engagement, online reading, and online TV watching. The study involved a sample of 120 university students, with 66 participants from Croatia and 54 from France. The data collected were analyzed using statistical software, and the results are outlined below.

Firstly, we present the self-assessed proficiency levels of the participants in both groups, using the CEFR scale (A1 to C2) as a reference. We describe the distribution of proficiency levels and highlight any notable differences between the French and Croatian participants. Next, we delve into the quantitative data on English exposure through different channels. We present the frequency of exposure and the types of content accessed through each channel for both groups. To determine if there were significant differences in mean scores of English exposure between the two countries, we conducted independent two-tailed t-tests and report the results of their statistical significance. Furthermore, we showcase the qualitative data collected on the reasons behind participants' preferences in watching online TV. Through thematic analysis, we identify common reasons reported by the participants and compare the reasons given by the French and Croatian participants, highlighting any noteworthy differences. Lastly, we present the results of our correlational analysis, examining the relationship between participants' self-assessed proficiency in English and their self-assessed exposure across the various channels. We report the Spearman's correlation coefficient values to determine the strength and direction of these relationships.



**I. Do French and Croatian university students assess their proficiency in the English language differently?**

On a scale from 1 to 6, the scores on self-assessment of the 66 Croatian participants produced a mean of 4.65 with a standard deviation of 0.97, while the 54 French participants' mean self-assessment scores were 3.02 with a standard deviation of 1.25. This suggests that the Croatian participants, who on average scored C1 may have a higher level of English proficiency than the French participants, who scored B1.

Table 2: self-assessed proficiency in the English language by the two groups

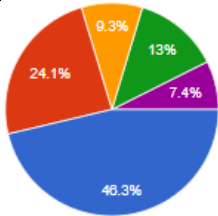
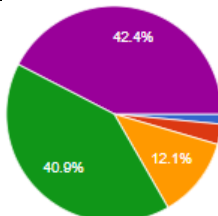
	The French	The Croatian	t-value	p-value	significance
C2 (= 6)	1.6%	17.6%	8.03	<.00001	Yes
C1 (= 5)	12.7%	42.6%			
B2 (= 4)	17.5%	30.9%			
B1 (= 3)	30.2%	4.4%			
A2 (= 2)	27%	4.4%			
A1 (= 1)	11.1%	0%			
Mean score	3.02 (=B1)	4.65 (=C1)			
SD	1.25	0.97			

**II. Are university students in French and Croatian universities exposed to English to a different degree?**

Both French and Croatian university students were found to have significant exposure to English through various means, including watching English TV content, reading e-books, accessing international news, engaging in chats in English with international friends, and browsing the internet in English. However, notable differences in the degree of exposure to English were observed between the two groups. Among the exposure factors, browsing the internet in English showed the most substantial difference (t-value 10.3), followed by chatting with international friends in English (t-value 7.49). Additionally, reading e-books (t-value 5.45) and reading international news in English (t-value 4.98) demonstrated considerable disparities. Watching internet TV content in English ranked fifth in terms of differences (t-value 3.6), while listening to the radio in English ranked sixth (t-value 2.14). On the other hand, the exposure by listening to music (t-value 1.28) and playing video games (0.04) showed some variation between the two groups, but not to a statistically significant extent. The following eight factors represent the most substantial differentiating factors between the two groups.

Figure 1: How often do you browse the internet in English?

Responses: **Never**, **Rarely**, **Occasionally**, **Often**, **Regularly**

Exposure factor no. 1	The French (M <sub>1</sub> = 2.11)	The Croatian (M <sub>2</sub> = 4.19)	t-value	p-value	Significance at p < .05
<b>Browsing the internet in English looking for information</b>			<b>10.3</b>	<b>&lt; .00001</b>	Yes

The exposure factor in question has revealed the most significant difference in the degree of English language exposure on the internet between the two groups. Among the

French participants, a total of 25 individuals (46.3%) reported never browsing the internet for information in English. In contrast, only one Croatian participant (1.5%) reported no such habits. Furthermore, 7.49% of the French participants reported regular browsing of the internet in English, while 42.4% of the Croatian participants reported engaging in regular browsing in English. The t-value for browsing the internet in English is 10.3, with a p-value of less than .00001, indicating a statistically significant difference in exposure to English websites.

Figure 2: How often do you chat with international friends in English?

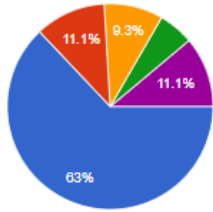
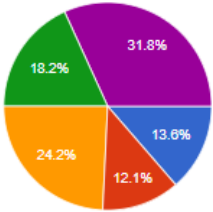
Responses: I do not have any

Yes, I do have some and I talk to them in English, however rarely

Yes, I do have some and I talk to them in English occasionally

Yes, I do have some and I talk to them in English often

Yes, I do have some and I talk to them in English regularly

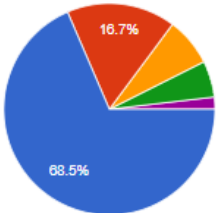
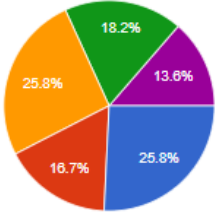
Exposure factor no. 2	The French ( $M_1 = 1.28$ )	The Croatian ( $M_2 = 3.78$ )	t-value	p-value	Significance at $p < .05$
<b>Chatting with international friends in English</b>			7.49	< .00001	Yes

A noteworthy disparity in exposure to English is evident between French and Croatian university students regarding their interactions with international friends. Among the French participants, 63% reported not having friends with whom they conversed in English, whereas 13.6% of the other group shared the same experience. Conversely, 11.1% of the French participants reported regular contact and conversations with international friends in English, while 31.8% of the Croatian participants reported the same. This discrepancy is supported by a t-value of 7.5, with a p-value of less than .00001, signifying a statistically significant difference in

exposure between the two groups concerning their engagement in English conversations with international friends.

Figure 3: How often do you read e-books in English?

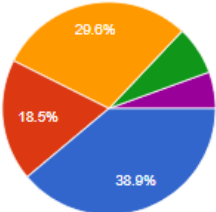
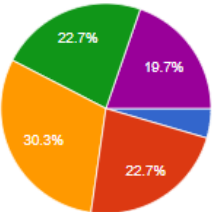
Responses: **Never**, **Rarely**, **Occasionally**, **Often**, **Regularly**

Exposure factor no. 3	The French (M <sub>1</sub> = 1.56)	The Croatian (M <sub>2</sub> = 2.78)	t-value	p-value	Significance at p < .05
<b>Reading e-books in English</b>			5.45	< .00001	Yes

Regarding reading, the Croatian reported reading e-books more often than the French. 13.6% of the Croatian participants said they regularly read e-books, as opposed to 1.9% of the French. The t-value for this difference is 5.45, with a p-value of < .00001, which means that there is a significant difference in exposure to English e-books between French and Croatian university students.

Figure 4: How often do you read international news in English?

Responses: **Never**, **Rarely**, **Occasionally**, **Often**, **Regularly**

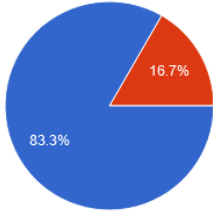

Exposure factor no. 4	The French (M <sub>1</sub> = 2.22)	The Croatian (M <sub>2</sub> = 3.3)	t-value	p-value	Significance at p < .05
<b>Reading international news in English</b>			4.98	< .00001	Yes

Regularly					
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Likewise, the t-value for reading international news in English is 4.98, with a p-value of < .00001, indicating a significant difference in favor of the Croatian participants in exposure to English international news.

Figure 5: Do you watch TV content in English?

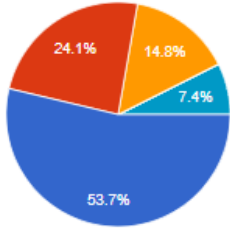
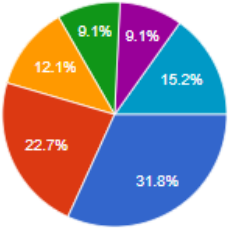
Responses: Yes/No

Exposure factor no. 5	The French (M <sub>1</sub> = 0.83)	The Croatian (M <sub>2</sub> = 1)	t-value	p-value	Significance at p < .05
<b>TV content originally in English</b>			3.6	.0005	Yes

As seen in Figure 5, all of the Croatian participants (100%, N=66) said they generally watched audiovisual content in English, as opposed to the 16.7% of the French (N=9) who reported they did not watch any such content. To determine the statistical significance of these results, a t-test was conducted. The t-value was 3.60, which is greater than the critical value of 1.96 at the 5% significance level. Additionally, the p-value was found to be .00046, which is less than the alpha level of .05. These findings indicate that the results are statistically significant, suggesting that there was a significant difference between the percentages of French and Croatian participants who watched audiovisual content in English.

Figure 6: How often do you listen to the radio in English?

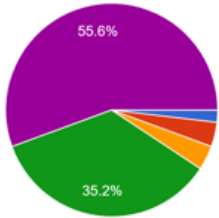
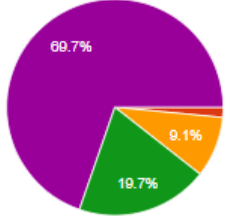
Responses: Never, Rarely, Occasionally, Often, Regularly, I do not listen to the radio at all, regardless of the language it is in

Exposure factor no. 6	The French (M <sub>1</sub> = 1.46)	The Croatian (M <sub>2</sub> = 1.95)	t-value	p-value	Significance at p < .05
<b>Listening to the radio in English</b>			2.14	.034	Yes

In both groups there were participants who never listened to the radio in any language at all. The largest groups in both cohorts are those who never listened to the radio in English, both among the French and Croatian there were 29 such participants. Not a single French participant listened to the radio in English regularly or often, and a total of 12 Croatian participants listened to it regularly or often in an equal distribution. Overall, the difference is statistically significant, but at the lowest rate of all the factors that proved statistically significant. The following two are thus not statistically significant.

Figure 7: How often do you listen to music in English?

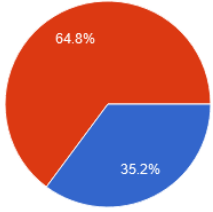
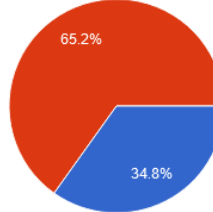
Responses: Never, Rarely, Occasionally, Often, Regularly

Exposure factor no. 7	The French (M <sub>1</sub> = 4.39)	The Croatian (M <sub>2</sub> = 4.58)	t-value	p-value	Significance at p < .05
<b>Listening to music in English</b>			1.28	.20	No

The Croatian university students reported a slightly higher frequency of listening to music. However, the p-value of 0.20 suggests that the observed difference in the mean values is not statistically significant. This means that the variation in English exposure between French and Croatian university students based on their music-listening habits may not be conclusive.

Figure 8: Do you play online video games in English?

Responses: Yes/No

Exposure factor no. 8	The French ( $M_1 = 0.35$ )	The Croatian ( $M_2 = 0.35$ )	t-value	p-value	Significance at $p < .05$
<b>Playing online video games in English</b> Yes No			0.04	.97	No

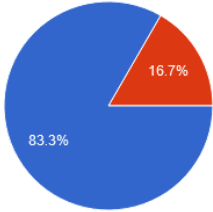

Finally, the t-value for playing online video games in English is 0.04, with a p-value of .97, indicating that there is no significant difference between French and Croatian university students in terms of playing online video games in English. This is also the only exposure factor to which the French are more exposed than the Croatian: 35.2% of the French played video games in English, and 34.8% of the Croatian had this habit.

### III. What are the reasons behind the two groups' preferences to exposure to TV content in English?

As previously stated, there was a difference found in exposure to TV content on the internet, experienced by the two groups in English. We further asked them about the ways they preferred to consume it. We based our questions on binary combinations among four ways to watch internet TV content; a dubbed version, a subtitled version in mother tongue, a subtitled version in English and one with no prompts to the original version at all. The responses are analyzed below. First, let us revisit to what extent the two groups are exposed to internet TV content created originally in English in Figure 9.

Figure 9: Do you watch TV content in English?

Possible responses: Yes/No.

Exposure factor	The French (M <sub>1</sub> = 0.83)	The Croatian (M <sub>2</sub> = 1)	t-value	p-value	Significance at p < .05
<b>Internet TV content originally in English</b>			3.6	.0005	Yes

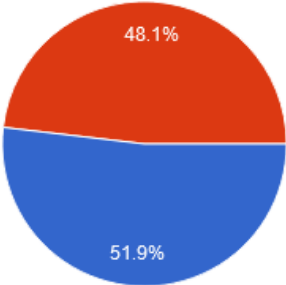
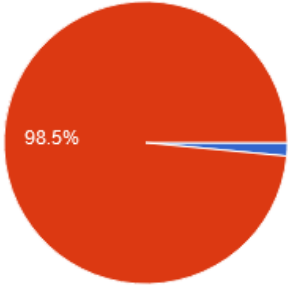
The participants were presented questions where they chose between a dubbed version and a version with subtitles in their mother tongue, then a dubbed version and a version with subtitles in English, further a dubbed version and the version with no subtitles at all and finally they were asked if they would give up watching if they had no dubbing or subtitles at all. For each of the questions, they were asked to provide an explanation for their choice. Their responses were analyzed on a group level, and the responses are presented below each of the questions.

Figure 10: If you had a choice between a version of content in English dubbed in your mother tongue and one with subtitles in your mother tongue, which one would you opt for?

Responses:

dubbed in my mother tongue

with subtitles in my mother tongue

The French	The Croatian	t-value	p-value	Significance at p < .05
		7.83	< .00001	Yes



The responses from the questionnaire revealed that while 51.9% of participants preferred a dubbed version in their native language, 48.1% preferred subtitles. Those who preferred the original version cited reasons such as a preference for the actors' original voices and intonations, as well as the belief that dubbing can detract from the artistic quality of the work. Others emphasized the importance of preserving the cultural context of the original work. Some also expressed a desire to improve their language skills by watching movies and TV shows in the original language with subtitles. Table 3 shows the most frequent arguments for the French participants' choices.

Table 3: "If I had a choice between a version of content dubbed in French and one with subtitles in French, I would choose the dubbed version." The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Ease	17	"With dubbing, there is no need to focus."
Artistic content suffers	4	"I don't understand or speak foreign languages well enough to have a good time watching a movie with the foreign language."

Table 4: "If I had a choice between a version of content dubbed in French and one with subtitles in French, I would choose the subtitled version." The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Intention of learning	9	"I made this choice because it is more convenient to learn a language this way."
Authenticity	8	"With dubbing, the intensity of the acting cannot always come across as well, it really can spoil the scene".

As for the Croatian counterpart, many preferred watching contents in its original language with subtitles because they found it provided a more authentic and credible representation of the content, allowed them to hear the original actors' and narrators' voices, and preserved the nuances and meanings that can be lost in translation. They also found dubbing distracting and said it could make the viewing experience less enjoyable by interfering with the concentration of the viewer. However, one participant preferred watching dubbed content because it is easier to follow, because they were not fluent in the original language. Some also mentioned that they find dubbed content more suitable for animated movies, but they preferred to watch live-action movies in their original language. Ultimately, the decision of whether to watch content dubbed or with subtitles depended on many factors, such as language fluency, cultural background, and viewing preferences.

Dubbed in Croatian: the one participant who would choose the dubbed version did not justify their choice.

Table 5: "If I had a choice between a version of content dubbed in Croatian and one with subtitles in Croatian, my choice would depend on the content in question." The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Animation movies	7	"I only like to watch animated feature films in Croatian, because dubbing can be fun, it can be creative. But dubbing anything else is a crime!"

Table 6: "If I had a choice between a version of content dubbed in Croatian and one with subtitles in Croatian, my choice would be the subtitled version." The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>

Authenticity	41	“Dubbed content is cheaper, and in feature films the new voice often does not even match the original actor’s one. I get a terrible feeling that everything the actors say is unnatural and inauthentic, and it spoils the whole experience of the movie. For example, Jennifer Aniston in German, it is a horror.”
Preference for subtitles or aversion towards dubbing	14	“I prefer to watch movies or series in their original form”.
Ease	4	“It's easier for me to follow content that is not dubbed. I do not like it when mouth gestures are not synchronized with the speech.”

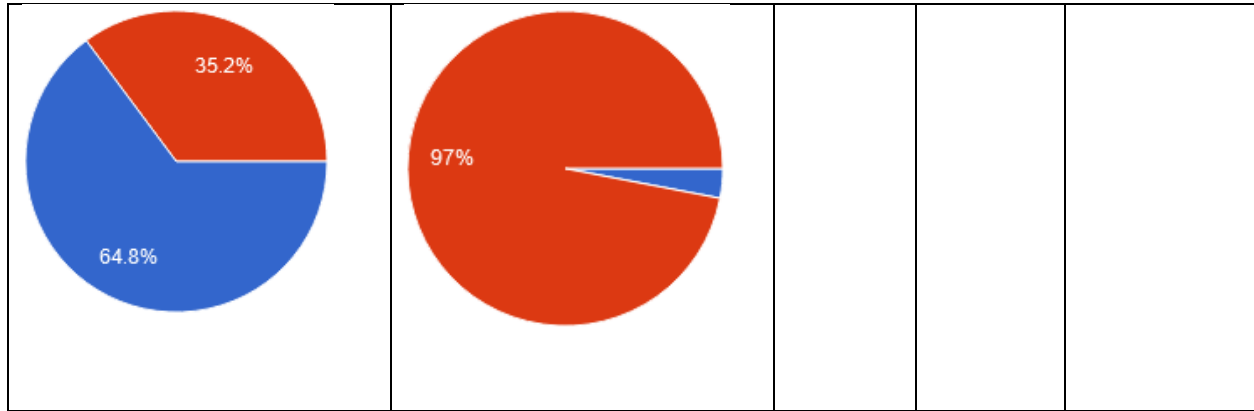
Figure 11: If you had a choice between a version of content in English dubbed in your mother tongue and one with subtitles in English, which one would you opt for?

Responses:

dubbed in my mother tongue

with subtitles in English

The French	The Croatian	t-value	p-value	Significance at $p < .05$
		9.69.	< .00001.	Yes



Overall, the French preferred the dubbed version over the one with subtitles in English. They felt more comfortable with the dubbed version in their native language or found it easier to follow without reading subtitles. Others noted limitations in their English language abilities or dyslexia and prefer to watch in their native language for comfort and comprehension. However, those who would choose subtitles in English seemed to feel it could help improve their English language skills and provide a better understanding of the original dialogue. Some also mentioned difficulty understanding spoken English due to accents or speaking speed.

Table 7: “If I had a choice between a version of content dubbed in French and one with subtitles in English, my choice would be the dubbed version in French.” The reasoning:

The French		
Argument	Mentioned by	Illustration
Ease	14	“It is easier to follow that way.”
Poor English	8	“My vocabulary in English is quite limited, I might not understand everything.”

Table 8: “If I had a choice between a version of content dubbed in French and one with subtitles in English, my choice would be subtitled in English.” The reasoning:

The French		
Argument	Mentioned by	Illustration

Intention of learning	10	“It is more interesting for learning a language (learning vocabulary and understanding the construction of sentences)”.
Authenticity	3	“It is much more precise with subtitles in English”.

As for the Croatian students, based on the responses it seems that the majority preferred to watch the original version of the content with subtitles in English rather than watching dubbed versions. The reasons for this preference were varied but some common themes include the desire to preserve the original meaning and authenticity of the content, having preference for the natural sound and look of the original language. There was the belief that subtitles are better for learning English or improving spelling. The desire to learn a second language by listening and reading along in the original language was important for them, just as for those who list this reason among the French. Some mentioned the perception that dubbed versions sound artificial or lose some of the original nuance and expression. Likewise, there was the frustration with poor quality Croatian dubbing. They found themselves able to understand English well enough to follow along with subtitles. However, it's worth noting that some participants still do enjoy certain dubbed versions, particularly for animated films.

Table 9: “If I had a choice between a version of content dubbed In Croatian and one with subtitles in Croatian, my choice would be the dubbed version.” The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Poor understanding of English	2	“I understand the content faster. If the subtitles were in English, I would probably have to look up the meaning of some of the words below in the subtitles”.

Table 10: “If I had a choice between a version of content dubbed in Croatian and one with subtitles in English, my choice would be the subtitled version.” The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Authenticity	18	“The content loses its quality and the original idea of the author if dubbed. Also, when "reading" my mother tongue in addition to listening to a foreign one, I get involved in translation or I deal with linguistics”.
Preference for subtitles or aversion towards dubbing	13	“Again, I hate the Croatian dubbing. Besides, I'm not happy to have someone else translate for me, even though I'm aware that I'll often translate worse myself”.
Intention of learning	11	“Subtitles come in handy for improving spelling, I get nothing from dubbing”.
Good understanding of English	9	“I like listening to the original audio with original subtitles, which help if a certain part of the content is more difficult to understand”.

Table 11: “If I had a choice between a version of content dubbed in Croatian and one with subtitles in English, my choice would depend on the content”. The reasoning:

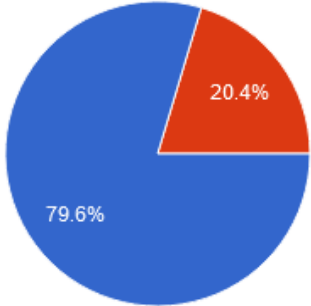
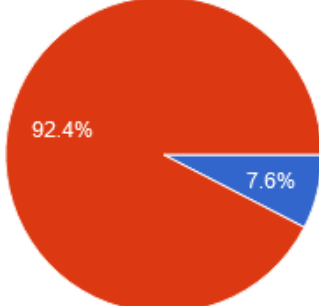
<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Animated movies	6	“As in the previous example, except for animated films (i.e. cartoons), I always choose subtitles for easier understanding”.

Figure 12: If you had a choice between a version of content in English dubbed in your mother tongue and the original version in English, with no subtitles or dubbing, which one would you opt for?

Responses:

dubbed in my mother tongue

original version with no subtitles

The French	The Croatian	t-value	p-value	Significance at $p < .05$
		11.66	< .00001	Yes

Based on the responses provided, it seems that the French students generally opted for the dubbed version of English content when they felt that their proficiency in the language was not high enough to understand the original version without prompts. They also chose the dubbed version when they preferred a more comfortable viewing experience, without the added effort of translating or reading subtitles. On the other hand, when they felt that they might be able to understand the original version without prompts, they preferred to watch it without any dubbing or subtitles, in order to hear the actors' original voices and to improve their listening skills. It is important to note that some students also mentioned a lack of proficiency in English as a reason for choosing the dubbed version, which suggests that improving their language skills could be a factor in their decision-making process. Additionally,

some students mentioned that they preferred the original version despite not being able to understand everything, which could indicate an interest in immersing themselves in the language and culture.

Table 12: “If I had a choice between a version of content in English dubbed in French and the original version in English, with no subtitles or dubbing, my choice would be the dubbed version in French.” The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Ease	17	“Easier to understand without the extra effort of translation”.
Poor English	12	“I do not speak English at all”.

Table 13: “If I had a choice between a version of content in English dubbed in French and the original version in English, with no subtitles or dubbing, my choice would be the version with no dubbing or subtitles.” The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Authenticity	3	“It is better to leave everything in its original form”.
Intention of learning	2	“This can be useful for practicing listening comprehension”.
Habit	2	“It also depends on the film but when you are used to an original version, and you hear the dubbed version it is often shocking! So in this case I prefer to watch the original version even if there are no subtitles”.



There was a mixed response among Croatians regarding watching movies or TV shows in their original language or with a dubbed version. Some still preferred not to watch it in their original version, while others preferred to watch the original version without any translations. Among those who preferred prompts, the reasons for doing so vary. Some did not want to miss out on any dialogue, while others found it easier to follow the plot when reading subtitles. Some also preferred to eat while watching, and therefore found subtitles less distracting than dubbed versions. Those who opted for the original version did so for several reasons. Some did not like dubbing, while others wanted to experience the content as it was originally intended. Some believed it better for language learning, as it is more authentic and useful than watching a dubbed version. Others also believed that the translation may not be accurate, and that the original version preserved the nuances and cultural references of the content. Overall, the responses suggest that there was a preference for the original version among those who understand the language, while those who do not may have preferred subtitled or dubbed versions. Additionally, the authenticity of the content and the accuracy of the translation appear to have been crucial factors in deciding which version to watch.

Table 14: “If I had a choice between a version of content in English dubbed in Croatian and the original version in English, with no subtitles or dubbing, my choice would be the dubbed version.” The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Ease	6	“I would understand the content better. I think I still don't speak English so fluently that I could easily follow along in the original without subtitles”.

Table 15: “If I had a choice between a version of content in English dubbed in Croatian and the original version in English, with no subtitles or dubbing, my choice would be the original version, with no dubbing or subtitles.” The reasoning:

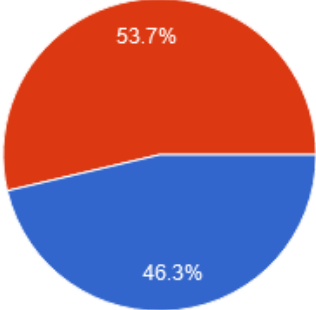
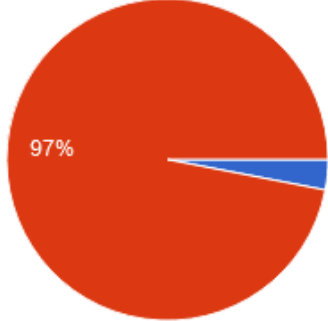
<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Authenticity	26	“It doesn't make sense for me to translate something that was created in another language into my own and watch it that way. I would only watch the dubbed version for the comedic potential.”
Preference for the original/aversion towards dubbing	15	“I dislike dubbing because it seems unnatural.”
Intention of learning	7	“Exposure to a foreign language through listening spurs its learning”.
Good understanding of English	7	“I understand English well enough, I do not need help translating”.

Table 16: “If I had a choice between a version of content in English dubbed in Croatian and the original version in English, with no subtitles or dubbing, my choice would depend on the content.” The reasoning:

<b>The Croatian</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Animated movies	2	“I would choose the original version just for movies, animated movies are fine with me if they are dubbed.

Figure 13: If you only had the original version of content in English, with no subtitles or dubbing, would you give up watching it altogether?

Responses: Yes/No

The French	The Croatian	<i>t</i> -value	<i>p</i> -value	significance at $p < .05$
		6.71	< .00001	Yes

The participants' willingness to watch the original content in English without subtitles or dubbing seemed to vary depending on their English language proficiency, their level of interest in the content, and their motivation to improve their language skills. Some participants expressed a desire to improve their English language skills and are willing to watch the original in English even if they don't understand everything. Others, however, expressed concerns about their ability to understand the content without subtitles or dubbing, as well as their level of interest in the content. Some participants indicated that they would prefer to watch the content in their native language, as they might not understand the story or the dialogue if they watch it in English without subtitles. The responses suggest that the decision to watch original content in English without subtitles or dubbing is highly dependent on individual factors such as language proficiency, interest in the content, and motivation to improve language skills.

Table 17: “Yes, if I only had the original version of content in English, with no subtitles or dubbing, I would give up watching it altogether.” The reasoning:

The French		
Argument	Mentioned by	Illustration
Poor understanding	15	“I would not be able to follow the story”.

Table 18: “No, if I only had the original version of content in English, with no subtitles or dubbing, I would not give up watching it.” The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Intention of learning	3	“I would not totally give up watching, it would after all allow me to improve my language skills”.
Good understanding of English	3	“I can understand English after all”.

Table 19: “If I only had the original version of content in English, with no subtitles or dubbing, whether I would give up watching it or not depends on the content.” The reasoning:

<b>The French</b>		
<b>Argument</b>	<b>Mentioned by</b>	<b>Illustration</b>
Interested enough	4	“If I am interested, I can make an effort”.
Content already familiar	2	“It depends if I have already seen the movie or not”.

The responses from Croatian students indicate a high level of comfort in watching English content without subtitles or dubbing. They expressed confidence in their language abilities and their proficiency in understanding the content. While some may face challenges with certain aspects of the dialogue, they relied on context to comprehend the material. Overall, the responses demonstrated a strong interest in the English language and a preference for consuming content in its original form. Some students found subtitles helpful in noisy environments or when they missed parts of the dialogue. In conclusion, Croatian university students displayed a preference for watching content in English without assistance.

Table 20: Yes, if I only had the original version of content in English, with no subtitles or dubbing, I would give up watching it altogether.” The reasoning:

The Croatian		
Argument	Mentioned by	Illustration
Poor understanding of English	2	“Because I can't hear half the words, so it's hard for me to follow”.

Table 21: “No, if I only had the original version of content in English, with no subtitles or dubbing, I would not give up watching it.” The reasoning:

The Croatian		
Argument	Mentioned by	Illustration
Good understanding of English	38	“My level of English allows me to understand content without subtitles and dubbing”.
Preference/habit	4	“I prefer watching movies that way anyway”.

Table 22: “If I only had the original version of content in English, with no subtitles or dubbing, whether I would give up watching it or not depends on the content.” The reasoning:

The Croatian		
Argument	Mentioned by	Illustration
Interested enough	7	“If I'm really interested in a movie, I'll watch whatever is available”.

IV. Is there a correlation between self-assessed proficiency in English and the exposure to English at the sample level?

Table 23: Correlation between self-assessed proficiency and exposure factors

Exposure factor	Exposure mean (both groups)	Self-assessed proficiency mean (both groups)	Spearman rho $r_s$	p (two tailed)	Significance
Listening to music in English (1-6)	4.49	3.92	0.24	0.01	Yes
Listening to the radio in English (1-6)	1.73	3.92	0.144	0.12	No
Reading e-books in English (1-6)	2.26	3.92	0.45	0	Yes
Reading international news in English (1-6)	2.82	3.92	0.54	0	Yes
Chatting with international friends (1-6)	2.65	3.92	0.5	< .00001	Yes
Browsing the internet in English (1-6)	3.26	3.92	0.66	0	Yes
TV content in English (0-1)	0.93	3.92	0.38	2E-05.	Yes
Playing online video games in English (0-1)	0.35	3.92	0.03	0.77	No

Exposure was measured through eight factors: playing video games, browsing the internet, chatting with international friends, reading international news, reading e-books, listening to the radio, listening to music, and watching internet TV, all in English. The study included 54 French and 66 Croatian university students.

The results showed a positive correlation between self-assessed proficiency in English and exposure to English in most of the factors, with significant correlations found in listening to music in English, browsing the internet in English, chatting with international friends in English, reading international news in English, reading e-books in English and watching TV content in English. The correlation coefficients for these factors ranged from 0.49 to 0.66. The p-values were also statistically significant for all these factors, except for playing video games in English and listening to the radio in English. Based on the given Spearman rho values, we can see that the exposure factors that have the strongest correlation with self-assessed proficiency in English are:

1. Browsing the internet in English (rho = 0.66)
2. Reading international news in English (rho = 0.54)
3. Chatting with international friends (rho = 0.5)

These three factors show a relatively strong positive correlation with self-assessed proficiency in English. The weakest correlation is observed with playing online video games in English (rho = 0.03), indicating a very weak positive correlation between playing online games in English and self-assessed proficiency in English. Therefore, the results suggest that browsing the internet in English, reading international news in English, and chatting with international friends are the exposure factors that are strongly associated with self-assessed proficiency in English.

### **3.5. Discussion**

#### **3.5.1. Main ideas**

This study was inspired by the idea that the context of acquiring a language plays a crucial role in the process (Tyne, 2012, p. 289). Considering the increasing opportunities of coming into contact with the target language thanks to the internet, learning a language in that natural context might be facilitated. Learning a language through out-of-classroom exposure is coming into contact with the target language, involves naturalistic learning and self-instruction and is key to developing proficiency (Azzolini et al., 2020, p. 9; Peters, 2018, p. 149; Peters, 2019, p. 3; Benson, 2001, p. 13; Verspoor et al. 2011, p. 165). The role of exposure varies greatly

according to many variables, notably the geographical context (Muñoz & Cadierno, 2021, p. 185). The four research questions were thus established in our study: whether university students in French and Croatian universities self-assess their English proficiency to a different degree, whether they are exposed to English to a different degree, what are the two groups' reasons behind the exposure they receive to internet TV content in English, and if there is a correlation between self-assessed proficiency in English and the exposure to English in the French and the Croatian groups. The exposure factors considered were English-language internet TV, English-language e-books, English-language news sources, chatting with foreign friends, English-language internet browsing, playing online video games and listening to music in English.

### **3.5.2. Summary of the findings**

Our study's findings align with our initial expectations, indicating that Croatian participants have greater exposure to the English language online compared to French participants. The self-assessment scores of 66 Croatian participants on a scale of 1-6 yielded a mean of 4.65 (SD = 0.97), while the 54 French participants had a mean self-assessment score of 3.02 (SD = 1.25). This suggests that Croatians may possess a higher level of English proficiency (rated at C1) compared to French participants (rated at B1).

Although both groups were exposed to similar factors, they had varying levels of exposure to the English language. Both groups primarily engaged with English-language internet TV, e-books, news sources, chatting with foreign friends, and internet browsing. However, our study uncovered contrasts to our initial expectations. There were no significant differences between the two groups regarding playing online video games and listening to music in English.

Our study also delved into the reasons behind participants' content preferences. French students favored content dubbed in their language. Some opted for English subtitles to enhance their language skills or improve comprehension. In contrast, Croatian students predominantly preferred content in the original language with English subtitles to maintain authenticity and learn English. However, some still favored dubbed content, particularly for animated movies.



The decision to use subtitles or not depended on language fluency, viewing preferences, and the desire to learn a second language.

Lastly, we explored the correlation between exposure to different factors and self-assessed proficiency in the English language. Our findings revealed significant correlations in all factors except for listening to the radio in English and playing video games.

### **3.5.3. Interpretation of the findings in light of the research questions**

The results on self-assessment highlight a substantial divergence between Croatian and French participants, with Croats reporting a proficiency level of C1 and the French reporting a proficiency level of B1. It is important to note that self-assessment may not always align with objective proficiency levels, but this disparity warrants further examination. Previous research has identified significant variations in English proficiency across different geographical contexts, which can be influenced by factors such as the linguistic proximity between learners' native and target languages, the extent of English instruction in educational institutions, and the level of exposure to the foreign language beyond formal learning settings (Muñoz & Cadierno, 2021).

Moreover, the Council of Europe reports that one in five people are discouraged from learning languages due to the lack of opportunities to practice speaking the language. The motivation to learn foreign languages can also be lower when learners are not in contact with these languages in their environment (Commission Européenne, 2001, as cited in Goffin et al., 2009). Additionally, the social prestige of the languages involved can be an explanatory factor for the learning achieved (Siguan, 1991). In Switzerland, for example, the debate over which languages to teach is ongoing, with some advocating for prioritizing English, while others support early teaching of national languages.

The role of the French Academy, particularly its influence on the status of English in French society, may also play a role in the self-assessment results of the French participants. While English is widely present in the media and linguistic landscape, its status as a foreign or second

language can vary across different European countries, depending on the linguistic distance from English (de Bot, 2014). This may not be the case in any of the nations concerned in our study, however being proficient in English can have different benefits according to the society where one belongs.

### **3.5.3.1. Difference in exposure by the two groups**

The results of the present study indicate that Croatian internet users are more exposed to English language content than their French counterparts. The most significant difference was found for the factor of browsing the internet for information (t-value 10.3). This finding may be attributed to the fact that Croatian speakers face a dearth of online information in their native language, thus necessitating their reliance on English language sources to meet their informational needs, since, as previously stated, only 0.1.% of the content on the internet is in Croatian, as opposed to the 2.5% of content in French as of January 1, 2022 (Web Technology Surveys, 2023). As noted by the principle of the Dominant Language Constellation (DLC), language selection is largely driven by individual, as well as community needs and preferences (Aronin & Singleton, 2012, p. 59). Therefore, the DLC of Croatian speakers may be shaped by their specific language needs and the availability of language resources in their geographic and political environment, which may differ from those of the French-speaking population (p. 64). Furthermore, the principle of the least effort suggests that individuals tend to select the languages that are most vital to their daily lives in any given context (p. 69). In the case of Croatian internet users, the selection of English language content may reflect their need for comprehensive and accessible online information. The pedagogical implications that emerge from this study point to the value of out-of-class exposure for vocabulary learning. The following three factors in particular seem to be positively associated with learners' vocabulary knowledge: watching non-subtitled TV and movies, using the internet, and reading books (Peters, 2018, p. 162).

The striking difference in self-assessment of English proficiency among the participants may be partly explained by their exposure to internet TV. While all Croatian participants reported watching internet TV, 16.7% of the French participants said they did not have such

habits (Almeida, 2015). It has been observed that some learning environments are more English-rich than others, such as those in which English TV programs are subtitled rather than dubbed (Muñoz & Cadierno, 2021, p. 185). Research has also suggested that watching video material with the soundtrack in the second language (L2) and subtitles may improve L2 acquisition (Montero Perez et al., 2013 as cited in Muñoz, 2017). In France, both dubbing and subtitling can be encountered in cinemas, while dubbing is the predominant approach on TV (*Study on the use of subtitling*, 2011). This is likely because dubbing is a more costly and time-consuming translation technique, which is used in larger and wealthier countries where the costs can be repaid by the popularity of television programs and films (De Grazia, 1989). However, Webb and Rodgers (2009) suggest that there are little incidental learning gains from watching only one episode of a television program because there are not many encounters with unknown words. Lin (2014) investigated the validity of internet television as a resource for acquiring L2 formulaic sequences. The study found that internet television genres that are most similar to everyday speech in terms of formulaic sequence patterns, such as factual, drama, and comedy, should be prioritized for L2 acquisition (p. 173). The frequency at which formulaic sequences appear on internet television was found to be directly proportional to that in everyday speech, suggesting that internet television can help EFL learners establish an accurate intuition about the frequency of use of formulaic sequences (p. 164). Lin and Siyanova highlight the benefits of internet television for L2 vocabulary learning. Before the advent of internet television, learners had to access satellite television in the school library or self-access language learning center, which was rather expensive for an ordinary household. However, with ubiquitous access to internet television, EFL learners can take advantage of the benefits of television programming for language learning, regardless of their location or schedule (2014, p. 1).

### **3.5.3.2. Reasons of exposure to internet TV content in English**

It appears that French audiences tend to prefer dubbed versions of internet TV content over subtitles in their native language, in English, or no assistance at all. However, a majority of 53.7% would still consider watching without dubbed or subtitled assistance. In contrast, Croatian audiences have not shown a significant preference for dubbed content when given the

option between dubbing, Croatian subtitles, English subtitles, or no assistance at all. They also would not refuse to watch if no assistance were available. This may be due to traditional practices, as France commonly uses dubbing on TV (*Study on the use of subtitling*, 2011) while Croatia does not typically dub TV content, let alone internet content. Dubbing is a more expensive and time-consuming technique used in wealthier countries to repay costs with the popularity of films and TV programs. The lack of familiarity with dubbed content in Croatia could be attributed to its scarcity. The negative reactions from Croatian audiences suggest a strong aversion to such content.

### **3.5.3.3. Correlation between exposure factors and self-assessed proficiency in English**

Contrary to our expectations, we did not find a statistically significant correlation between playing video games in English and self-assessed proficiency. This is in contrast to previous research among learners aged 15-16, which showed positive correlations between playing digital games and L2 proficiency, particularly with regard to vocabulary, as well as the frequency of gaming and types of games played (Sundqvist, 2009). Other studies have also established a link between better grades in L2 English and gaming, with frequent gamers outperforming moderate gamers who, in turn, outperform non-gamers (Pettersen, 2019). In addition, research has shown that gaming with both oral and written English input and gaming with only written English input are significantly related to vocabulary scores (Jensen, 2017). Gender-related differences have also been identified, with boys outperforming girls in vocabulary tests (Sylvén and Sundqvist, 2012). Boys also tend to game significantly more than girls (Jensen, 2017), which could explain some of the gender differences observed in these studies. It is worth noting that in our study, a majority of the participants declared themselves as women, though not a large majority, with 77 out of 120 or 64.16% of the pool being women. This may have played a role in the lack of correlation between playing video games in English and self-assessed proficiency in our study, and could be an interesting avenue for further research.

Another notable finding in our study was the lack of significant correlation between listening to the radio in English and self-assessed English proficiency. This is somewhat surprising given that listening to the radio is often considered a valuable tool for language learning, particularly for improving listening comprehension skills. One possible explanation for this finding is that the radio content may not have been engaging enough or presented at a level that was appropriate for our participants. Likewise, this finding may have been influenced by the low overall exposure to radio content in our population. Namely, 61.6% of the French either do not ever listen to the radio, regardless of the language it is in or to the radio in English, and 47% of the Croatian participants said the same.

#### **4. Limitations of the study**

There are a few limitations to this study. First, in spite of anonymity guaranteed to the participants in the section where they were explained the purpose of the study and where their consent was sought, people might not have been comfortable disclosing information about them honestly. The participants might have adapted their responses to meet ours or their personal expectations. For example, they might not have admitted they preferred subtitles over the original version without any subtitles. Secondly, it was later ascertained that one question was probably left to be interpreted ambiguously due to unpredicted polysemy in French. The question asked whether participants studied a foreign language/linguistics or not, and the ensuing question was about what they studied more precisely. Upon closer inspection it became clear that the supposed 70.4% of the French participants who studied a foreign language or linguistics did not in fact study it at university since the percentage did not at all correspond with the answers to the following question. Our guess is that discrepancy is due to clumsiness in the formulation of the question about studying a language, whereby many participants might have thought the question was about studying a foreign language/linguistics at all, somewhere, and not necessarily at university. Furthermore, Alison and Mackey warn that studies should report intracoder reliability, yet this study only had one author, thus only one coder as well, so that way the reader's confidence in the conclusions of the study may be undermined (2016, p.

139). Finally, for all these reasons, the data may be noisy, but the study was carried out in good conscience.

## **5. Suggestions for further research**

There are several suggestions for how to extend this research study. First, it would be interesting to generalize the research to the entire population: since this research was conducted only on the student population, it is necessary to conduct research on the general population in order to obtain more general results. Second, validation of results using a real test of English proficiency; instead of using only the self-assessment method, participants should also receive a real test of English proficiency in order to validate the obtained results. Third, a comparison of differences between English language university students in France and Croatia might also be useful. For this study, only students who do not major in the English language were asked to fill in the questionnaire, but research needs to be conducted ascertaining differences in English language exposure and self-assessment precisely between English language university students in France and Croatia. Finally, considering the ubiquity of social media use, their impact on the English language needs to be taken into account, including their role in learning, improving, maintaining, and improving English language skills. Some of the elements of exposure to English on social networks were examined in questions such as "I hold conversations in English online with people I do not know in person", but based on this study, a more general approach on the topic would certainly provide conclusive results.

## **6. Conclusion**

The aim of this thesis was to compare the exposure to the English language of two different groups of university students, French and Croatian. It sought to determine if they were exposed to English to a different degree, identify differences and reasons for their exposure to internet TV in English, and examine the correlation between their self-assessed exposure and proficiency in that language. Findings showed that when it comes to self-assessment, there were two levels

of difference between the two groups: the Croatian thought they had the C1 level in English and the French the B1 in English. Furthermore, the Croatian seemed to be more exposed to each of the exposure factors, except for one, playing video games in English, and this was one of only two exposure factors that did not show a significant difference, the other being listening to music in English. The differences listed from the most to the least significant were as follows: browsing the internet in English, chatting with international friends in English, reading e-books in English, reading international news in English, watching internet TV content in English, listening to the radio in English, listening to music in English and playing video games in English. When it comes to preferences on watching internet TV content in English, the French, whenever possible, chose dubbed versions. As for the reasons behind their choices, the French usually cited their lack of willingness to read the French subtitles and the lack of will to focus on the plot and not the translation, as well as the lack of proficiency in English for subtitles in English or for the original version with no prompts. Those who still avoided the dubbed version did so in order to improve their skills in English or for artistic purposes. The Croatian did not prefer the dubbed version in any of the combinations. They preferred subtitles in Croatian for the sake of authenticity of the content, subtitles in English because they did not need the translation, but they still preferred subtitles in English to the original version with no help whatsoever. Both groups stated they would give a chance to internet TV content in English were there no help at all, provided the content was interesting enough. If the Croatian still opted for dubbing, it was in the case of animation movies. Finally, it was ascertained that six out of eight of the exposure factors in the study correlated with the self-assessed proficiency in English: browsing the internet in English, chatting with international friends in English, reading international news in English, reading e-books in English, watching internet TV in English and listening to music in English. The two factors that did not correlate with the level of self-assessed proficiency in English proved to be listening to the radio in English, and, interestingly, playing video games in English. Our study might have provided valuable insights into the relationship between various exposure factors and self-assessed English proficiency. The findings suggest that exposure to English through various media might have a positive impact on language learning, and that some factors may be more effective than others. More research is needed to confirm that claim, for

we only had self-assessed knowledge as a variable. Future research could investigate the topic on specifically university students of the English language, as well as on the general population in the two countries. These findings could have implications for language learning and teaching in both countries and could help inform the development of language policies and curricula in the future.



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## Sažetak

Sve veći broj ljudi diljem svijeta koristi internet u razne svrhe. Raste i broj prilika za učenike jezika dolaskom u kontakt sa svojim ciljnim jezikom, tj. za izloženost ciljnom jeziku. Prijašnja istraživanja ukazala su na pozitivan utjecaj takve izloženosti na učenje jezika. Cilj ovog istraživanja bio je utvrditi kako 120 francuskih i hrvatskih studenata procjenjuje svoju razinu engleskog jezika, u kojoj su mu mjeri izloženi, zašto te je li njihova izloženost u korelaciji s njihovom samoprocjenom znanja engleskog jezika. Hrvatski su sudionici puno bolje procijenili svoje znanje engleskog jezika od Francuza, jer smatraju da je njihov engleski dostojan razine C1, za razliku od Francuza koji svoju razinu engleskog ocjenjuju razinom B2. Hrvati su također prijavili veću izloženost engleskom jeziku na internetu u svim čimbenicima izloženosti osim u jednom. Francuzi preferiraju sinkronizirane internet TV sadržaje, uglavnom zbog nedostatka volje da se koncentriraju na čitanje podnapisa ili zbog slabog razumijevanja engleskog jezika, dok Hrvati ne preferiraju sinkronizaciju, izuzev animiranih filmova, uglavnom radi očuvanja autentičnosti sadržaja. Izloženost je pozitivno korelirala sa samoprocjenom razine engleskog u svim faktorima izloženosti osim slušanja radija i igranja videoigara.

Ključne riječi: izloženost engleskom jeziku, drugi jezik, internet, razina znanja jezika, samoprocjena, učenje izvan učionice