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„Exploring the role of English in young adults' lives in Austria: Second language engagement & enjoyment"

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Abstract

The digital era is continuously opening new doors for informal second language learning (ISLL; Dressman, 2020, p. 1). This modern phenomenon has not been neglected by researchers in the field of SLA (e.g., Sundqvist, 2009; Sockett, 2014), forging the new research path of ISLL. However, within this field, only limited research has been conducted on affective factors (Arndt, 2023). Therefore, the present thesis addresses the relationship between ISLL and Foreign Language Enjoyment (FLE), a positive emotion experienced by L2 speakers when a satisfactory interplay between challenge and ability is met while engaging in L2 use (Botes et al., 2022; Dewaele & MacIntyre, 2016). The current study explores ISLL involvement and FLE levels of 653 young adults in Austria between 18 and 35 years by means of a validated online survey based on prior research (e.g., Schwarz, 2020; Ghamarian-Krenn, 2023; Resnik & Dewaele, 2020). In addition to ISLL practices in leisurely settings, this study also investigates the use of English in professional and educational contexts.

(Almost) daily ISLL involvement in the recreational setting was reported by nearly all participants (95.3%), by 30.1% in the educational context, and by 25.3% in the professional setting. Compared to working young adults, tertiary students and employed tertiary students scored significantly higher on the ISLL scale. FLE levels were relatively elevated and consistent among the sample (M = 3.75, SD = .7); there were no differences between the three subgroups. However, members of Gen-Z had significantly higher recreational ISLL and FLE levels than Millennials. Furthermore, FLE was predicted by recreational, educational as well as professional ISLL individually. The findings suggest that recreational, educational, and professional ISLL involvement among Austrian young adults contributes to "globalized bilingualism" (Smit & Schwarz, 2019, p. 309) in Austria. Moreover, in accordance with Fredrickson's (2011) broaden-and-build theory, frequent experiences of ISLL lead to increased FLE, which could then reinforce overall mental wellbeing.

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List of abbreviations

A1-C2 ..... Proficiency levels
AHS ..... Allgemeinbildende höhere Schule (Academic Secondary School)
BMBWF ..... Bundesministerium für Bildung, Wissenschaft und Forschung (Ministry of Education)
BMF ..... Bundesministerium für Finanzen (Ministry of Finance)
BMS ..... Berufsbildende mittlere Schule (intermediate vocational eduction)
CLIL ..... Content and language integrated learning
EE ..... Extramural English
EEQ ..... Extramural English Questionnaire
EF ..... Education First (Education company)
EFL ..... English as a foreign language
ELF ..... English as a lingua franca
ELT ..... English language teaching
EME ..... English-medium education
EMI ..... English as a medium of instruction
ERT ..... Emergency remote teaching
FL ..... Foreign language
FLB ..... Foreign language boredom
FL(C)A ..... Foreign language (classroom) anxiety
FLE ..... Foreign language enjoyment
FLES ..... Foreign language enjoyment scale
FWF ..... Austrian Science Fund
H1-3 ..... Hypothesis 1-3
HEI ..... Higher education institutions
HTL ..... Höherbildende technische Lehranstalt (technical college)
IDLE ..... Informal digital learning of English
ISLL ..... Informal second language learning
ISLP ..... Informal second language practices
LL ..... Linguistic landscape
LTC ..... Language contact typology
L1 ..... First language
L2 ..... Second language
LX ..... any language acquired after the L1
OCFLU ..... Out-of-class foreign language use
OeAD ..... Austrian Agency for Education and Internationalization
OILE ..... Online informal learning of English
ORF ..... Österreichischer Rundfunk (Austrian Broadcasting Cooperation)
PP ..... Positive Psychology
SLA ..... Second language acquisition
TEI ..... Trait emotional intelligence
WTC ..... Willingness to communicate
WU ..... Wirtschaftsuniversität Wien (Vienna University of Economics and Business)

List of statistical abbreviations

α ..... Cronbach alpha value
ANOVA ..... Analysis of variance
b ..... regression coefficient
CFA ..... Confirmatory factor analysis
CFI ..... Comparative fit index
EFA ..... Exploratory factor analysis
F ..... Regression model test statistic
H ..... Kruskal-Wallis test statistic
IQR ..... Interquartile range
M ..... mean value
N ..... sample size
p ..... probability value
Q-Q plot ..... Quantile-quantile plot
RMSEA ..... Root mean square error of approximation
R^2 ..... coefficient of determination
r_B ..... rank biserial correlation (effect size)
r_s ..... Spearman correlation coefficient
SD ..... standard deviation
SRMR ..... Standardized root mean square residual
SW ..... Shapiro-Wilk test
TLI ..... Tucker-Lewis index
U ..... Mann-Whitney U test statistic
VIF ..... Variance inflation factors
W ..... Shapiro-Wilk test statistic
Z ..... Wilcoxon signed-rank test statistic
z ..... Fisher's z effect size

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1 Introduction

Work-life balance is a top priority of members of the Gen-Z and Millenials (Deloitte, 2023, p. 1). While older cohorts often disparage this attitude of "kids these days" (Bishop, 2022), modern as well as conventional free time activities have the potential to foster practical skills, such as digital or linguistic competences, and help to maintain emotional well-being (Takiguchi et al., 2023; Miglbauer, 2017). In fact, a growing body of research has detected positive effects of informal second language learning on various factors, such as the second language proficiency of young adults (e.g., Ghamarian-Krenn, 2023). Another substantial pool of studies on foreign language enjoyment, a concept from positive psychology, has revealed positive influences on a range of different aspects, for example, the personality trait of learner autonomy (e.g., Resnik & Dewaele, 2021). However, research investigating the possible connection between informal second language learning and foreign language enjoyment is limited. According to Arndt (2023, p. 7), previous studies on informal second language learning have mostly concentrated on the frequency of specific activities, whereas affective factors have largely been neglected. Therefore, the present thesis aims to address a potential relationship between these two constructs.

The first of these concepts, informal second language learning, refers to the uninstructed, primarily incidental acquisition of a second language by engaging in naturalistic recreational, professional, or educational endeavors which involve the target language (Schurz, 2022, p. 48; Dressman & Sadler, 2020, p. 1). In the Austrian context, comprehensive studies on the ISLL behaviors of different student groups, such as lower (Schurz, 2022) and upper secondary students (Schwarz, 2020), as well as tertiary students (e.g., Ghamarian-Krenn, 2023), have been conducted. As the majority of studies have been embedded in some kind of educational setting, Schwarz (2020, p. 351) asserts that "[…] it would be interesting to explore the English leisure practices of adults outside formal education, although such research

presents difficulties in relation to access." Similarly, in their "future research shopping list", Sockett and Toffoli (2020, p. 482) call for more research of ISLL in workplace settings. To address this research lacuna, the current study examines ISLL behaviors of young adults, i.e., 18 to 35-year-olds who are either 1) working, 2) studying, or 3) working & studying. Socket and Toffoli (2020, p. 483) further propose that "[w]e are not different people in our personal and professional or personal and academic lives and ideally we should be able to imagine learning as some kind of seamless integration of all our life contexts." Therefore, not only the ISLL practices of the above-described participant group is investigated, but also engagement with the target language in professional and educational contexts is explored by means of language skills scales.

The second concept focal to this study is foreign language enjoyment (FLE), an intense, positive emotion experienced by L2 speakers of a language when a satisfactory interplay between challenge and ability while engaging in L2 use is met (Dewaele & Li, 2021, p. 926; Dewaele & MacIntyre, 2016, p. 216). Until a decade ago, emotions have frequently been described as "the elephant in the room" in the context of second language acquisition (Prior, 2019). While research on negative learner emotions had slowly started to push emotions into the spotlight in the context of second language acquisition, positive learner emotions remained in the dark until the 2010s (MacIntyre & Mercer, 2014, p. 156). Seminal studies on FLE by MacIntyre and Dewaele (2014; 2016) have laid a foundation for a profusion of research on FLE in various educational and geographical contexts. However, similar to ISLL, to my knowledge, FLE has always been studied in the context of formal language instruction. To approach this gap, the FLE scale by Dewaele and MacIntyre (2014) has been adapted to out-of-school, occupational and tertiary studies settings.

The present piece of research explores the impact of English use in the recreational, professional, and educational context as well as the levels of foreign language enjoyment among young adults, i.e., 18 to 35-year-olds in Austria. Here are the research questions underlying the present study:

> **RQ1a:** How do young adults in Austria engage with English in their free time?
> **RQ1b:** How do young adults in Austria engage with English in their professional and educational context?
> **RQ1c:** Are there differences in recreational informal second language learning practices between tertiary students, tertiary students who are working part-time and young adults who are working full-time?
>
> **RQ2a:** To what extent do young adults in Austria enjoy engagement with English?
> **RQ2b:** Are there differences in foreign language enjoyment between tertiary students, tertiary students who are working part-time and young adults who are working full-time?
>
> **RQ3:** What is the relationship between informal second language engagement and foreign language enjoyment among young adults in Austria?

A questionnaire based on previously used scales has been designed specifically for this project with novel items and validated in a threefold piloting process by means of "think-alouds", reliability analysis of a pilot round and expert feedback. The final version of the online survey was taken by 661 young adults in Austria. Among them, 29.4% were working young adults, 33.18% were tertiary students and 37.42% were both working and studying. The quantitative data was analyzed with descriptive and inferential statistics, using the software JASP (JASP Team, 2023) and IBM SPSS Statistics (IBM Corp, 2022). More specifically, confirmatory factor analyses, Kruskal-Wallis tests, Mann-Whitney U tests, Wilcoxon signed-rank tests and (multiple) linear regression models were computed. Qualitative data was coded with MAXQDA 2022 (VERBI Software, 2021).

The thesis will first outline the importance of English in Austria. Second, the term informal second language learning is defined and conceptualized before crucial studies focusing on the tertiary sector are reviewed and ISLL research in the Austrian context is introduced. Third, a brief overview of research on emotions is provided, followed by the definition, conceptualization, and measurement of foreign language enjoyment. Furthermore, relevant studies on FLE are reviewed. The study design

presents the research questions and target participant groups and provides an account of the questionnaire design and validation process. Eventually, the results of the statistical analyses are presented and discussed. Finally, in the conclusion, the most important results and implications are highlighted, limitations are identified, and an outlook is provided.

2 The role of English in Austria

While English words and phrases have made their way into the linguistic repertoires of Austrians (Onysko, 2007), German remains Austria's official language. In some multilingual regions of Austria, the minority languages Croatian, Slovene, and Hungarian function as additional official languages (BMF, 2023). According to the most recent international EF English Proficiency Index, for which 111 countries and regions were evaluated by English skills, Austria held third place internationally and was thereby classified as very highly proficient (EF, 2022, p. 6). Nevertheless, English does not hold an official status in Austria. Therefore, according to Kachru's (1985) sociolinguistic classification model, *Three concentric circles of world Englishes*, Austria can be located in the expanding circle. In the model, the various degrees of the "types of spread, the patterns of acquisition and the functional domains in which English is used across cultures and languages" are symbolized by classification into the norm-providing inner circle (e.g., the USA), the norm-developing outer circle (e.g., India) and the norm-dependent expanding circle (e.g., Brazil; Kachru, 1985, p. 12; 16). Considering the status of English in the globalized 21st century in Austria, however, this classification can be called into question. Smit and Onysko (forthcoming, p. 1) propose a more modern, multifaceted model for the categorization of the status of English in Austria, namely Onysko's (2016) *Language Contact Typology* (LTC) of world Englishes.

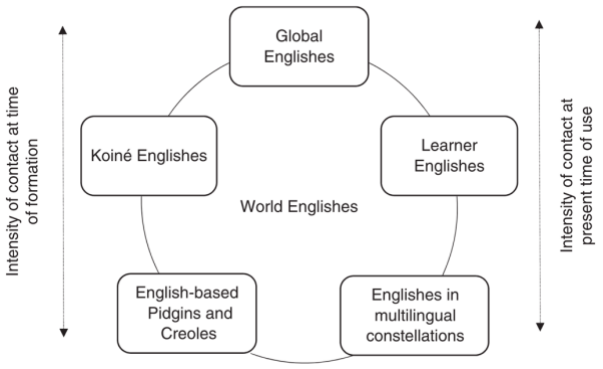

Figure 1: Language Contact Typology of world Englishes (Onysko, 2016, p. 213)

Onysko's (2016, p. 212) LTC aims to provide a classification system, which is based on the premise that contact between languages and codes is omnipresent and a natural precondition for the development of language. The model consists of five main contact settings:

1) *Global Englishes* represent the significance of English as an international lingua franca.
2) *Learner Englishes* are characterized by features of the speaker's L1 (e.g., Indian English).
3) *Englishes in multilingual constellations* refer to English as an L1 or LX in highly multilingual speech community contexts (e.g., in postcolonial contexts).
4) *English-based Pidgins and Creoles* originate from historically contingent multilingual settings.
5) *Koiné Englishes* are varieties which developed in the context of dialect contact (e.g., Maori; Onysko, 2016, p. 212-214).

For the Austrian context, Smit and Onysko (forthcoming, p. 12) conclude that the contact types of *Learner Englishes* and *Global Englishes* are prevalent. Since English is not an official language in Austria, the contact type of *Englishes in multilingual constellations* does not apply to the Austrian context. In the following paragraphs, I will describe the various settings in which English is used in Austria.

2.1 English in the educational context

In the educational context, *Learner Englishes* take a key role across all educational institutions ranging from preschool to tertiary level (Smit & Schwarz, 2019, p. 301). With regard to language

acquisition, Austrian kindergartens primarily aim to foster German competences (De Cillia & Krumm, 2010, p. 154), but, for example in Vienna, there are some kindergarten groups, where bilingual elements of English or other languages are integrated into the daily routines (Stadt-WIEN.at, 2022). Moving on to elementary school, language education of at least one foreign language, almost always English, starting in the first grade has been mandatory since the school year of 2002/2003 (De Cillia & Haller, 2013, p. 159; De Cillia & Krumm, 2010, p. 154). With the implementation of the new primary school curriculum in the school year 2023/2024, these regulations are refined: After the fourth grade, all students should have reached proficiency level A1 in the foreign language *(Primary School Curriculum*, 2023, p. 66; Virtuelle PH, 2022). EFL classes are taught regularly throughout lower- and upper secondary levels. To obtain a standardized school-leaving certificate ("Matura"), students have to take a final exam in a foreign language of their choice (BMBWF, n.d.). Oftentimes the students opt for English at proficiency level B2 (*Academic Secondary School Curriculum*, 2023; Nimmervoll, 2023).

In addition to these policies on English as a foreign language, English is progressively employed as a medium of instruction for subject content at the secondary and tertiary level (Smit & Schwarz, 2019, p. 303). In the secondary school context, Content and Language Integrated Learning (CLIL) refers to "a dual-focused educational approach in which an **additional language** is used for the learning and teaching of both content and language" (Coyle et al., 2010, p. 1, emphasis in original). Characteristics of CLIL are the use of a foreign language or lingua franca, which is predominantly English, teachers who are usually subject rather than language teachers, and the existence of CLIL lessons in addition to EFL lessons (Dalton-Puffer & Smit, 2013, p. 546). As there are few top-down regulations for the implementation of CLIL in Austria, CLIL has been realized in the form of voluntary grassroots initiatives in all Austrian secondary school types, except for upper secondary technical colleges (HTL), where CLIL was made compulsory in 2011 (Smit & Onysko, forthcoming, p. 3; Dalton-Puffer

& Smit, 2013, p. 547). Considering the tertiary level, Gaisch et al. (2021, p. 281) proclaim: “English has made it into Austrian higher education institutions (HEIs), and it is here to stay.” Despite the absence of explicit language policies, English-Medium Education (EME) has become a crucial instrument for the internationalization of tertiary education in Austria as it serves as an academic lingua franca in multilingual contexts (Smit & Onysko, forthcoming, p. 3; Gaisch et al., 2021, p. 300). In a study analyzing the websites and official documents of six Austrian Universities of Applied Sciences, Gaisch et al. (2021, p. 297) found that the institutions established both German and English as dominant languages. Especially in the realms of financing, conducting and publishing research, postgraduate study programs, internal HEI communication and external marketing, bilingualism was omnipresent (Gaisch et al., 2021, p. 297). Interestingly, the Austrian Science Fund (FWF, 2023) only allows English research applications with the only exception of research focusing on texts in German or other languages, conducted in the fields of linguistics and literary studies. In light of the above, it can be concluded that from pre-primary education to tertiary education and beyond, in the educational context, English constitutes the second most important language after German.

2.2 English in the professional context

Only limited research on the use of ELF, or in Onykso’s terms *Global Englishes* and presumably also *Learner Englishes*, has been conducted in the professional context in Austria (Smit & Onysko, forthcoming, p. 9). Nevertheless, there are a few branches, where the use of English has been explored. With 136.91 million overnight stays in Austria in 2022 (Statistik Austria, 2023b), it is reasonable to infer that tourism creates a multitude of workplaces in Austria. Here, in its function as a lingua franca, English performs a vital role in the communication between tourists and service providers as well as among multilingual employees in the tourism industry (Smit & Onysko, forthcoming, p. 8). Examples for such ELF exchanges are guided walking tours held in English (e.g., “Viennese women stories” by Prime Tours, 2023), or the communication of a kitchen crew in an

alpine hotel restaurant (cf. Gonçalves, 2020). In addition to the tourism sector and in HEIs, it is also apparent that multinational companies (e.g., Bank Austria; cf. Stajic, 2015) and organizations (e.g., United Nations) use English as a lingua franca (Smit & Schwarz, 2019, p. 299).

To my knowledge, the use of English on social media for professional contexts in Austria has not been studied yet. Nevertheless, as in January 2023, English was the most common language on the internet worldwide, accounting for nearly 60% of shared web content (Statista, 2023), it is plausible to suggest that English content is featured in most Austrian social media users' feeds. In the work context, the role of English on LinkedIn, which is an online service provider and functions like a professional social medium, could be interesting. Yet, also more informal social media, such as Instagram should not be neglected as it can be assumed that English is used by Austrian businesses as a marketing language. Examples for the online use of English for professional purposes could be English job offers, such as the quest for a "Human Rights Team Assistant (f/m/d)" in Salzburg by ALDI SÜD HOLDING (2023) on LinkedIn, or content marketing, such as an Instagram posting of an Austrian winery announcing their presence at an international wine event (@theresapichler, 2022).

Turning to the public space, the importance of English in the lives of Austrians is reflected in its linguistic landscape (LL), which refers to "a space's public and private signs including shopfronts, billboards, advertisements, business and personal names, graffiti, and other legible text" (Malloy, 2023). According to Ben-Rafael (2009, p. 41), in addition to the linguistic content of a sign, it also carries a symbolic message as it recognizes the presence of a speech community. A small body of LL research in the Austrian context (e.g., Podrepschek, 2016) has shown that after German, English ranked as the second most commonly occurring language on signs in Vienna and that with regard to multilingual signs, the mixture of German and English was detected most frequently (Smit & Onysko,

forthcoming, p. 8). These results further suggest the presence of the *Global Englishes* and *Learner Englishes* contact types in Austria (Smit & Onysko, forthcoming, p. 12).

2.3 English in the recreational context

In view of the recreational context, there is a profusion of different activities, which can be pursued in English in Austria. Although German is clearly predominant, the possibilities to engage in leisurely English activities range from the realms of the media and entertainment to sport and cuisine. English media can be consumed online, in various English theaters, in sections of two Austrian daily newspapers (*Der Standard* & *Salzburger Nachrichten*), in English bookstores (e.g., Shakespeare & Company, 2023), or by listening to bi- or multilingual radio stations or podcasts, such as the national ORF-based FM4 radio station or the podcast "The Wurst Guide to Living in Austria" (Vienna Würstelstand, 2021; Smit & Onysko, forthcoming, p. 6; 11; Smit & Schwarz, 2019, p. 306).

Furthermore, there is also a broad selection of English cinemas and movie festivals in Austria. According to a recent interview with the Austrian Cineplexx CEO Christof Papousek published in *Die Presse am Sonntag* on July 30th, 2023, the demand for original version movie screenings of the current blockbuster movies *Oppenheimer* and *Barbie is* peaking: In the first four days after the release of the two movies, 24% of the *Oppenheimer* movie audience and 26% of *Barbie* fans wished to watch the movies in English without any subtitles (Nussmayr, 2023, p. 42). Papousek further stated that in recent years, this trend was also particularly visible for Marvel movies, which is closely linked to American pop culture and fandom. Nussmayr (2023, p. 43) asserts that streaming services, such as Netflix, where the default language can be switched with only one mouse click, could have contributed to this phenomenon.

Furthermore, Austrians can sign up for various sports classes held in English, and after training enjoy dinner or join a pub quiz at an English-speaking pub. According to Smit and Onysko (forthcoming, p. 10), the latter is an example of how English-speaking expat communities from the Inner and Outer Circle living in Austria enrich the diversity of English in Austria. Further examples for communities in Austria constitute English-speaking churches and various leisure-related groups, like book clubs, sports teams, or choirs (e.g., V.O.I.C.E Choir, 2023; Smit & Onysko, forthcoming, p. 11). The importance of the role of English in addition to German is stressed by this overview of the extensive possibilities for English activities in Austria.

This is also reflected in a study by Smit and Schwarz (2019, p. 298) who conducted a qualitative content analysis on 229 newspaper articles from the seven major Austrian newspapers featuring the key words "English/Englisch" and published between February and April 2017. They found that most newspaper entries either promoted cultural events and tourism or covered information for everyday life tasks, such as obtaining a driver's license. Furthermore, they found articles relating to all three contexts discussed above: educational, professional and recreational settings (Smit & Schwarz, 2019, p. 299). In view of Onysko's (2018) LTC, considering the evidence presented above points at the presence of the contact types *Learner Englishes* and *Global Englishes*. Englishes in *multilingual constellations* only applies to English-speaking expat communities, but not to Austria overall (Smit & Onysko, forthcoming, p. 12). A detailed account of the use of English among young Austrians will be addressed in the next section, which deals with informal second language learning of English.

2.4 Summary of the role of English in Austria

In summary, because English is not an official language in Austria, according to Kachru's three circle model, Austria falls into the expanding circle. However, as the role of English in Austria is more multifaceted, Smit and Onysko (forthcoming, p. 1) suggest using a more modern system for the

classification of English in Austria, Onysko's (2016) LTC of world Englishes. For the Austrian setting, the contact types of *Learner* and *Global Englishes* apply (Smit & Onysko, forthcoming, p. 12).

Learner Englishes are prevalent in the educational domain, which ranges from preschool to tertiary education, encompassing normal EFL settings, but also an additional educational approach called CLIL and study programs using English as a medium of instruction. *Learner Englishes* can also occur in ELF settings, where primarily the contact type of *Global Englishes* applies. *Global Englishes* come into play in the professional context, especially in the tourism industry, in academia, and in international companies. Unfortunately, the use of social media for professional contexts in Austria has not been studied. However, as English is the most common language used on the internet, it can be assumed that companies make use of the lingua franca for marketing purposes, for example. *Global Englishes* and *Learner Englishes* are also visible in Austria's linguistic landscape, where English was the second most frequent language occurring after German and combinations of English and German constituted the most frequently occurring multilingual signs (Smit & Onysko, forthcoming, p. 8). In the recreational setting, a great selection of free time activities, including cultural productions or the news broadcasted in English, also shows the presence of the above-mentioned contact types.

3 Informal second language learning

In the following, the concept of informal language learning is introduced and conceptualized. Furthermore, studies on ISLL at the tertiary levels are reviewed, followed by an account of the ISLL research conducted in the Austrian context.

3.1 Defining informal language learning

In addition to formal language instruction, the digital age has enabled incessant opportunities for naturalistic language learning (Dressman, 2020, p. 1). If connected to the internet, in their free time, learners can autonomously indulge in their target language in infinite forms, including podcasts, TikToks, games, Netflix shows, or animes just to name a few. As new technologies and media are introduced at rapid speed, the list of innovative language learning possibilities is continuously augmented. "What an incredible time ours is for language learning," Dressman (2020, p. 1) concludes. This modern phenomenon has not been neglected by researchers in the field of SLA (e.g., Sundqvist, 2009; Sockett, 2014), forging the new research path of informal second language learning (ISLL) practices of LX learners. Due to the international spread of Anglo-American media in the past decades and the general status of English as a lingua franca, both online and offline (e.g., Bosso, forthcoming), it is evident that the majority of researchers have focused on informal learning of English (Arndt, 2023, p. 2), as opposed to other second languages. This is reflected in the terminology used to describe the concept: Extramural English (EE; Sundqvist, 2009), online informal learning of English (OILE; Sockett, 2014), or informal digital learning of English (IDLE; e.g., Lee & Dressman, 2018). Other researchers have coined terms in relation to the traditional, formal context of language learning: out-of-class learning (e.g., Kashiwa & Benson, 2018), uninstructed L2 learning (e.g., Andringa, 2020), language learning beyond the classroom (Benson & Reinders, 2011), or language learning in the (digital) wild (Jensen, 2019; Reynolds, 2023). More general descriptions of the concept are implicit language learning (Ellis, 2010), incidental learning (e.g., Miller & Godfroid, 2020), informal second language practices (ISLP; Arndt, 2023), or informal language learning (Dressman & Sadler, 2020).

Extramural English is a pioneering concept coined by Pia Sundqvist (2009), which refers to a learner's self-initiated engagement with English outside of the (school) walls, i.e., in their free time. Intentional as well as unintentional contact with the L2 are considered extramural engagement with the language

(Sundqvist, 2009, p. 25). EE is never prompted by teachers or other language instructors, and the focus lies on *using*, rather than *learning* the language (Sundqvist & Sylvén, 2016, p. 6). With regard to the other concepts mentioned above, Sundqvist and Sylvén (2016, p. 9) propose the employment of EE as a hypernym for terms like out-of-class learning (e.g., Kashiwa & Benson, 2018), incidental language learning (e.g., Miller & Godfroid, 2020), implicit language learning (Ellis, 2009) or OILE (Sockett, 2014). However, although EE perfectly serves to investigate leisurely language use, it is not suitable for the current project: As the present thesis investigates recreational, professional, i.e., work-related, and university-related English engagement, the word "extramural" would result in ambiguity since it could refer to outside of university *and* outside of work. Also, while research on Extramural English is usually linked to EFL settings in the sense that in addition to EE engagement, the participants receive formal instruction in English (e.g., Schwarz, 2020; Schurz, 2022), for the current study, a more school-detached framework is needed.

The concepts of OILE (Sockett, 2014), IDLE (e.g., Lee & Dressman, 2018), and language learning in the (digital) wild (e.g., Jensen, 2019) focusing on the mediatized lifeworlds of young people, are highly appropriate concepts to investigate present-day virtual media use in English, but they are limited to the digital world. However, access to a stable internet connection is not the only qualification for picking up a new language in an informal setting. In view of ELF, the naturalistic use of English also occurs in non-digital communicative situations where the only shared language is English, e.g., when travelling, in sports courses, when playing board games with the expats next door. However, ISLL is also not limited to communicative non-digital situations, as reading the original hard copy version of *Harry Potter* or cooking by following a recipe in English can also constitute activities of recreational English use. Therefore, the umbrella concept of informal second language learning will be used as it encompasses any engagement with the L2 outside of formal EFL settings (Dressman, 2020, p. 4). This definition is

in line with Schurz' (2022, p. 48) inclusive description of uninstructed, naturalistic learning, referring to

> the acquisition of language that happens primarily incidentally by means of performing any type of naturally occurring (i.e., undesigned, unmanipulated) activity that involves the use of the target language outside its instructed context, receptively or productively, including or excluding other target language speakers or learners, online or offline and irrespective of regularity and intensity of use.

Consequently, the broader concept of ISLL includes recreational English practices, but also professional and educational ELF use and is not limited to specific demographic groups, such as EFL students (Dressman, 2020, p. 4; Sockett & Toffoli, 2020, p. 472). Although the current project does not investigate learning processes or the influence of ISLL on proficiency levels, but rather the use of English among young adults, the concept of informal second language *learning* was chosen. A reason for this is that research on leisurely second language use emerged from SLA research and is therefore closely linked to *learning* (e.g., Sundqvist, 2009). Furthermore, in line with Schurz' (2022, p. 48) definition of uninstructed, naturalistic learning above, L2 users' engagement in naturally occurring activities in English, which constitutes the focus of the present project, enables incidental acquisition of the language. In light of the above, for the present thesis, informal second language *use* is equated with informal second language *learning*.

Due to the wide scope of the term ISLL, it is essential to further disentangle the denotations of the words "informal", "formal" and "non-formal" in this context to avoid confusion. *Informal learning refers* to language acquisition by employing materials not initially created for language teaching. It is not to be mistaken with the informal register of a language, nor reduced to English engagement in informal settings (Sockett & Toffoli, 2020, p. 472f). *Formal learning*, on the contrary, refers to EFL settings, while *nonformal* indicates the engagement in English materials created for the sole purpose of language learning, but without a connection to formally instructed EFL contexts (Sockett & Toffoli, 2020, p. 472f). In summary, informal second language learning can be defined as the uninstructed, mainly incidental

acquisition of a second language by engaging in naturalistic recreational, professional, or educational endeavors, which involve the target language (Schurz, 2022, p. 48; Dressman & Sadler, 2020, p. 1).

3.2 Conceptualizing informal second language learning

Many important studies in the field of ISLL (e.g., Schwarz, 2020; Lee, 2019) have drawn upon the model of language learning beyond the classroom by Benson (2011, p. 9), which consists of four dimensions and can take different forms: Firstly, Benson (2011, p. 9) proposes the location of learning, which extends from private or recreational settings to extracurricular educational contexts. Secondly, the level of formality ranges from informal to non-formal to formal settings. Thirdly, the pedagogy regulates whether learning is naturalistic, self-instructed or instructed. Lastly, the locus of control refers to the person who takes control over the content of learning, i.e., the learner, teacher, or someone else. As the present thesis aims to describe ISLL practices in the recreational, professional, and educational setting, but disconnected from formal language instruction, the model is not applicable even though it helps to categorize language learning situations beyond the classroom.

At the beginning of 2023, SLA researcher Arndt (2023) proposed the contextual model of engagement in informal language practices. As the term *engagement* is often used intuitively, the need for a clear definition is urgent (Arndt, 2023, p. 3). According to Reschly and Christenson (2012, p. 3), in educational research, the concept of engagement is used to refer to the extent of active participation, interest and meaningful involvement in learning. Furthermore, Arndt (2023, p. 2) maintains that engagement is always embedded in a certain context, such as engagement with a certain task. Arndt (2023, p. 3) summarizes that scholarship agrees on the dynamic and shapeable character of engagement, which means that it can change over time, can be influenced, and that it consists of at least three different aspects. These dimensions include behavioral, cognitive, and affective engagement, and are interconnected and overlap to a certain extent (Reinders & Nakamura, 2021, p.

141). In her model, which is based on previous engagement research by Oga-Baldwin (2019), Arndt (2023, p. 4) complements these three dimensions with linguistic engagement. While behavioral engagement generally refers to noticeable signs of student participation, such as perseverance (Reinders & Nakamura, 2021, p. 141), it is operationalized as time, frequency, and diversity spent with informal activities (Arndt, 2023, p. 6). Cognitive engagement stands for attention, mental effort, and focus while engaging in ISLL. Affective engagement refers to the emotional components of (language) learning, such as enjoyment or anxiety (Reinders & Nakamura, 2021, p. 141; Arndt, 2023, p. 3). Finally, linguistic engagement indicates the "extent to which learners consciously focus on processing linguistic features and improving their language skills" (Arndt, 2023, p. 6).

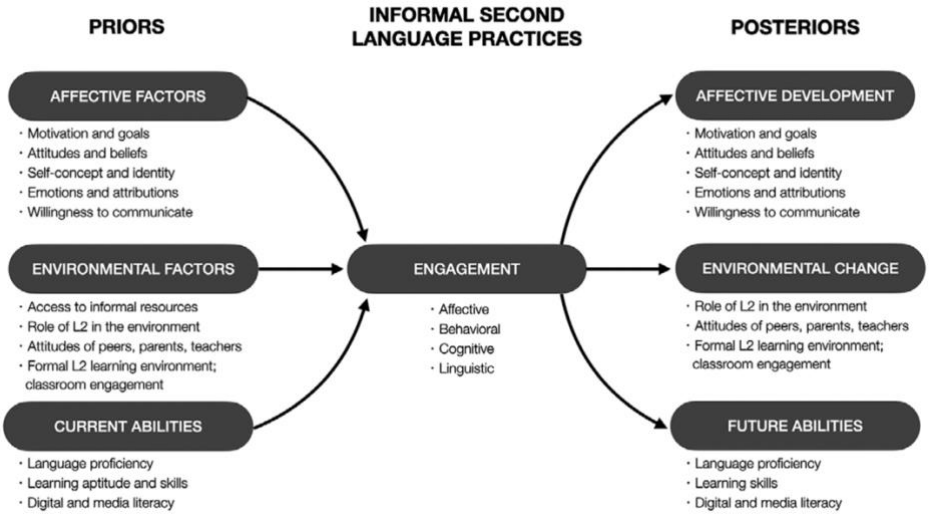

Figure 2: Contextual model of engagement in informal second language practices (Arndt, 2023)

In the model, engagement serves as a central mediator, which is employed to arrive at an understanding of the connection between a learner's past and future cognitive, behavioral, affective, and linguistic experiences and achievements. It also takes environmental factors, such as access to informal resources, into account (Arndt, 2023, p. 4-6).

Arndt's (2023) work is groundbreaking because prior research on engagement has exclusively focused on formal educational settings (Reinders & Nakamura, 2021, p. 138). Also, her innovative approach resulted in the design of a model and a measurement tool to study engagement in ISLL contexts. As the article was released during the pilot phase of the current study, has a longitudinal design, and is a form of a language diary (Arndt, 2023, p. 7), her questionnaire is not employed in the present thesis. Nevertheless, the work at hand seeks to investigate the relationship between the behavioral and affective dimensions of the contextual model of engagement in informal language practice.

3.3 ISLL among young adults at the tertiary level

In the table below, an overview of the central ISLL studies published from 2016 to 2023 is provided. As the current study investigates young adults' English use quantitatively, only research with a focus on this target population and a quantitative strand is considered.

Study	Focus	Participant group	Region of participants	ISLL measurement	Results
Arnbjörnsdóttir (2018)	Summary of a range of (national) studies on exposure, proficiency and use of English	Representative sample of Icelandic [children and] adults	Iceland	surveys, interviews, diaries	-Adults use English in recreational, professional and educational settings -almost all adults (90-95%) between 18 and 39 hear English every day -more receptive engagement with English as opposed to productive language use -41% of the adults between 18 and 39 write every day
Busby (2021)	Receptive vocabulary skills, exposure to English in educational and extramural settings	189 university students (aged 21 to 26)	Norway	3 items on extramural reading (offline and online), and gaming	-reading books, gaming and reading online were predictors of vocabulary knowledge -EE engagement was a stronger predictor for vocabulary knowledge than in-class exposure to English
Cole & Vanderplank (2016)	Informal, out-of-class learning and language proficiency	84 participants -34 foreign language class participants -50 self-taught learners (aged 18 to 24)	Brazil	Learner beliefs, actions and attitudes questionnaire	-no significant difference between autonomous and classroom-trained FL learners -more fossilized errors among FL class participants -proficiency levels of self-taught learners achieved by internal extrinsic motivation and not by quantity of time spent with informal resources

Ghamarian-Krenn (2023)	EE and academic verb knowledge	-153 English major students (mean age: 21.24, SD = 3.66)	Vienna, Austria	-Longitudinal design Extramural English Questionnaire (EEQ) with slight adaptations -2 data collection rounds: students filled in EEQ after each semester for one academic year	-high EE engagement -most popular activities: listening to English music, watching English videos and reading -longitudinal effect: stable EE behavior -gender differences: boys played more games, girls read more fiction-oriented works or listened to music -fiction-oriented reading and creative writing predicted academic verb knowledge
Ghamarian-Krenn & Schwarz (forthcoming)	Comparative analysis of EE activities and vocabulary knowledge	-189 secondary students (mean age 21.26, SD = 3.66) -152 tertiary students (mean age 15.56, SD =0.68)	Vienna, Austria	-38 EE activities based on EEQ and EEQ with slight adaptations	-daily EE engagement among almost all secondary (96.3%) and tertiary students (97.4%) -most popular activities: listening to music, watching videos online, reading status messages or comments, singing English songs, reading social media messages, watching music videos, watching series and films -higher frequency of EE reading (online and offline), going to concerts, watching non-fiction, writing notes or thinking in English among university students -EE influences receptive, but not productive vocabulary
González-Fernández (2022)	Out-of-class learning and depth of vocabulary knowledge	-314 FL learners (aged 18 to 65 years, mean age: 22.42)	International (European 50%, Chinese 50%)	Language exposure questionnaire measuring hours per week spent with specific activities	-Reading, watching TV and the use of social media showed significant correlations with vocabulary knowledge -Listening to music, viewing TV and reading were among the top three activities
Lee & Drajati (2019)	IDLE, WTC and the affective variables of grit, motivation, self-confidence, FLA	183 FL university students (aged 18-36, averaged age 21.19)	Indonesia	IDLE questionnaire based on Lee (2019)	-IDLE significantly correlated with WTC -Productive IDLE activities were predictors of WTC (as opposed to receptive IDLE activities)

Lee (2019)	IDLE, confidence, FLE	77 Korean tertiary students (aged 19 to 26, mean age: 21.55)	South Korea	IDLE items asking for quantity, interviews	-frequency of IDLE activities, age, and major predicted confidence and enjoyment -younger students who frequently engaged in IDLE had higher levels of confidence and enjoyment -diversity of IDLE activities predicted productive oral vocabulary knowledge
Lee & Dressman (2018)	IDLE, WTC, language proficiency	94 university students (aged 19-27, mean age: 21.5)	South Korea	Interviews, survey	-engaging in a range of different IDLE activities significantly correlated with WTC and language proficiency
Lee (2020a)	IDLE, proficiency, perceptions of English as an international language	89 undergraduate EFL students (aged 19-27, mean age 21.65, SD = 1.98)	South Korea	6 IDLE items based on Lee 2019	-frequency of IDLE activities correlated with positive perceptions of English as an international language
Lee (2020b)	IDLE, attitudes towards varieties of English, strategic competence for cross-cultural communication	266 tertiary students (aged 19 to 30, mean age 21)	South Korea	Delphi survey[1] based on existing literature; 8 IDLE items	-engagement with IDLE activities almost once a week (very low) -significant relationship between IDLE and strategic competence for cross-cultural communication
Lee et al. (2021)	IDLE, WTC, FLE, FLA	1265 EFL students at the secondary and tertiary level (aged 14 to 27, mean age: 18.27, SD = 2.1)	South Korea	IDLE scale of 13 items based on Lee and Drajati (2019)	-IDLE predictor of WTC -IDLE predicted higher FLE and lower FLA
Miglbauer (2017)	EE, digital skills, fostering language and IT skills	333 first-year students (aged 18 to 25)	Austria	15 items based on Leppänen et al. (2011)	-receptive EE engagement most prominent -most frequent EE activities: listening to music, reading webpages, watching films without,

[1] According to Hsu and Sandford (2007), the Delphi method refers to "a group communication process which aims to achieve a convergence of opinion on a specific real-world issue." It usually comprises a series of adapted versions of a questionnaire on a certain topic.

					reading emails, watching films with subtitles, writing notes, writing text messages
Orhon (2018)	Out-of-class learning, language learning process, attitudes	109 tertiary students (aged 18 to 23, mean age: 18.88, SD = 1.09)	Turkey	19 items based on previous research (e.g., Hyland, 2004)	-Most frequent activities: listening to music, watching TV or videos in English -connection between proficiency level and attitudes towards out-of-class activities -Speaking activities not very frequent -no difference in gender
Trinder (2017)	OILE, technology use in class	175 business students	Vienna, Austria	Questionnaire with 16 closed item and further open-ended questions	-most frequent activities: watching TV, using online dictionaries and writing emails

With regard to the existing literature on ISLL at the tertiary level, it is striking that despite a considerable amount of international research interest in the topic, there is a paucity of established quantitative research conventions in the field of ISLL among adults. This is also reflected in the variety of theoretical concepts referring to ISLL, as discussed in 3.1. While seven studies focused on the digital components of informal language learning by researching IDLE (Lee, 2019; Lee & Drajati, 2019; Lee & Dressman, 2018; Lee, 2020a; b; Lee et al., 2021) and OILE (Trinder, 2017), another four investigated out-of-class learning (Cole & Vanderplank, 2016; González-Fernández, 2022; Orhon, 2018). Furthermore, Extramural English was represented by four studies (Miglbauer, 2017; Busby, 2021; Ghamarian-Krenn & Schwarz, forthcoming) and more generally, "use of English" was employed in Arnbjörnsdóttir (2018).

Nevertheless, the studies reviewed above have undoubtedly contributed substantially to the field by examining ISLL of English among (young) adults in their local context and in connection to numerous other variables. Almost all studies have investigated ISLL among FL learners, whereas only Arnbjörnsdóttir (2018) examined the use of English among the Icelandic population, also taking the work context into account. This could be due to a lack of research access to non-educational areas. As Arnbjörnsdóttir (2018) and earlier studies like Leppänen et al. (2011) draw upon national surveys, which were government-funded, access to larger parts of the population was facilitated. Although the majority of participants in the other studies reviewed were tertiary students, studies which investigated tertiary and secondary students (Ghamarian-Krenn & Schwarz, forthcoming; Lee et al., 2021), all age groups of a population (Arnbjörnsdóttir, 2018) or foreign language class participants in comparison to autodidact learners (Cole & Vanderplank, 2016) were also included in the review. The majority of participants were roughly between 18 and 30, with lower mean ages ranging from 18.27 (Lee et al., 2021, p. 6) to 22.42 (González-Fernández, 2022, p. 28). Concerning the sample sizes of the quantitative survey studies, the number ranges from 77 participants (Lee, 2019, p. 770)

to 1265 participants (Lee et al., 2021, p. 6). In addition to vocabulary knowledge (e.g., Ghamarian-Krenn & Schwarz, forthcoming) and proficiency (e.g., Cole & Vanderplank, 2016), ISLL studies have also targeted WTC (Willingness to communicate; e.g., Lee & Drajati, 2019) as well as various affective factors (e.g., Lee et al., 2021), language attitudes (e.g., Orhon, 2018), IT skills and use (e.g., Miglbauer, 2017) and strategic competence for cross-cultural communication (Lee, 2020b).

In view of the methodologies, qualitative ISLL data was usually gathered by means of interviews (e.g., Lee & Dressman, 2018, p. 437). Regarding the quantitative data collection instruments, there is no established scale which is employed to measure ISLL. This could be explained by the different understandings of ISLL, which is again echoed in the range of different concepts, dissimilar research contexts, and by limited research into the validation of ISLL scales. Also, at this point, it has to be borne in mind that the field is strongly linked to technical developments, and has, therefore, experienced a boost as recently as the late 2010s and early 2020s. Concerning the survey instruments used to measure ISLL, the number of items ranges from as few as three items (Busby, 2021, p. 72) to as many as 44 items (Ghamarian-Krenn, 2023), indicating that comparisons between the studies should be drawn cautiously. Most researchers employed 3-point, 5-point or 7-point Likert-type ratings of the items on their scales, indicating the amount of time spent with ISLL activities. The only exception constituted the scale by González-Fernández (2022, p. 33), which asked the participants for the hours spent on specific activities per week. An innovative approach was the use of a Delphi survey to ensure the content validity of the IDLE scale used by Lee (2020b, p. 51). As opposed to the majority of the studies, unfortunately, some researchers did not disclose any details on the reliability of the items used to measure ISLL (e.g., Trinder, 2017).

The studies reviewed above presented a range of substantial findings. In addition to the educational context, young adults came across English in professional and recreational settings (Arnbjörnsdóttir,

2018, p. 53). The findings further suggest that some ISLL activities are carried out on a daily basis: Arnbjörnsdóttir (2018, p. 42) found that 90 to 96% of young adults in Iceland between 18 and 39 hear English every day and that 41% of participants write every day. Ghamarian-Krenn and Schwarz (forthcoming, p. 9) also recorded daily EE practices among 96.3% of all secondary and 97.4% of all tertiary students in Austria. Conversely, in a study among 266 South Korean tertiary students, Lee (2020b, p. 159) discovered that IDLE activities were performed only once a week. This conflicting finding could point to less ISLL engagement among South Korean tertiary students, but it could also be explained by the use of the concept IDLE, which only includes digital activities, thereby ignoring offline ISLL engagement. Also, 4 out of 6 IDLE items used in the survey asked for cultural awareness rather than the frequency of IDLE practices, e.g., "I use technology to help myself understand and appreciate the target culture better" (Lee, 2020b, p. 160), which also applies to the IDLE scale by Lee (2020a, p. 62). These IDLE instruments differ from most other scales, as they usually emphasize the frequency of engagement with an activity as opposed to the underlying intentions.

The most popular ISLL activities were listening to music (Miglbauer, 2017; Orhon, 2018; González-Fernández, 2022; Ghamarian-Krenn, 2023; Ghamarian-Krenn & Schwarz, forthcoming), watching TV (Trinder, 2017; Miglbauer, 2017; Orhon, 2018; González-Fernández, 2022; Ghamarian-Krenn, 2023), watching videos online (Orhon, 2018; Ghamarian-Krenn, 2023; Ghamarian-Krenn & Schwarz, forthcoming), reading (González-Fernández, 2022), reading online (Miglbauer, 2017; Ghamarian-Krenn & Schwarz, forthcoming), and writing emails or text messages (Trinder, 2017; Miglbauer, 2017). An increased amount of receptive informal language engagement, as opposed to productive language use, has also been found (Arnbjörnsdóttir, 2018, p. 41; Miglbauer, 2017, p. 61; Ghamarian-Krenn, 2023, p. 236). In a similar vein, Ghamarian-Krenn and Schwarz (forthcoming, p. 13) demonstrated that only receptive vocabulary knowledge is influenced by EE engagement. Following a similar pattern, Orhon (2018, p. 11) demonstrated that speaking activities were rather

infrequent. In contrast, Lee (2019, p. 122) discovered that the diversity of IDLE activities predicted productive vocabulary knowledge.

Correlations were found between time spent reading, watching TV, and using social media informally and vocabulary knowledge (González-Fernández, 2022), IDLE and WTC (Lee & Drajati, 2019; Lee & Dressman, 2018), positive perceptions of English as a globalized language (Lee, 2020a), strategic competence for cross-cultural communication (Lee, 2020b), as well as language proficiency (Lee & Dressman, 2018). Furthermore, ISLL also seems to be a predictor of a range of variables. IDLE predicted WTC (Lee et al., 2021, p. 11), lower FLA, higher FLE (Lee, 2019, p.122; Lee et al., 2021, p. 11), and confidence (Lee, 2019, p. 121). Lee and Drajati (2018, p. 173) found that only productive IDLE activities predicted WTC. Busby (2021, p. 58) demonstrated that, compared to formal learning settings, EE was a more influential predictor of vocabulary knowledge, and more specifically, reading online and offline as well as gaming predicted vocabulary knowledge. Similarly, Ghamarian-Krenn (2023, p. 288; 291) showed that EE activities concerned with fiction-oriented reading and creative writing predicted academic verb knowledge. Interestingly, Cole and Vanderplank (2016, p. 39), who compared self-taught and institution-bound FL learners in Brazil, found that the levels of proficiency achieved by autonomous learners were not due to ISLL, but rather to internal motivation. Moreover, a difference in proficiency between these two groups could not be detected. Nevertheless, FL class students had increased error fossilizations. A dominance of activities related to digital technologies was also found by studies, which did not specifically focus on IDLE (Miglbauer, 2017, p. 61). A relationship between attitudes toward out-of-class learning and proficiency among tertiary students in Turkey, but no difference in gender regarding the attitudes, was found by Orhon (2018, p. 11).

3.4 Informal language learning and extramural English in Austria

As the current thesis presents a quantitative study on ISLL practices among *Austrian* young adults, the following section will also review EE research on the secondary level (Schwarz, 2020; Schurz et al., 2022; Schurz & Sundqvist, 2022; Schurz, 2022). The studies on tertiary-level ISLL (Miglbauer, 2017; Trinder, 2017; Ghamarian-Krenn, 2023; Ghamarian-Krenn & Schwarz, forthcoming) in the Austrian context have already been reviewed in 3.3.

The first comprehensive work in the Austrian setting was conducted by Schwarz (2020) and systematically examined Viennese teenagers' EE habits and the potential impact on vocabulary development. In her mixed-methods study, 201 AHS students in the 10th grade kept online language diaries, took vocabulary tests, participated in focus group interviews, and most importantly, filled out a questionnaire. For this purpose, Schwarz (2020, p. 138) developed the Extramural English Questionnaire (EEQ), a paper-and-pencil questionnaire, which covers the participants' use of EE, language variables, and sociodemographic variables. In addition to Sundqvist's (2009) concept of EE, Schwarz adopted Benson's (2011) framework on language learning beyond the classroom. Schwarz' (2020, p. 260) study demonstrated the positive influence of EE on receptive vocabulary size. Over 95% of the learners engaged in at least one EE activity almost every day. Music, audiovisual media, and other online contexts constituted the most prominent EE practices.

Also concerned with EE in the secondary school context, the studies by Schurz et al. (2022) and Schurz and Sundqvist (2022) are the first studies to cross-nationally examine and compare the relationship between EE use and ELT among lower- and upper-secondary teachers. Schurz et al. (2022) analyzed qualitative data, more specifically, semi-structured interviews with Austrian, French, and Swedish lower-secondary teachers. Teachers from all three countries reported progress in their students' receptive skills and vocabulary range, which can be ascribed to the students' EE

engagement. Furthermore, the results of their analyses showed that due to the rising importance of EE among the students in these European countries, English should no longer be considered an exclusive foreign language (Schurz et al., 2022, p. 13). This aligns with Smit and Schwarz' (2020, p. 309) classification of the present language policies in Austria as "globalized bilingualism" since German is the official language and English constitutes an additional language that plays a crucial role in the educational context, as well as both the private and public spheres.

Similarly, in their quantitative study, Schurz and Sundqvist (2022) investigated teacher beliefs about the interplay between EE and ELT. An online questionnaire filled out by 534 upper secondary teachers from Austria and France ("dubbing countries") and Finland and Sweden ("subtitling countries") showed a substantial difference between these two groups: EE use among students is significantly higher in subtitling countries (2022, p. 16). This finding is not in accordance with Schwarz (2020, p. 348) who concluded that the types and amounts of EE revealed no discrepancies between subtitling and dubbing countries. Since Schurz and Sundqvist (2022, p. 16) showed that in comparison to Austria, overall EE use was significantly lower in France, the French dataset could have had a strong influence on the finding that EE engagement was significantly higher in subtitling countries. Compared to countries where television shows are dubbed, EE has a long history in subtitling countries, such as Sweden (Schurz & Sundqvist, 2022, p. 1). In Austria, the rise of EE can be ascribed to the emergence of streaming services and social media (Schwarz, 2020, p. 352). Concerning EE habits in all four countries, the upper-secondary teachers reported that, in order of frequency, music, videos, other audiovisuals, gaming, reading, speaking, other audios, and writing were the most frequent EE practices (2022, p. 10). These results share similarities with the findings by Schwarz (2020, p. 340) who listed music, watching online video clips, and reading on social media as the most common EE activities among Viennese upper secondary students. While in Schurz and

Sundqvist's study (2022), teachers were interviewed about their perceptions of students' EE use, in Schwarz' (2020), the students themselves were surveyed.

Schurz (2022) presents a cross-national study, in which Austrian and Swedish 13 to 14-year-old students (N = 213) as well as teachers (N = 14) were surveyed about the students' EE involvement and a possible link to automatized and/or implicit language knowledge. Teacher interviews and student and teacher questionnaires were used to collect data. The analysis demonstrated that while the average weekly time spent on EE activities by the Austrian students was 16.71 hours, Swedish learners spent 26.50 hours per week. In a similar vein, the analyses showed that EE, more specifically, watching audio-visual material and gaming, had a positive influence on automatized-implicit grammar knowledge, which was not the case for Austrian students.

The Austrian studies reviewed above support the conclusion that, like tertiary students, secondary learners frequently consume English extramurally. Furthermore, there are connections between EE and vocabulary knowledge.

3.5 Summary of informal second language learning

The digital era has facilitated access to naturalistic language learning settings (Dressman, 2020, p. 1). Therefore, in addition to research on formal EFL settings, the scope of SLA research has been expanded to informal second language learning practices (e.g., Sundqvist, 2009; Sockett, 2014). Various terms have been used to describe this phenomenon, including Extramural English, online informal learning of English (OILE), out-of-school learning, IDLE (informal digital learning of English) and more. However, for the present purpose, the umbrella term ISLL is most suitable. ISLL can be defined as the uninstructed, mainly incidental acquisition of a second language by engaging

in naturalistic recreational, professional, or educational endeavors, which involve the target language (Schurz, 2022, p. 48; Dressman & Sadler, 2020, p. 1).

Although Benson's (2011) model of language learning beyond the classroom is widely used as conceptual background for studies research ISLL behaviors, Arndt's (2023) contextual model of engagement in informal second language practices is more appropriate for the present setting because it is not related to formal language instruction and because in addition to a behavioral, cognitive and linguistic dimension, it also takes affective engagement of ISLL practices into account. In educational research, the concept of engagement is used to refer to the extent of active participation, interest, and meaningful involvement in learning (Reschly & Christenson, 2012, p. 3). In the model, engagement serves as a central mediator, which is employed to gain insights into the connection between a learner's past and future cognitive, behavioral, affective, and linguistic experiences and achievements. However, the present study only focuses on the behavioral and affective engagement dimensions.

Research on ISLL with tertiary students presented a range of noteworthy findings. In addition to the educational context, young adults come across English in professional and recreational settings (Arnbjörnsdóttir, 2018, p. 53). The findings further imply that some ISLL activities are undertaken daily (e.g., Arnbjörnsdóttir, 2018, p. 42; Ghamarian-Krenn and Schwarz, forthcoming, p. 9). Listening to music (Miglbauer, 2017; Orhon, 2018; González-Fernández, 2022; Ghamarian-Krenn, 2023; Ghamarian-Krenn & Schwarz, forthcoming), watching TV (Trinder, 2017; Miglbauer, 2017; Orhon, 2018; González-Fernández, 2022; Ghamarian-Krenn, 2023), watching videos online (Orhon, 2018; Ghamarian-Krenn, 2023; Ghamarian-Krenn & Schwarz, forthcoming), reading (González-Fernández, 2022), reading online (Miglbauer, 2017; Ghamarian-Krenn & Schwarz, forthcoming), and writing emails or text messages (Trinder, 2017; Miglbauer, 2017) are among the most prominent

ISLL activities. The participants engage more frequently in receptive activities as opposed to productive language use (Arnbjörnsdóttir, 2018, p. 41; Miglbauer, 2017, p. 61; Ghamarian-Krenn, 2023, p. 236).

Correlations were detected between IDLE and WTC (Lee & Drajati, 2019; Lee & Dressman, 2018), positive perceptions of English as a globalized language (Lee, 2020a), strategic competence for cross-cultural communication (Lee, 2020b), language proficiency (Lee & Dressman, 2018), as well as ISLL and vocabulary knowledge (González-Fernández, 2022). In other studies, vocabulary knowledge was even predicted by EE (Busby, 2021, p. 58; Ghamarian-Krenn, 2023, p. 288; 291). Furthermore, IDLE predicted WTC (Lee et al., 2021, p. 11), lower FLA, higher FLE (Lee, 2019, p.122; Lee et al., 2021, p. 11), and confidence (Lee, 2019, p. 121). Lee and Drajati (2018, p. 173) found that only productive IDLE engagement predicted WTC. Moreover, studies, which did not specifically concentrate on IDLE also found a prevalence of activities involving digital technologies (Miglbauer, 2017, p. 61). Austrian studies conducted with secondary students and their teachers also confirmed the high frequency of ISLL engagement and its connection to vocabulary knowledge.

4 Emotions and language learning

The first part of the following section presents a theoretical and historical account of research into emotions. More precisely, the question of why psychological science existed for a century before positive emotions were researched will be probed (Fredrickson & Joiner, 2018, p. 195). Furthermore, the construct of FLE is defined, and the theoretical foundation, as well as the development of the different types of FLE assessment, are discussed. Finally, existing studies on FLE in the tertiary context are reviewed.

4.1 Research into emotions

Humans depend on emotions to serve vital purposes. They send warning signals to provide individuals with essential information, such as to call attention to potential threats or advantages to a person's health and happiness. In essence, emotions help us to detect the relevance of different circumstances to our well-being (Döveling & Konijn, 2021, p. 5). It is crucial and sometimes a challenging task to be able to distinguish emotions from related notions, such as affect, feeling, temperament, and mood (MacIntyre & Gregersen, 2012, p. 197; Coppin & Sander, 2016, p. 5). Emotions are elicited by distinct external events and are characterized by a start and a finish point (MacIntyre & Gregersen, 2012, p. 197). Also, emotions are linked to events that are relevant to an individual (Döveling & Konijn, 2021, p. 8). These qualities of emotions are in accordance with Reeve's (2009, p. 301) definition of *emotions* as "short-lived, feeling-arousal-purposive-expressive phenomena that help us adapt to the opportunities and challenges we face during important life events." Taking a closer look at this definition, "feeling-arousal" refers to physical reactions that co-occur with certain emotions. "Purposive" describes the goal-directed nature of emotions, and "expressive" reflects the social and communicative component of emotions, such as an uncontrolled facial expression, which is easily interpreted (MacIntyre & Gregersen, 2012, p. 194).

Although Coppin and Sanders (2016, p. 15) mention that there is a difference between feelings and emotions, for the purpose of this thesis, and in line with MacIntyre and Gregersen (2012, p. 194), *feelings* can be defined as emotional states. In contrast, *moods* describe a lasting affective state that is less intense than emotion and is not linked to situational circumstances (Kawabata & Mallett, 2022, p. 2). Identifying a mood's origin is, therefore, a difficult endeavor. Moods run in the background, while emotions operate in the conscious foreground. The term *affect* functions as an umbrella term for feelings, emotions, and moods and refers to an "either positive or negative feeling state, often toward someone or something" (Döveling & Konijn, 2021, p. 8). It is employed to differentiate

between a feeling state and the internal conditions of thought, cognition, and reflection (Döveling & Konijn, 2021, p. 7f.). *Temperament*, by contrast, is connected to an individual's personality and describes the inclination of a person to live through specific moods and emotions (MacIntyre and Gregersen, 2012, p. 197).

Research into emotions has shown that human cognition and behavior can be heavily influenced by emotions as "emotion guides attention, memory, decision-making, and action" (Coppin & Sander, 2016, p. 3). Therefore, the importance of researching emotions across various disciplines cannot be neglected. However, although the study of emotions dates back to the early days of psychological science when in 1872, Charles Darwin (1872/1998) observed emotions and facial expressions, it is surprising that it took more than 100 years for affective sciences to develop as a research field. This severe delay could be explained by the fact that emotions were considered trivial in the then-prevailing behaviorist school (Fredrickson & Joiner, 2018, p. 195; Coppin & Sander, 2016, p. 6f.). Finally, in the 1980s, research by pioneers like Ekman initiated an "affective turn" of scientific interest in emotions across many different disciplines, such as psychology, economics, literature, history, neuroscience, sociology, computer sciences, and linguistics (Coppin & Sander, 2016, p. 3).

To be able to examine emotions, a classification of emotions is necessary. As there is a comprehensive body of research and a profusion of different categorizations of emotions, detailed elaborations would exceed the scope of this Master's thesis. There are three leading theories of emotion: basic emotion theory, dimensional theory, and appraisal theory. The basic emotion theory contends that there is a limited set of basic emotions, which are biologically and psychologically fundamental (Gu et al., 2019, p. 2). The dimensional theory of emotion proposes that there are three dimensions: "pleasant-unpleasant, tension-relaxation, excitation-calm" (Gu et al., 2019, p. 2). As per the appraisal theory, stimulation events trigger internal states known as emotions (Gu et al., 2019, p. 3). Although there

are major differences, all three theories agree that emotions consist of five different components, which have demonstrated their usefulness for the conceptualization, but also measurement of emotion. The components are "1.) expression, 2.) action tendency, 3.) bodily reaction, 4.) feeling, and 5.) appraisal" (Coppin & Sander, 2016, p. 6). Emotions are inseparable from their bodily expression (Coppin & Sander, 2016, p. 6). Action tendencies describe the preparedness to act in an appropriate way in a certain situation (Coppin & Sander, 2016, p. 10). Further, emotions elicit bodily reactions, i.e., physical arousal. As in the early days of emotion research, *feeling* was often used interchangeably with *emotions*, early models of emotions are theories of feelings (Coppin & Sander, 2016, p. 15). Appraisal constitutes the cognitive process, which elicits emotions (Coppin & Sander, 2016, p. 18).

Zooming in on the expression component of emotions, it is evident that although some scholars propose discordant criteria for the classification of emotions, the so-called "big six" constitutes a prominent model, which comprises "fear, disgust, anger, sadness, surprise, and enjoyment" (Coppin & Sander, 2016, p. 8; Matsumoto & Ekman, 2009, p. 69). These basic emotions are said to be universal and closely linked to bodily responses and elementary survival (MacIntyre & Mercer, 2014, p. 162). The "big six" were initially proposed by Paul Ekman (1972), who conducted fundamental research into emotions and the micro expressions triggered by the respective emotions.[2] Nevertheless, "serious" emotions, like fear, anger, or sadness, formed the center of attention, as "pleasant emotional experiences were often deemed frivolous, merely icing on the cake." (Fredrickson & Joiner, 2019, p. 195). Finally, it was not until the threshold of the 21st century that academic attention shifted to the research of positive emotions. This progress was fueled by the birth of positive psychology (PP) (Seligman & Csikszentmihalyi, 2000). PP empirically investigates how people bloom and thrive (MacIntyre & Mercer, 2014, p. 154) and will be briefly discussed in 4.2.

[2] Ekman's claim that facial expressions are universal across different cultures has been exposed to criticism (Coppin & Sander, 2016, p. 8). However, a detailed account of this debate is beyond the scope of the thesis.

This development can also be observed within the domain of second language acquisition (SLA), where research on affective factors started in the 1980s and primarily focused on negative emotions, with anxiety constituting the most researched factor, often investigated in the context of research on motivation in SLA (MacIntyre & Gregersen, 2012, p. 195; Dewaele & MactInyre, 2014, p. 240). The concept of foreign language anxiety (FLA) was first introduced by Horwitz et al. in 1986 and refers to the negative emotional response triggered by second-language use or second-language learning contexts, and sometimes even by thoughts about these situations (Horwitz, 2017, p. 33). Symptoms include a racing heart, sweating palms, trembling hands, and a dull feeling in the stomach (Reeve, 2009, p. 331). People experiencing FLA often describe feelings of nervousness, upset, worry, or tension (MacIntyre & Gregersen, 2012, p. 195). These symptoms and feelings are associated with the "fight-or-flight" reaction, which is a response linked to the sympathetic and parasympathetic nervous system (MacIntyre & Gregersen, 2012, p. 195). As FLA is not measured in the present study, elaborating on this dimension and its literature is beyond the scope of this thesis. This thesis aims to venture into the rather under-researched realm of enjoyment in second language experiences in Austria. Therefore, the following subsections will focus on foreign language enjoyment (FLE).

4.2 Defining foreign language enjoyment

Considering the etymology of *enjoyment*, the term refers to the act of experiencing *joy*, so that the words can therefore be used synonymously (Kawabata & Mallett, 2022, p. 2). According to Merriam-Webster (n.d.), related concepts to enjoyment include "satisfaction", "happiness", "pleasure", "delight", "exuberance", and "contentment". The following holistic definition of *joy* discusses the circumstances in which en - *joy* - ment is experienced as well as the corresponding physical reactions. This definition also encompasses the social and interpersonal aspects essential to enjoyment.

> Joy is a pleasant and often quite intense emotion which usually occurs within a safe and secure environment and is experienced bodily as a warm glow which emerges from the center of the

> body and moves upward and outward. The expansive feeling of joy is accompanied by a corresponding broadening of perception, a powerful sense of connection to others, a profound feeling of being rooted in the present moment, a sense of existential freedom, and/or the belief that the world is nurturing, life-affirming, and benevolent. (Robbins, 2009, p. 540)

Concluding from this definition, experienced joy, i.e., enjoyment, comes with an array of positive affective states. This is in agreement with Fredrickson's broaden-and-build-theory, which will be introduced below. Regarding the construct of enjoyment, Kawabata and Mallet (2020, p. 4) assert that, empirically, joy and fun cannot be fully detached from each other as their conceptualization is congruous. This is also consistent with Dewaele and Li's (2021, p. 926) account of enjoyment as "a positive affective state that combines challenge, happiness, interest, fun, sense of pride, and sense of meaning." Dewaele and MacIntyre (2016, p. 216) further elaborate that "enjoyment can be defined as a complex emotion, capturing interacting dimensions of challenge and perceived ability that reflect the human drive for success in the face of difficult tasks […]." The aspect of the interplay between "challenge" and "perceived ability" evokes the idea of the *flow* concept, first introduced by positive psychologist Mihaly Csikszentmihalyi (1990/2009) and still explored with burning interest by researchers today (e.g., Phan & Ngu, 2022). A flow experience is characterized by "deep absorption, engagement, and enjoyment" and includes the typical feelings of absolute focus, a distorted perception of time, minimized self-awareness, and fusion between the activity and perception (Tse et al., 2021, p. 310). Hence, it can be inferred that the optimal combination of the challenge of a certain task and the necessary skill level to master this task provides a promising condition for flow. A rock climber flashing a difficult route at the end of a long day in the mountains, and a chemist working on the synthesis of a new product in the laboratory could illustrate such flow experiences. Returning to the foreign language learning context, Botes et al. (2022, p. 206) define FLE as "broad positive emotion experienced by FL learners when their psychological needs are met in the FL classroom." As this definition is not suitable for the context of this thesis, I will base my definition of FLE on the ones discussed above: *Foreign language enjoyment refers to an intense, positive emotion experienced by L2 speakers of a language when a satisfactory interplay between challenge and ability while engaging in L2 use is*

met. While any language can function as the respective L2, in the current context, the English language is in the spotlight.

Conceptually, the majority of research on FLE draws upon the broaden-and-build theory, which was proposed by Fredrickson (2001) and analyzes the character and effects of positive emotions on individuals (Mercer & MacIntyre, 2014, p. 162). To be more precise, according to the broaden-and-build theory, personal resources that foster mental and physical well-being can be acquired by regular exposure to brief, moderate, positive emotions. These momentary, positive experiences "broaden" people's perceptions and, over time, provide fertile ground to "build" these positive, inner resources. Examples of such experiences can be encountered every single day through human interaction, supporting others, playing, or learning (Fredrickson & Joiner, 2018, p. 194-196). The positive-broadening nature of these events can help to develop resources like resilience, positive thinking, self-compassion, or the ability to regulate emotions and fully enjoy positive experiences (Hanson et al., 2023, p. 145). The theory has also been validated by research into affective neuroscience: Garland et al. (2010) have shown that based on the tenets of neuroplasticity[3], downward spirals of negative emotions that are often described as symptoms of depression or anxiety can be counterbalanced by upward spirals of positivity. This can be explained by the fact that positive experiences induce permanent changes in neural structure and activity (Hanson et al., 2023, p. 142). A recent study by Hanson et al., (2023, p. 148f.) also demonstrated that a significant amelioration of psychological resources was detected among US-American participants (N = 46) who enrolled in a course aimed at boosting these resources by teaching strategies for focusing on positive experiences. These findings constitute an excellent illustration of the agenda of positive psychology, which emphasizes the "facilitation and promotion of positive and proactive life experiences" and the interception of

[3] Neuroplasticity or neural plasticity refers to "[…] the ability of the nervous system to change its activity in response to intrinsic or extrinsic stimuli by reorganizing its structure, functions, or connections […]" (Puderbaugh & Emmady, 2022).

rumination (Phan & Ngu, 2022, p. 2). The PP broaden-and-build theory also ties in with Arndt's (2023, p. 5) contextual model of engagement in informal second language practices, in which engagement with ISLL practices, among other aspects, mediates affective development (see 3.2).

Nevertheless, it cannot be neglected that PP is and has always been subject to criticism. In a systematic review of current critiques of PP, by means of content analysis of 32 articles, van Zyl et al. (2023, p. 7) found six major points of criticism, including claims that PP commercializes positivity with capitalist ulterior motives or that it lacks a proper conceptualization and measurement tools. Concerning the territory of SLA, this criticism is also consistent with Mercer and MacIntyre (p. 167), who, in 2014, called for the advancement of theoretical foundations and the practical application of positive psychological ideas to language learning settings. Yet, in the past decade, a growing body of research has aimed to address this gap, for example, by developing the PP construct of foreign language enjoyment.

4.3 Conceptualizing and measuring foreign language enjoyment

Seminal contributions to the conceptualization and exploration of foreign language enjoyment have been made by Dewaele and MacIntyre (2014; 2016) and served as a catalyst for subsequent studies on FLE. In their first comprehensive study conducted in 2014, they looked into the levels of and relationship between FLA and FLE. The participant group consisted of 1746 international, but mostly European (86.2%) foreign language learners aged 11-75, with an average of 24. The FL learners in Dewaele and MacIntyre (2014, p. 244) had varying levels of education: intermediate high school diploma (N = 91), high school diploma (N = 113), Bachelor's degree (N = 994), Master's degree (N = 450), and PhD (N = 94). Data was collected using an online questionnaire with Likert-Scale ratings consisting of a 21-item FLE scale (FLES) and an 8-item FLA scale, which will be described in more detail below. The results showed that FLE in the classroom setting was significantly higher than FLA

(Dewaele & MacIntyre, 2014, p. 248) and that the levels of FLA and FLE were linked to various biographical variables, such as the self-perceived FL proficiency, the number of languages known, the education level, or age group. Significantly higher levels of FLE and lower levels of FLA could be detected among FL learners who had already studied various languages, had reached higher proficiency levels in the FL, had attained more advanced education, and were older (Dewaele & MacIntyre, 2014, p. 262). Interestingly, females had higher levels of both FLE and FLA (Dewaele & MacIntyre, 2014, p. 254). Another essential finding was that despite the fact that FLE and FLA showed a significant negative correlation, only 12.9% of the variance was shared, and the two distributions of the scores were far from similar. This indicates that FLE and FLA are two separate independent emotions, which, although related, are not antipodal ends of one continuum (Dewaele & MacIntyre, 2014, p. 261). Thereby, they confirmed earlier claims by MacIntyre and Gregersen (2012, p. 193) that positive and negative emotions have different functions, alluding to Fredrickson's theory of positive upward and negative downward spirals of emotions.

In order to find out more about this relationship and the dimensional structure of FLE, Dewaele and MacIntyre (2016) analyzed their initial data set (2014) with questionnaire responses from 1742 multilinguals in greater detail with quantitative and qualitative methods. As already mentioned above, Dewaele and MacIntyre (2014; 2016) used 29 items concerned with anxiety and enjoyment in the foreign language classroom. The respondents rated their degree of agreement on a standard 5-point Likert scale (strongly disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4, strongly agree = 5). The 8 items which were used to ask about FLA were borrowed from the seminal work on foreign language anxiety by Horwitz et al. (1986). The remaining 21 items, which investigated FLE, are built upon Ryan et al.'s (1990) 7-item Interest/Enjoyment subscale and were, hence, further developed by Dewaele and MacIntyre (2014, p. 243). To elicit qualitative data to support their quantitative results, Dewaele and MacIntyre (2016, p. 219) also added an open item asking for a

detailed description of their feelings during a specific event they particularly enjoyed in the foreign language class setting. A factor analysis, more specifically, principal component analysis of all 29 items, revealed a three-factor structure consisting of "Foreign Language Classroom Anxiety"[4] and "Foreign Language Enjoyment – Private"[5] with high positive loadings (> .50) from eight items each as well as "Foreign Language Enjoyment – Social" with high positive loadings (> .50) from five items[6] (Dewaele & MacIntyre, 2016, p. 222f.). Furthermore, positive loadings (> .30) of nine enjoyment items indicate an overlap between private and social FLE (Dewaele & MacIntyre, 2016, p. 223). Furthermore, the qualitative data collected by Dewaele and MacIntyre (2014, p. 265) verified these two dimensions of social and private FLE, which will be examined in more detail below. In light of the above, it can be concluded that the FLES by Dewaele and MacIntyre (2014; 2016) constitutes a successful tool for measuring FLE, also frequently employed in later studies (see 4.4).

Nevertheless, because FLE is often examined in connection with other constructs (e.g., the willingness to communicate (WTC)), the number of items of a questionnaire quickly accumulates. As lengthy questionnaires can discourage participants from completing them (Cohen et al., 2018, p. 345). Botes et al. (2021) aimed to fill this methodological lacuna by developing a short version of the FLE scale (S-FLES) without sacrificing the reliability or validity of the original FLES. Botes et al. (2021, p. 862f.) approached this task by randomly splitting in half the original data set, which was collected by Dewaele and MacIntyre (2014) among 1603 adult FL learners between 18 and 75. The first half of the data served to devise the S-FLES by detecting the underlying factor structure with the help of a principal component analysis and choosing the items with the strongest weighting, while

[4] The eight FLA items with highly positive loadings in Dewaele and MacIntyre (2016, p. 220) correspond to all eight items taken from Horwitz et al. (1986).
[5] Items with highly positive loadings within the factor FLE – social contain "*laugh a lot, form a tight group, have common 'legends' (such as running jokes), a good atmosphere, teacher is supportive, friendly and encouraging, peers are nice* and *there is a positive environment*. [original emphasis]" (Dewaele & MacIntyre, 2016, p. 221).
[6] Items with highly positive loadings within the factor FLE – Private include "*I enjoy it, it's fun, don't get bored, learnt interesting things* and *feel proud*" [original emphasis] (Dewaele & MacIntyre, 2016, p. 223).

the second half was employed to confirm its reliability and validity (Botes et al., 2021, p. 864). As a result, three FLE subscales with three items each and an overall acceptable internal consistency were derived: teacher appreciation (α = .92), personal enjoyment (α = .71), and social enjoyment (α = .77) (Botes et al., 2021, 867f.). The S-FLES forms a valuable contribution to FLE research, and, since its introduction, has been frequently employed for studies on FLE in the foreign language learning context (e.g., Botes et al., 2023).

As the current study does not examine language use and enjoyment in a specific classroom setting, but rather in its various professional, tertiary level and recreational environments, the items of the dimension of teacher appreciation do not apply to the target group of the present study. Therefore, the S-FLES could not be utilized in the present study. Nevertheless, the confirmation of the two other dimensions, social and private FLE, was essential as they proved to be suitable to the present context. To delineate the two dimensions of social and private FLE, which also form the basic structure of my FLE scale, definitions will be provided below. Dewaele and MacIntyre (2016, p.222f.) define the dimension of social FLE as enjoyment characterized by "[…] the social setting or the presence of other people". In the classroom setting, it is described by "[…] positive feelings, encouraging peers, nice teachers, and a supportive environment" (Dewaele & MacIntyre, 2016, p. 225). Botes et al. (2021, p. 868) add that social enjoyment is defined as "[…] the fulfilment of social psychological needs in the FL classroom." As the research setting of the present thesis is detached from foreign language classes, the social dimension of FLE is understood as the fulfillment of social psychological needs when consuming or producing English utterances regardless of the setting. Concerning the more individual, private dimension of FLE, Dewaele and MacIntyre (2016, p. 228) found that the participants who experienced private FLE described "the feelings and cognition that accompany enjoyment", more specifically, the "[…] thoughts and feelings coalesce around a sense of accomplishment". In other words, private FLE refers to the "personal reactions to learning that reflect

relatively inner thoughts and feelings [...]" (Dewaele & MacIntyre, 2016, p. 223). This definition is suitable for the present research context since ISLL, which is also measured, could contribute to FLE.

4.4 FLE at the tertiary level in Europe

In the following table, an overview of the most important FLE studies published from 2014 to 2023 is presented. Due to the research context of this thesis, only European or International FLE studies with a majority of European participants at the tertiary level and a quantitative methodology are taken into account.

Table 1: FLE Studies at tertiary level in Europe (2014-2023)

Study	Focus	Participant group	Region	FLE measurement	Main finding(s) with regard to FLE
Barrios & Acosta-Manzano (2021)	WTC, FLE, FLA, out-of-class language use (OCFLU)	420 adult FL learners of English and Spanish (aged 14 to 70, mean age: 39.44, SD = 13.37)	Spain	10 FLE items based on Dewaele and MacIntyre (2014)	-FLE is a predictor of OCFLU -Significant correlation between WTC and FLE, FLA, relative standing, language proficiency and OCFLU
Botes et al. (2020)	FLE and FLA, multilingualism and perceived language proficiency	1622 FL learners (averaged age: 23.97, SD =8.03)	International	FLES by Dewaele and MacIntyre (2014)	-Small, but significant effect of multilingualism and proficiency on FLA -No significant effect of multilingualism and proficiency on FLE -Higher multilingualism connected to higher FLE
Botes et al., (2023)	FLE, FLA, Foreign language boredom (FLB)[7] and the personality traits openness to experience, conscientiousness,	246 FL learners (averaged age: 35.42, SD = 12.70)	UK	S-FLES by Botes et al. (2021)	-FLE significantly predicted by conscientiousness, extraversion and agreeableness -Positive predictors of FLE were the second-order personality traits trust, cheerfulness, excitement seeking, dutifulness

[7] Foreign language boredom (FLB) in the classroom setting refers to "a state of disengagement" (Kruk & Zawodniak, 2020, p. 6).

	extraversion, agreeableness, neuroticism				
Dewaele (2019)	WTC, FLA, FLE	210 adult learners (aged 18 to 63)	Spain	FLES by Dewaele and MacIntyre (2014)	-High FLE was linked to lower FLA and higher WTC
Dewaele (2023)	FLA, FLE	207 adult learners (aged 18 to 63)	Spain	FLES by Dewaele and MacIntyre (2014)	-Academic achievement linked with FLE -Positive attitude towards FL is a strong predictor of FLE
Dewaele & MacIntyre (2014)	FLA, FLE	1746 FL learners (aged 11-75, average of 24)	International, but mostly European (86.2%)	FLES by Dewaele and MacIntyre (2014)	-Negative significant correlation between FLA and FLE -FLE significantly higher than FLA -FLE and FLA linked to self-perceived proficiency, multilingualism, education level and age group -Female participants showed increased levels of FLA and FLE
Dewaele & MacIntyre (2019)	FLE, FLA	750 adult learners (mean age: 26, SD = 10)	International	10 FLE items based on Dewaele and MacIntyre (2014)	-FLE and FLA separate dimensions -FLE and FLA predicted by different variables -Social setting has a strong effect on FLE
Dewaele et al. (2016)	FLE, FLA	1736 FL learners (aged 11 to 75; mean age: 24, SD = 8.5)	International, but mostly European (86.2%)	FLES by Dewaele and MacIntyre (2014)	-Female learners had both more FLE and FLA -On the item level, females had significantly more fun, pride, enjoyment, excitement, and interest
Maican & Cocoradă (2021)	FLE during emergency remote teaching (ERT), FLA	207 university students in FL courses (average age: 21.23 (SD = 4.2), with 94% younger than 24)	Romania	FLES by Dewaele and MacIntyre (2014)	-Negative correlation between FLA and FLE -Retrospective FLE during online courses -Higher FLE among students with lower achievements

Moskowitz & Dewaele (2020)	intellectual humility[8], FLE, FLA	163 adult FL learners (aged 16 to 65, mean age: 31, SD = 11.7)	Spain	S-FLES by Botes et al. (2021)	Low levels of intellectual humility linked to higher levels of ego-oriented personal FLE
Resnik & Dewaele (2020)	Trait emotional intelligence (TEI), FLE, FLA	768 secondary and tertiary students in L1 and EFL classes (aged 14 to 52, mean age: 17.99, SD = 4.15)	Austria, Germany, Switzerland, South Tyrol (Italy)	S-FLES by Botes et al. (2021)	-Higher FLE linked to lower FLA -TEI positively connected to FLE
Resnik & Dewaele (2021)	FLE, FLA, learner autonomy, TEI during ERT	510 tertiary students (aged 18 to 53, mean age: 22.66, SD = 3.78)	Europe, but mostly Austrian (87.8%)	S-FLES by Botes et al. (2021)	-Lower FLE and FLA in ERT compared to on-site classes -TEI and learner autonomy positively connected to FLE
Uzun (2017)	FLE, FLA, OCFLU	166 tertiary students in mandatory EFL classes (aged 18 to 22)	Turkey	FLES by Dewaele and MacIntyre (2014)	-Significantly higher levels of FLE than FLA -No significant correlation of FLE and FLA with watching films/series in English or listening to English music

[8] There is lack of agreement regarding the precise definition of the construct of intellectual humility. Barrett (2017, p.2) identifies intellectual humility as "a virtuous middle between two vices, intellectual arrogance and intellectual diffidence".

Although the field of FLE is still in its infancy, there is an impressive body of research on FLE among adult FL learners in Europe. In the studies reviewed above, FLE is always investigated in tandem with FLA. Reasons for this might be that research has shown that positive and negative emotions are linked, that FLA, since its introduction by Horwitz et al. in 1986, is a much more established research field, and that the FLE-scale by Dewaele and MacIntyre (2014) encompasses eight items measuring FLA. Regarding the measurement, all of the studies reviewed above have either used the FLES by Dewaele and MacIntyre (2014) or the S-FLES by Botes et al. (2021). The surveyed participant groups were mostly adult learners enrolled in FL courses. Barrios and Acosta-Manzano (2021), Dewaele and MacIntyre (2014), Dewaele et al. (2016), Moskowitz and Dewaele (2020), Resnik and Dewaele (2020) also included students younger than 18, however, the average age of their samples lies between 17.99 (Resnik & Dewaele, 2020) and 39.44 years (Barrios & Acosta-Manzano, 2021), and can, therefore, also be used to draw comparisons, even if the potential influencing factor of age needs to be acknowledged.

Concerning the relationship between FLE and FLA, the negative correlation between FLE and FLA initially reported by Dewaele and MacIntyre (2014) was confirmed by many more studies (e.g., Maican & Cocoradă, 2021; Dewaele & MacIntyre, 2019; Uzan, 2017; Resnik & Dewaele, 2020). Some studies reported increased FLE and FLA levels among female FL learners (e.g., Dewaele & MacIntyre, 2014; Dewaele et al., 2016), while others did not mention salient differences (e.g., (Alenezi, 2020, p. 1221 in the Saudi Arabian context). Regarding the learner's ages, older individuals experienced raised FLE in comparison to younger ones (Dewaele & MacIntyre, 2014; Dewaele et al., 2018).

Other prominent results include associations between FLE and the personality traits of intellectual humility (Moskowitz & Dewaele, 2020), trait emotional intelligence (TEI; Resnik & Dewaele, 2020;

2021), learner autonomy (Resnik & Dewaele, 2021), and conscientiousness, extraversion as well as agreeableness (Botes et al., 2023). However, it is important to stress that the significant correlations between FLE and conscientiousness, extraversion, and agreeableness must be treated cautiously as the effect sizes were small to moderate ($R^2 < .25$; Botes et al., 2023). Further findings point to the connection between FLE and WTC (Barrios & Acosta-Manzano, 2021; Dewaele, 2019), FLE and social setting (Dewaele & MacIntyre, 2019), FLE and FL achievement (Dewaele, 2023), FLE and positive FL attitudes (Dewaele, 2023), FLE and self-perceived proficiency (Dewaele & MacIntyre, 2014), FLE and OCFLU (out-of-class foreign language use; Barrios & Acosta-Manzano, 2020), and FLE and multilingualism (Dewaele & MacIntyre; Botes et al., 2020). However, there were some contradictions as, for example, Dewaele (2023) did not demonstrate an effect of multilingualism on FLE as opposed to Botes et al. (2020) and Dewaele and MacIntyre (2014). Also, Botes et al. (2020) did not find an impact of proficiency on FLE in contrast to Dewaele and MacIntyre (2014). Moreover, two studies (Barrios & Acosta-Manzano, 2021; Uzun, 2017) investigated a possible link between FLE and OCFLU. Interestingly, while Barrios and Acosta-Manzano (2021, p. 15) found that OCFLU predicts FLE among adult FL learners in Spain, Uzun (2017, p. 15) did not report a significant relationship between FLE or FLA and two specific OCFLU practices. However, this could be explained by the fact that Uzun (2017) solely asked the participants about their exposure to English-language TV and music and did not employ a broad ISLL scale. Barrios and Acosta-Manzano (2021, p. 23) on the other hand used a 5-item OCFLU scale based on Olsson and Sylvén (2015), which uses a 7-point Likert Scale and asks for the frequency of written and spoken interaction outside of the language classroom.

FLE in emergency remote teaching (ERT) settings induced by the Covid-19 pandemic was investigated by Resnik and Dewaele (2021) in Europe with a majority of Austrian participants, and Maican and Cocoradă (2021) in Romania. While Macian and Cocoradă (2021, p. 10) reported the

typical negative correlation between FLE and FLA, Resnik and Dewaele (2021, p. 19) had discordant results as the significant correlations between FLE and FLA in on-site settings vanished in the ERT setting. Overall, the participants in Resnik and Dewaele (2021, p. 21f.) experienced decreased FLE and FLA in the ERT context, but higher levels of FLE in on-site contexts. Also, TEI and learner autonomy were positively connected to FLE (Resnik & Dewaele, 2021, p. 22). The study by Maican and Cocoradă (2021, p. 11) showed that in ERT settings, FLE was increased among students with lower achievements. Furthermore, they conclude that retrospectively, FLE in on-site settings served as a protective factor for enjoyment in ERT settings (Maican & Cocoradă, 2021, p. 16).

The main findings of the studies reviewed above are roughly in line with a meta-analysis on FLE conducted by Botes et al. (2022, p. 223). In their analysis, they reviewed 56 international quantitative studies on FLE with 96 effect sizes and 28.166 participants in total. Concerning the internal consistency of the scales used in the studies, the average Cronbach values were α=.86. Their results verified the positive connection of FLE with lower levels of FLA, increased WTC, raised academic achievement, and elevated self-perceived proficiency. It also becomes evident that while many studies investigated FLE internationally (e.g., Dewaele & MacIntyre, 2019) or in countries like Spain (e.g., Moskowitz & Dewaele, 2020), research into FLE in the purely Austrian setting is just beginning to take shape.

To my knowledge, although Austrian participants accounted for the majority of the sample in some studies (e.g., Resnik & Dewaele, 2021), only one prior study has examined foreign language enjoyment fully in the Austrian context: Resnik and Schallmoser (2019) conducted qualitative research on the relationship between e-Tandem language learning and FLE among tertiary students of English from Austria and students of German from the UK and the US. E-Tandem refers to digital collaborative language learning among two peers of different L1s. Qualitative data analysis of 19

interviews with the e-Tandem participants showed a positive effect of the self-perceived FLE levels on most participants (N = 16) (Resnik & Schallmoser, 2019, p. 550). Not a single participant reported a negative impact on the self-perceived FLE. The stated reasons for FLE in the e-Tandem context were authentic communication in the target language with L1 speakers (N = 13), cultural exchange (N = 12), relaxation in comparison to the classroom setting (N = 10), the development of new friendships (N = 9), self-perceived proficiency advancement (N = 5) and exchanging peer feedback and support (N = 4). Interestingly, the missing power relations in the extramural Tandem setting seemed to have a positive effect on their FLE levels (Resnik & Schallmoser, 2019, p. 555). As the current study aims to measure FLE outside of institutional and professional contexts, it will be interesting to see if this also applies to Austrians who do not currently receive EFL instruction.

4.5 Summary of emotions and language

As emotions can have a tremendous impact on human actions, behavior and decisions, researching the "short-lived, feeling-arousal-purposive-expressive phenomena" (Reeve, 2009, p. 301) that guide us through difficult situations and opportunities, is promising. The "affective turn" in the 1980s marked the beginning of multidisciplinary academic interest in emotions (Coppin & Sander, 2016, p. 3). Matsumoto and Ekman (2009, p. 69) assert there are six universal emotions (fear, disgust, anger, sadness, surprise and enjoyment) that are connected to physical response and survival instincts. While FLA was first investigated in 1986 by Horwitz et al., FLE moved into the research focus in the 2010s, when Dewaele and MacIntyre (2014; 2016) made fundamental contributions to the field. The construct of FLE, which can be defined as an intense, positive emotion experienced by L2 speakers of a language when a satisfactory interplay between challenge and ability while engaging in L2 use is met, is in line with Fredrickson's (2001) broaden-and-build theory. According to the theory, the regular experience of brief, moderate, positive emotions can build resources, which cultivate physical and mental well-being.

Concerning the measurement of FLE, after Dewaele and MacIntyre (2014; 2016) had designed and validated an FLE scale consisting of 21 items, Botes et al (2021) constructed a shorter, 9-item version of this instrument by means of factor analysis. Studies using these instruments have found a negative correlation between FLE and FLA (Dewaele & MacIntyre, 2014) and a connection between FLE and self-perceived proficiency (e.g., Dewaele, 2023), WTC (e.g., Barros & Acosta-Manzano, 2021), positive FL attitudes (Dewaele, 2023), multilingualism (Botes et al., 2020), OCFLU (Barrios & Acosta-Manzano, 2020), intellectual humility (Moskowitz & Dewaele, 2020), trait emotional intelligence (e.g., Resnik & Dewaele, 2021), learner autonomy (e.g., Resnik & Dewaele, 2021), conscientiousness, extraversion and agreeableness (Botes et al., 2023). The positive effect of FLE on self-perceived proficiency was supported by qualitative research into FLE in the Austrian setting (Resnik & Schallmoser, 2019, p. 550).

5 Study design

The present section is concerned with the methodological design of this study. First, the research questions and hypotheses are outlined. Second, the target participant group is introduced. Third, the questionnaire design and validation process are explained. Fourth, the questionnaire administration is illustrated, and lastly, the data analysis methods are presented.

5.1 Research aims and questions

RQ1a: How do young adults in Austria engage with English in their free time?
RQ1b: How do young adults in Austria engage with English in their professional and educational context?
RQ1c: Are there differences in recreational informal second language learning practices between tertiary students, tertiary students who are working part-time and young adults who are working full-time?
RQ2a: To what extent do young adults in Austria enjoy engagement with English?
RQ2b: Are there differences in foreign language enjoyment between tertiary students, tertiary students who are working part-time and young adults who are working full-time?
RQ3: What is the relationship between informal second language engagement and foreign language enjoyment among young adults in Austria?

If suitable, matching hypotheses were formulated. As RQ1a, RQ1b, and RQ2a will be calculated with descriptive statistics, there is no need for hypotheses (McCombes, 2023). However, regarding RQ1c and RQ2b, I hypothesized that there are differences in ISLL routines between these three groups (H1b), that there are differences in FLE between these three groups (H2b), and that more engagement with informal learning of English correlates with a high level of FLE (H3). Concerning RQ3, I hypothesized that increased recreational ISLL predicts higher FLE.

5.2 Target participant groups

The ISLL behavior and foreign language enjoyment of secondary students in Austria have been the subject of many studies in the past decade. Therefore, in order to explore ISLL behavior and FLE of understudied groups, the participants of this study are young adults aged 18 to 35 who currently live in Austria or have lived in Austria for most of their lives. The age ranges for young adulthood are defined differently by different sources. I relied on a broad definition of young adulthood from "roughly 20 to 35 years of age" by the (*American Psychology Association*, n.d.) to be able to draw comparisons between younger young adults, i.e., members of the "Generation Z" and older ones, i.e., "Millenials" (Seemiller & Grace, 2019). However, my participant group of young adults between 18 and 35 also underlies a threefold distinction:

1) tertiary students (working up to 7 hours per week)
2) tertiary students working part-time (more than 7 hours per week)
3) young adults working (7 hours to 40 or more per week)

As only 20% of tertiary students do not work in addition to pursuing their study program (Statista, 2019), a cut-off point was needed to ensure that there would be enough participants for participant subgroup 1). Since asking for the income would have been neither meaningful nor appropriate in a

survey, the amount of time spent on a hypothetical normal 9-to-5 job with a 30-minute lunch break and 30 minutes of coffee breaks was chosen as the maximal side job for subgroup 1.). Based on the classification of the Austrian education system (OeAD, 2022), apprentices in their advanced training at postsecondary or tertiary level[9] are categorized as members of the second participant group of tertiary students working part-time. Since the current study is interested in ISLL of English and FLE, students of English and American Studies or translation studies have been excluded as their interest in English is very high (see e.g., Ghamarian-Krenn & Schwarz, forthcoming), which would distort the overall results.

5.3 Questionnaire design, validation and distribution

In the subsequent sections, the steps of the data collection process are described in detail. Additionally, to provide orientation, a chronological overview of the research timeline is illustrated in Figure 3.

[9] These apprentices have taken and passed a higher education entrance examination (OeAD, 2022).

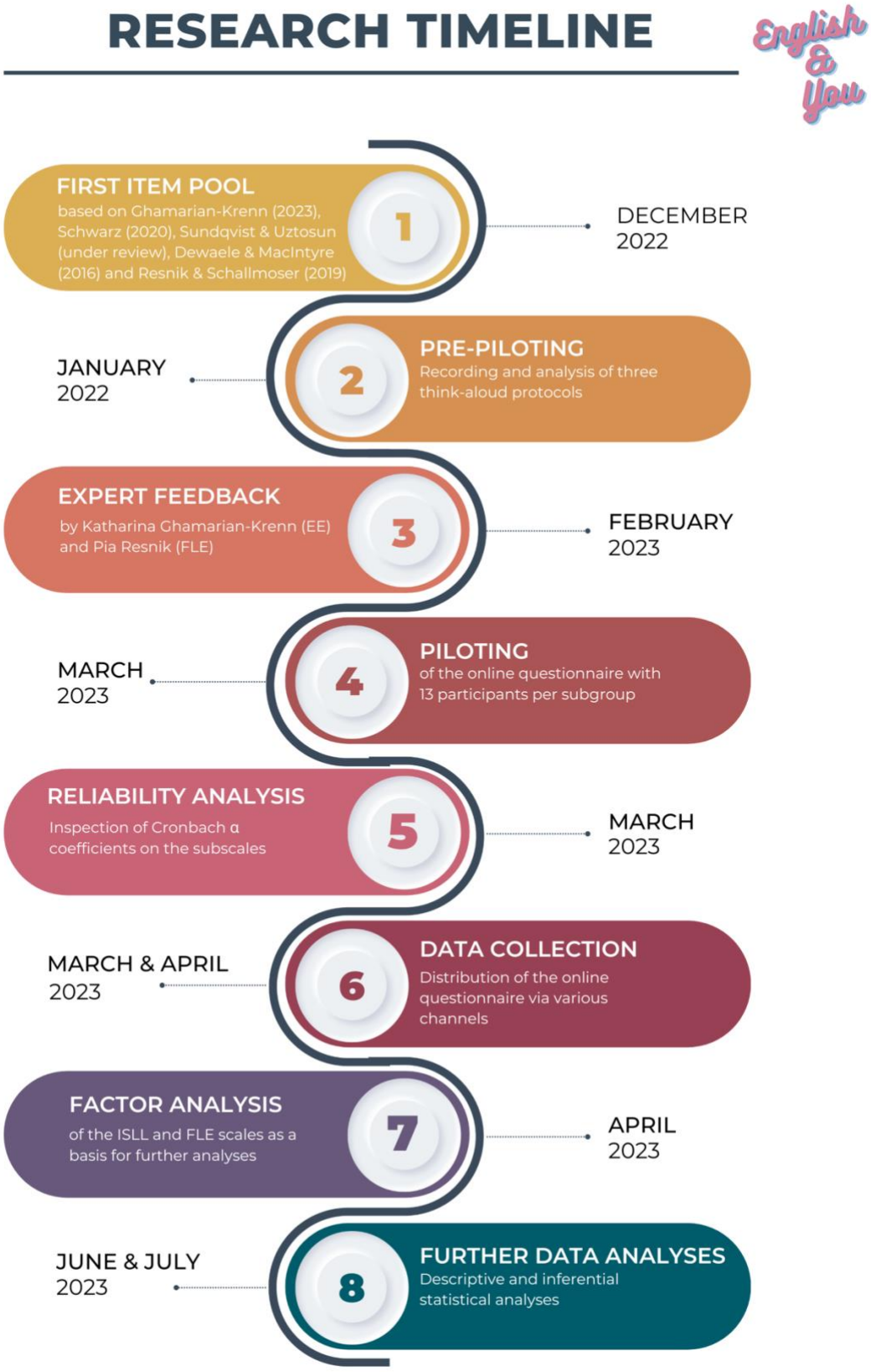

Figure 3: Data collection and analysis process

5.3.1 Questionnaire development

After the research aims and questions as well as the target groups had been decided, it became evident that two scales with various subscales each were needed: one scale to investigate the ISLL behaviors and another one to find out more about the FLE experienced in the recreational, professional and educational domains by young adults in Austria. Furthermore, depending on the participant group, knowledge about how frequently the test takers encounter English in their educational and/or professional context would be necessary as well. For this purpose, respective educational and professional ISLL scales asking for the frequency of the four skills (i.e., reading, listening, speaking, writing) were designed. To gather additional information about the participants, demographic data was prompted too.

The recreational, professional and educational ISLL scales, the FLE scale as well as the demographic items were integrated into the present survey so that the participants only had to take one questionnaire. In the next step, two initial item pools were generated for the ISLL and FLE scale. Dörnyei and Taguchi (2010, p. 39f.) assert that there are three common techniques to create successful survey items: first by using "creativity and lots of common sense" to invent new items, second by drawing on qualitative, exploratory data (e.g., talks, brainstorming with experts and friends), and third by adopting questions from already established scales. All three methods were used to come up with items for the present questionnaire.

The recreational ISLL scale drew upon Ghamarian-Krenn's (2023, p. 147) adapted version of Schwarz' (2020) Extramural English Questionnaire, and Sundqvist and Uztosun's (under review) EE scale. The professional and educational scale designed by the author of this thesis. Participants indicated the frequency of their participation in activities on a Likert scale [1 = (almost) never, 2 = a few times a year, 3 = a few times a month, 4 = a few times a week, 5 = (almost) daily].

The quest for items for the present FLE scale was more challenging because at the beginning of 2023, only FLE scales for the educational context, more specifically, foreign language classes at the secondary and tertiary level, existed. The most prominent instrument was created by Dewaele and MacIntyre (2014; 2016) and aims to investigate FLA and FLE in foreign language classes. Their FLES includes classroom-related items, such as "The teacher is encouraging" (Dewaele & MacIntyre, 2016, p. 234), which are incongruous with the present setting. However, based on the dimensions of their FLES, I created items suitable for the out-of-school context and organized them according to Dewaele and MacIntyre's (2014) constructs "FLE – Private" and "FLE – Social". Additionally, items were inspired by the qualitative piece of research on FLE at the tertiary level by Resnik and Schallmoser (2019). For a more detailed source of each item on the two present scales, please see Appendix F. In the FLE scale, participants indicated the degree to which they agreed with a statement on a Likert scale [1 = I fully disagree, 2 = I disagree, 3 = neutral, 4 = I agree, 5 = I fully agree]. After consulting statistician Katharina Rötzer (personal communication, January 17, 2023), a 5-point Likert scale was chosen in both cases as the answer scales have clear midpoints and can therefore be interpreted as continuous variables, which is necessary for a range of statistical analyses relying on means and standard deviations (Loewen & Plonsky, 2015, p. 99).

After the first item pool and constructs underlying the scales were decided upon, more general considerations included the following: Since the strongest language for most participants is German and an excellent understanding of all items is key, the questionnaire is in German. For the same reason, I also aimed for short items and natural wordings, which is also proposed by Dörnyei and Taguchi (2010) who allege that "[t]he best items are often the ones that sound as if they had been said by someone […]" (p. 40). For reasons of convenience of administration and analysis, high level of anonymity, access to the target groups, environmental aspects as well as design attractiveness and flexibility (branching), an online survey tool called *CheckMarket* (Medallia, n.d.) was chosen over a

pen-and-paper questionnaire (Cohen et al., 2018, p. 362; Dörnyei, 2007, p. 121). The final questionnaire included 70 closed items for the recreational ISLL and FLE scales as well as 5 to 10 closed items and up to three open items for the professional and educational ISLL scales (depending on the subgroups) for the ISLL scales. Furthermore, 8 to 9 demographic items (depending on the subgroup), and one control item to counteract the response bias were added (Field, 2017, p. 1046f.) Screenshots of the German online survey can be found in Appendix B.

5.3.2 Piloting to increase validity and reliability

Due to the importance of clear wordings and a reliable, valid and practical instrument in second language research, the questionnaire was field-tested with a sample similar to the target group in two piloting stages. Additionally, experts on ISLL and foreign language enjoyment, more specifically, Katharina Ghamarian-Krenn and Pia Resnik, were consulted for their critical feedback.

In the pre-piloting phase, think-aloud protocols, sometimes also referred to as "cognitive interviews" as they aim to unveil the verbalization of cognitive processes, were conducted (Schellings et al., 2013, p.967). The participants were asked to audio-record themselves while taking early versions of the questionnaire. While filling in the survey, they were asked to read the questions out loud and continuously share their thoughts on each item with me. This included their decision-making processes of the answer choice they picked for each item as well as feedback on the items (e.g., ambiguous wordings or ideas for additional items). After each think-aloud, the questionnaire was ameliorated based on the verbal protocols by the participants. The following transcribed passage illustrates an example from a think-aloud:

> Ich schaue mir Filme auf Englisch an, ähm, ja, fast, also *ein paar Mal pro Monat* würde ich sagen, *ein paar Mal pro Monat* […]. Ich weiß nicht, ob ich zwischen *ein paar Mal pro Monat* und *(fast) täglich* noch irgendwie ein Wochenstufe […] (Think-aloud protocol, 1)

This statement led to the insertion of an additional answer choice on the Likert scale, which is used for the first part of the questionnaire. As the administration and analysis of the recordings is a time-consuming endeavor (Willis, 2015, p. 38), only three think-alouds were conducted.

For the quantitative pilot study, the questionnaire was distributed to 13 people per subgroup, and hence, 39 people in total. Julious (2005) suggests a sample size of 12 participants per group for reasons of "[…] feasibility, precision about the mean and variance; and regulatory considerations" (p. 287). Reliability analyses were conducted with each subscale of the pilot survey data set in SPSS, as Field (2017, p. 1046) suggests. A commonly proposed cut-off point for Cronbach α values is .7. However, because the number of items in a subscale can have a strong impact on the respective Cronbach α coefficients, lower values for fewer items in a subscale are acceptable as well (Field, 2017, p. 1046). In the current setting, the resulting Cronbach α coefficients in the following table show that all subscales had acceptable to high reliabilities with two exceptions.

Table 2: Reliability of subscales after the piloting round (in α)

ISLL scale	**α**		**FLE scale**	**α**
ISLL Viewing	.76		FLE – Private	.85
ISLL Digital	.77		FLE – Social	.86
ISLL Multidimensional	.72			
ISLL Reading	.7			
ISLL Written and spoken production (offline)	.66			
ISLL Online interaction	.6			

Based on the results of the reliability analyses, three items were eliminated. Another item was deleted because the answers showed zero variance in the pilot results. The reliability was tested again after

the actual data collection, resulting in excellent reliability of the two scales was excellent with α = .94 for the ISLL scale and α = .93 for the FLE scale.

Table 3: Reliability of subscales after the actual data collection (in α)

ISLL scale	α		FLE scale	α
ISLL Viewing	.79		FLE – Private	.87
ISLL Digital	.64		FLE – Social	.87
ISLL Multidimensional	.79			
ISLL Reading	.79			
ISLL Written and spoken production (offline)	.71			
ISLL Online interaction	.85			

Overall, the final internal consistency was even higher than after the piloting round with acceptable to high values for both scales. The reliability of the FLE subconstructs was particularly satisfactory.

5.3.3 Confirmatory factor analysis of ISLL and FLE scale

Given the limited scope of a Master's thesis and the extensive nature of the questionnaire, which consisted of almost 100 items, for the analysis of potential differences between the subgroups, it was necessary to accumulate the items into meaningful subscales. After consulting with Igor Yanovich (personal communication, April 19, 2023), the following approach was chosen. As already demonstrated in the previous section (5.3.2), the reliability analysis between the pilot round and the actual distribution of the questionnaire resulted in acceptable to high (.6 to .86) Cronbach α values for all subscales, which even slightly increased after the data collection process (Field, 2017, p. 1046). For ISLL, the subscales were *Viewing*, *Digital*, *Multidimensional*, *Reading*, *Written and spoken production*, and *Online interaction*. The FLE scale was divided into *FLE-Private* and *FLE-Social*. While at this point the recreational ISLL subscales were solely based on Cronbach α coefficients

during the pilot stage and after the actual data collection, the two FLE subscales were based on previous factor analyses (cf. Dewaele & MacIntyre, 2016; Botes et al., 2021). After the data collection process, confirmatory factor analysis of the subscales was conducted in JASP to uncover the latent factor structure of the two scales.

In general, factor analysis is "a set of structure-analyzing statistical procedures used to investigate the underlying correlations in a set of observed variables in order to group them in related clusters" (Loewen & Plonsky, 2015, p. 66). As opposed to its analog exploratory factor analysis (EFA), confirmatory factor analysis tests a model pertaining to prior research and theory. In the context of psychometric scale development, CFA is employed to determine the latent factor structure of a questionnaire (Brown, 2015, p. 1). According to Brown (2015, p. 43), CFA should be favored over EFA in "later stages of construct validation and test construction, when prior evidence and theory support more 'risky' a priory predictions regarding latent structure." Hence, in addition to inspecting goodness of fit and parameter estimates, an essential element of model evaluation lies in this preparatory work of determining a meaningful and useful model grounded in previous empirical and theoretical evidence (Brown, 2015, p. 42).

In the present context, two CFAs were conducted and the fit of both measurement models was examined by means of the model's chi-square with its degrees of freedom and probability value, comparative fit index (CFI), Tucker-Lewis-Index (TLI), the Root Mean Square Errors of Approximation (RMSEA), and the standardized root mean square residual (SRMR). Concerning the interpretation of the values, the following guidelines by Brown (2015, p. 74; 129) were followed: When CFI and TLI are .95 or higher, RMSEA values are approximately .06 or lower, and SRMR values are roughly .08 or lower, a good fit is present. Also, to further examine the fit, the factor loadings, cross-loadings, and error variables in the measurement models were inspected. According

to Loewen and Plonsky (2015, p. 67), factor loadings ranging from .30 to .40 are considered high in applied linguistic research. The strength of a factor loading shows the extent to which a variable contributes to a factor.

CFA of the ISLL scale

Although the factor model for the ISLL scale was significant ($N = 653$, $X^2(1112) = 6907.198$, $p < .001$), hence indicating a good model fit, the CFI (.608) and TLI (.585) indices markedly diverge from the proposed cut-off values. The RMSEA (.089) and SRMR (.113) values further indicate a mediocre fit (Brown, 2015, p. 74).

Table 4: Factor loadings of ISLL subscales

Factor loadings

Factor	Indicator	Symbol	Estimate
Viewing	E_watching_music_videos	λ11	0.539
	E_going_to_concerts	λ12	0.255
	E_watching_films	λ13	1.079
	E_watching_series	λ14	1.140
	E_watching_videos	λ15	0.780
	E_watching_documentaries	λ16	0.866
Digital	E_watching_TikToks_Reels	λ21	0.077
	E_producing_SoMe_content	λ22	0.193
	E_playing_games_on_phone	λ23	0.528
	E_programming	λ24	0.274
	E_playing_singleplayer_games	λ25	1.058
	E_playing_multiplayer_games	λ26	0.894
	E_using_AI	λ27	0.282
	E_using_search_enginges	λ28	0.392
Multidimensional	E_listening_to_music	λ31	0.144
	E_listening_to_podcasts_audiobooks	λ32	0.620
	E_daydreaming	λ33	1.212
	E_thinking_talking_in_E	λ34	1.336
	E_singing_songs	λ35	0.359
	E_boardgames	λ36	0.363
Reading	E_reading_lyrics	λ41	0.589
	E_using_subtitles	λ42	0.536
	E_reading_books	λ43	0.866
	E_reading_newspaper_articles	λ44	0.926
	E_reading_instructions	λ45	0.908
	E_reading_short_stories	λ46	0.687
	E_reading_fanfiction	λ47	0.542
	E_reading_blogs_or_fora	λ48	0.633
	E_reading_comics_and_mangas	λ49	0.306
Written and spoken production	E_writing_lyrics	λ51	0.182
	E_writing_fanfiction	λ52	0.106
	E_writing_poetry	λ53	0.165
	E_writing_stories	λ54	0.387
	E_writing_lists_notes	λ55	1.202
	E_writing_diaries	λ56	0.336
	E_speaking_offline	λ57	0.809
	E_using_E_phrases_in_L1	λ58	0.526
Online interaction	E_reading_emails	λ61	0.822
	E_reading_SoMe_private_messages	λ62	1.162
	E_reading_SoMe_postings_comments	λ63	0.545
	E_writing_emails	λ64	0.677
	E_writing_blog_fora_entries	λ65	0.212
	E_writing_SoME_private_messages	λ66	1.234
	E_writing_SoME_postings_comments	λ67	0.776
	E_multiplayergames_chatting	λ68	0.200
	E_multiplayergames_speaking	λ69	0.177
	E_communicating_on_datingapps	λ610	0.184
	E_sending_voicememos	λ611	0.935
	E_phone_calls	λ612	0.922

Taking a look at the factor loadings, more problems with the model are uncovered. The factor loadings range from .077 to 1.234. Factor loadings that exceed 1.0 indicate model specification errors or issues with the sample or model-implied matrices (Brown, 2015, p. 107). Considering the fit indices and factor loadings, the model might not be adequate. Nevertheless, as the validation of the ISLL scale used in the present research is not a specific research interest, adapted models will not be computed.

CFA of the FLE scale

With a sample size of N = 637, the factor model was significant ($X^2(188) = 1460.608$, $p < .001$), pointing to a good fit of the model structure. In contrast, the CFI (.824) and TLI (.803) values obtained in the CFA were slightly below the cut-off values. The RMSEA was .103, which is above the suggested threshold, and SRMR pointed at a good fit with .061. In total, these fit statistics suggested a mediocre fit (Brown, 2015, p. 74).

Table 5: Factor loadings of FLE subscales

Factor loadings

Factor	Indicator	Symbol	Estimate
FLE – Private	Like_to_be_creative_in_E	λ11	0.990
	Like_to_listen_to_others_in_E	λ12	0.629
	Like_to_read_in_E	λ13	0.691
	Like_to_write_in_E	λ14	0.905
	Learnt_interesting_things_in_E	λ15	0.742
	E_proud_of_proficiency	λ16	0.835
	E_progress	λ17	0.647
	Like_E_because_good_at_it	λ18	0.880
	Cool_to_know_E	λ19	0.390
	Making_errors_is_part_of_learning	λ110	0.151
	Relaxed_even_if_dont_understand	λ111	0.323
FLE – Social	Like_to_talk_in_E	λ21	0.952
	Link_E_to_people_I_like	λ22	0.574
	E_Inside_jokes	λ23	0.749
	E_writing_confident	λ24	0.807
	E_speaking_confident	λ25	0.885
	E_authentic_communicating_is_fun	λ26	0.658
	Relaxed_when_communicating_in_freetime	λ27	0.913
	Like_E_because_language_linked_to_specific_people	λ28	0.759
	Laugh_off_mistakes	λ29	0.397
	Like_E_because_importance_in_international_context	λ210	0.448

Except for one item within the factor of FLE-Private ("making errors is part of the learning process", .151), all factor loading estimates were high, ranging from .32 ("I remain relaxed even if I don't understand") to .990 ("I like to be creative in English"). All in all, the fit indices and parameter estimates point to a suboptimal fit, suggesting that model refinement might be an improvement. However, computing model modifications would go beyond the scope of the present thesis.

5.3.4 Questionnaire administration

Concerning the sampling strategy, non-probability sampling, meaning "[…] a reasonable sample using resources that are within the means of the ordinary researcher" (Dörnyei & Taguchi, 2010, p.

60) was selected due to its feasible nature. More specifically, a mixture of purposeful convenience sampling, i.e, easily accessible participants who belong to the target participant groups, and snowball sampling was most suitable for the current project (Dörnyei & Taguchi, 2010, p. 61f.). This means that in the time span from March 3rd to April 4th, 2023, the link to the questionnaire was distributed among as many people possible via WhatsApp, Email, Facebook, Twitter, Instagram, Moodle, and printed posters with a QR code (see Appendix C). The social media postings were shared by many individuals, the interdisciplinary Research Platform *#YouthMediaLife* at the University of Vienna and VERBAL, the Austrian Association of Applied Linguistics. Some *#YouthMediaLife* members and other academics kindly shared the questionnaire among their students studying various subjects (apart from English) at the University of Vienna, KPH Vienna/Krems, and the Vienna University of Economics and Business. An incentive of winning one out of three wish vouchers (15€ per voucher) was created to maximize the number of participants and to reduce the drop-out quota. The winners of the prize draw were selected with the help of a random number generator. They were provided with their vouchers in May 2023.

5.4 Data analysis

Based on the results of the reliability analysis and the CFA, the items were grouped into subscales and aggregated by summing up all item values per subscale. To enable comparisons, the 5-point Likert scale data was then normalized by dividing the aggregated subscale values by the number of items of the subscale (Yanovich, personal communication, April 19, 2023). In addition to the subscales, all items of a scale were aggregated and normalized to compute a variable representing the results of the whole scale.

For the analysis of the data set, a range of descriptive and inferential statistical analyses were conducted. Regarding descriptive statistics, reliability analyses were conducted (see 5.3.2).

Furthermore, mean values, standard deviations, skewness, kurtosis, and plots were inspected to "summarize, organize, and categorize" the data as well as to discover similarities and differences in the data set (Loewen & Plonsky, 2015, p. 50). Concerning inferential statistical methods, a variety of different tests were used, which are portrayed in Table 6.

Table 6: Inferential statistical tests employed in the present thesis

Test	Description
Confirmatory factor analysis	Please see 5.3.3 for a detailed description
Shapiro-Wilk test	The Shapiro-Wilk test examines whether the data set is normally distributed, which is an assumption of many parametric tests. This is done by a comparison between the distribution of the data set and a normally-distributed data set with the same mean and standard deviation as the actual data set. (Loewen & Plonsky, 2015, p. 176)
Wilcoxon signed-rank test	The Wilcoxon signed-rank test is the non-parametric equivalent of a dependent or paired samples t-test. Two data sets of scores from the same sample are compared by ranking the differences between them and allocating positive and negative values to the ranking. (Loewen & Plonsky, 2015, p. 203)
Mann-Whitney U test	The Mann-Whitney U test is the equivalent of an independent samples t-test. The scores by two independent groups are compared by ranking them from lowest to the highest and then calculating a rank-sum score. (Loewen & Plonsky, 2015, p. 109).
Kruskal-Wallis test	The Kruskal-Wallis test is a non-parametric test employed to "compare scores from three or more groups." The rank order of the data, as opposed to means scores, is used to draw comparisons. (Loewen & Plonsky, 2015, p. 95)
Post-hoc Dunn's test using Bonferroni correction	"Post hoc tests consist of pairwise comparisons that are designed to compare all different combinations of the treatment groups." (Field, 2017, p. 715) Dunn's test is a non-parametric test employed for investigating "small sub-sets of pairs" (Goss-Sampson, 2019, p. 80).
Univariate linear regression	Linear regression models investigate the strength of the relationship between two variables. A regression analysis can be employed to predict the values of one variable based on the other one. Univariate linear regression models have one dependent variable and one predictor variable (Loewen & Plonsky, 2015, p. 102). Bonferroni correction is a "method of reducing the negative effects of conducting multiple statistical analyses on the same data set" (Loewen & Plonsky, 2015, p. 15).

Multiple linear regression	A multiple linear regression model is a subtype of linear regression, which includes more than one predictor variable. (Loewen & Plonsky, 2015, p. 102)

The open questions on the recreational, professional, and educational ISLL scales were coded employing qualitative content analysis in MAXQDA 2022 (Kuckartz & Rädiker, 2019). In an iterative coding process, the mentioned activities were assigned to activity categories (e.g., *phone/video calls*). In the next step, the categories were summarized into broader domains of further recreational ISLL activities (e.g., *online*), professional ISLL activities (e.g., *communication*) as well as educational ISLL activities (e.g., *academic writing & reading*).

6 Results

In the following section, the study results are presented. First, socio-demographic information about the participants is outlined. Second, an overview of the data is provided. Thirdly, the results of the four scales (recreational, professional, educational ISLL and FLE) are showcased. Lastly, the relationship between ISLL and FLE is addressed.

6.1 Participants and demographics

A total number of 661 young adults in Austria filled out the online questionnaire. Eight respondents were excluded from the analysis because of an incorrectly completed control item, resulting in a final sample size of N = 653. As 17 respondents dropped out after the first page (recreational ISLL), the subgroup sample consists of 636 respondents: 187 working young adults (29.4%), 211 tertiary students (33.18%), and 238 working & tertiary students (37.42%). The responses by the 17 people who only filled out the first page could be used for descriptive statistics of the ISLL scale. Regarding gender, the majority of the sample was female (69.7%, N = 443), whereas only 29.3% (N = 186) was male, and seven people selected ‘diverse’ as their gender. According to Wilson and Dewaele (2010, p. 115), a preponderance of female participants in online SLA surveys is usual, as females tend to be

more interested in language-related questionnaires and are more inclined to reflect on their emotions. Furthermore, according to Statistik Austria (2022), the predominance of female students is also visible in Austria's population, with 44% male and 56% female students between 18 and 35 in the academic year 2021/22.

Table 7: Gender, generation and mean age in the three subgroups

	N	Female	Male	Diverse	Gen-Z	Millenials	Mean age	SD
Tertiary students	**211**	147	62	2	191	20	22.81	3.07
Working young adults	**187**	136	49	2	55	132	28.10	3.65
Working & tertiary students	**238**	160	75	3	157	81	25.21	3.9
Total (%)	**636 (100)**	**443 (69.7)**	**186 (29.3)**	**7 (1.1)**	**403 (61.7)**	**233 (35.7)**	**25.25**	**4.1**

Table 7 shows that with regard to age, the participants were between 18 and 35 years old, with a mean age of 25.26 (N = 636, SD = 4.1). Although the determination of one specific birth year as a delineation between two generations is often debated, birth years between 1997-2012 are frequently named for members of Gen Z (Eldridge, 2023). Therefore, the participants were grouped into Millenials, born 1988-1996 (N = 233, 36.6%), and Gen-Z, born 1997-2005 (N = 403, 63.4%).

Table 8: Frequency of participant subgroup according to generation

	Generation	Frequency	Percent
Participant subgroup			
tertiary students			
	Gen-Z	191	90.52
	Millenials	20	9.48
	Total	211	100
working young adults			
	Gen-Z	55	29.41
	Millenials	132	70.59
	Total	187	100
working & tertiary students			
	Gen-Z	157	65.97
	Millenials	81	34.03
	Total	238	100

Table 8 illustrates the distribution of the subgroups across the two generations. It is salient that almost all tertiary students (90.52%) belong to Gen-Z. On the contrary, 70.59% of working young adults are Millenials. Regarding working & tertiary students, the majority (65.97%) are members of Gen-Z.

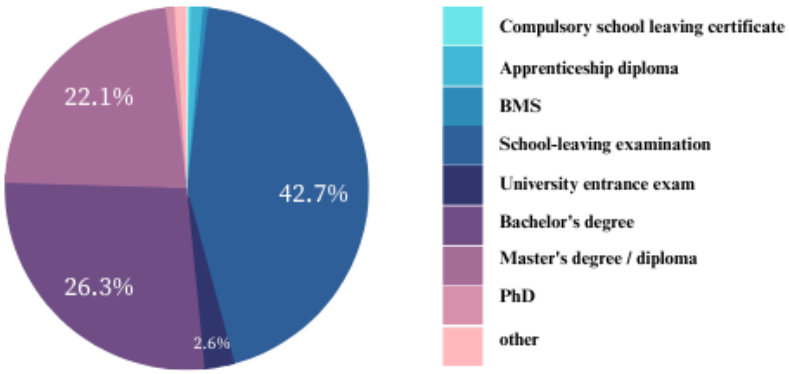

Figure 4: Highest level of education

In the sample, the highest educational attainment constituted a compulsory school-leaving certificate for two people, an apprenticeship diploma for seven people, a BMS diploma for three people, a school-leaving certificate, such as the Austrian standardized school leaving exam (Standardisierte Reife- und Diplomprüfung) for 279 individuals, and a university entrance examination for 17 people. At the tertiary level, 172 participants had a Bachelor's degree, 144 had a Master's degree or

completion of a diploma program, five people had finished a PhD, and seven people had other diplomas. According to Statistik Austria (2023a), in the Austrian census 2021, the most prevalent educational attainment in the Austrian population was the apprenticeship diploma (30.9%). The second largest group (24.4%) had a compulsory school-leaving certificate. 13.8% of the Austrian population completed BMS, 8.8% finished BHS, and 6.8% graduated from an AHS. Only 15.3% held a tertiary-level degree. Hence, compared to the Austrian population, the present sample exhibits a higher level of education. Wilson and Dewaele (2010, p. 115) maintain that compared to a random sample, self-selected and motivated participants who show an interest in the topic and a certain degree of meta-linguistic awareness are likely to be more educated.

With regard to their proficiency level in English, only three participants described themselves as A1 beginners (.47%), 21 as A2 pre-intermediate (3.29%), 72 as B1 intermediate (11.3%), 243 as B2 upper intermediate (38.14%), 229 as C1 advanced learners (35.95%), and 69 as C2 proficient in English (10.83%; see Figure 5).

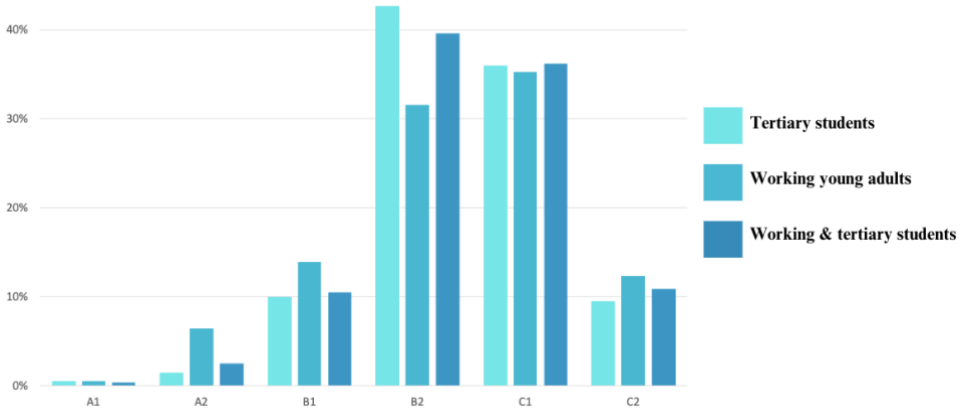

Figure 5: Relative frequencies of perceived proficiency level per subgroup

The diagram illustrates the relative frequency distribution of proficiency levels among the three subgroups. It shows that there are no substantial differences between the samples and that the majority of participants (74.1%) indicated that they were upper intermediate, or advanced learners of English.

The mean values of 4.3 to 4.4 for all three groups with standard deviations of .9 for tertiary students as well as working & tertiary students and 1.1 for working young adults, could be explained by the fact that for the school-leaving exam in Austria, students are obliged to graduate in a second language, which is often English at B2 level (BMBWF, n.d.). Therefore, as 94.3% of the sample obtained the school-leaving certificate or a higher degree, a mean centering around B2 and C2 appears congruent with that information. Furthermore, 21.9% (N = 143) indicated that they had stayed abroad in an English-speaking country for more than a month, which could also contribute to a raised proficiency level.

For the compositions of the three subgroups, tree maps depicting the educational and professional fields have been created. The sizes of the boxes correspond to the frequencies of the study programs as well as the occupations represented in the three samples.

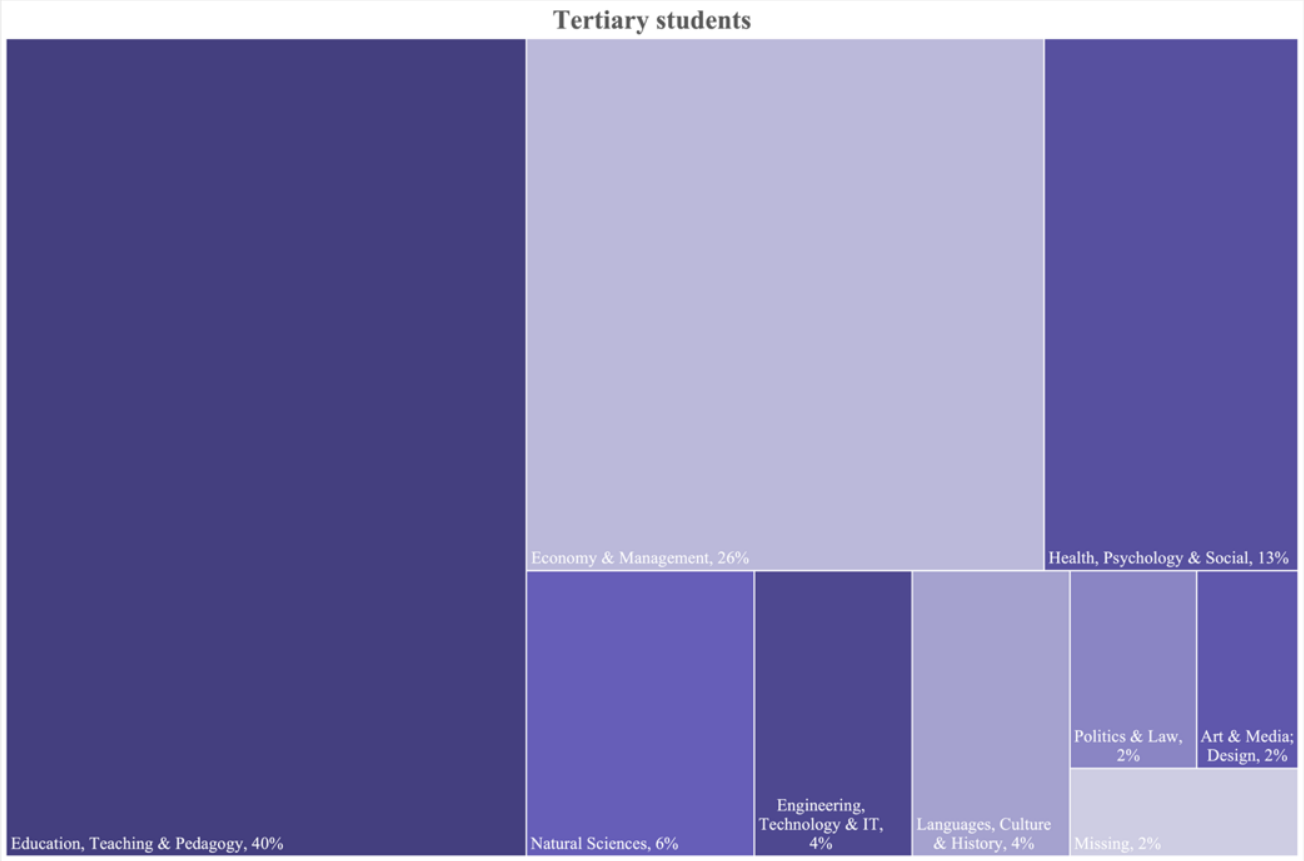

Figure 6: Distribution of study fields among tertiary students[10]

The three most popular study fields among the current sample of tertiary students were education, teaching & psychology (41.06%, N = 85), economy & management (26.57%, N = 55) and health, psychology & social (13.04%, N = 27), followed by natural sciences (6.28%, N = 13), language, culture & history (4.34%, N = 9), engineering, technology & IT (4.34%, N = 9), politics & law (2.37%, N = 5), art, media & design (1.89%, N = 4). There were no participants who studied tourism, events or sports, and four answers were missing.

[10] For the sake of clarity, the percentages in the tree maps were rounded to whole numbers.

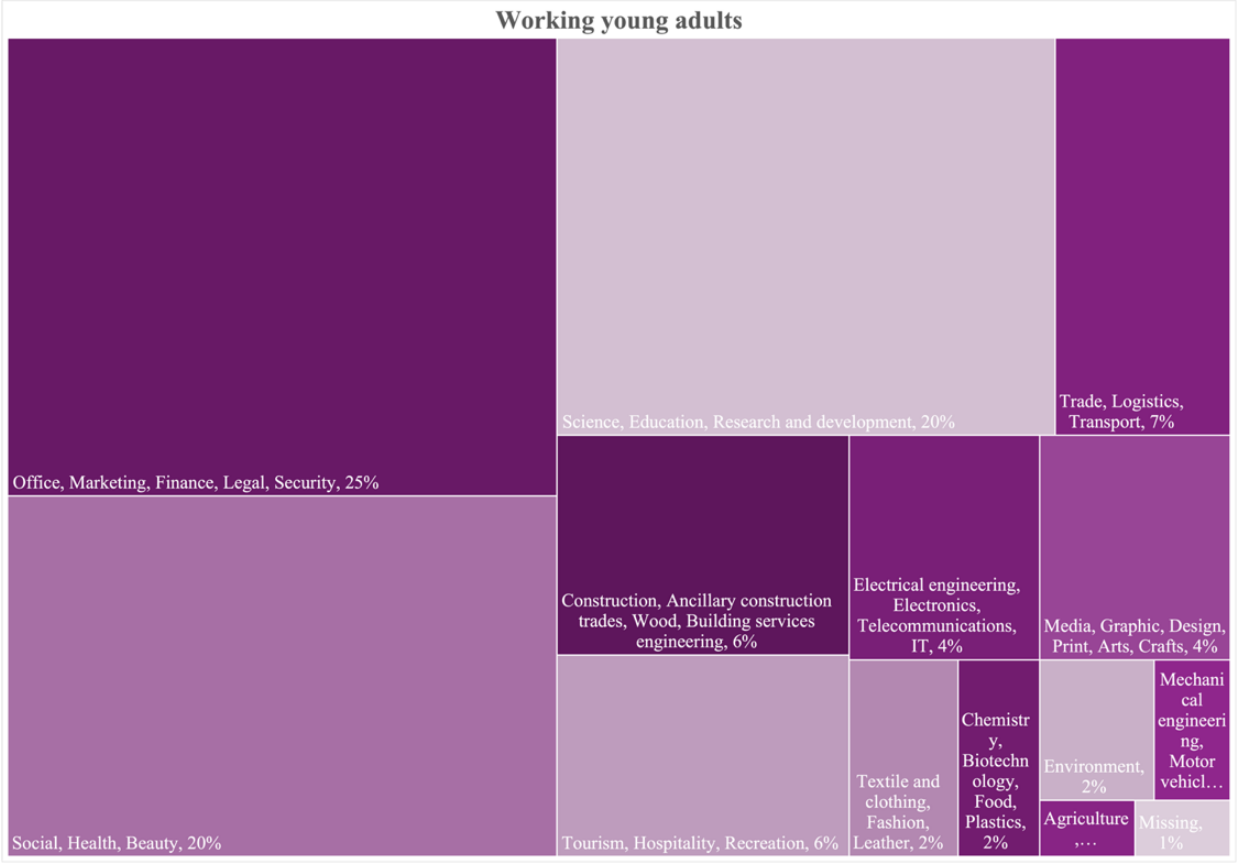

Figure 7: Distribution of professional fields among working young adults

The majority of working young adults were employed in the fields of office work, marketing, finance, legal & security (25.27%, N = 47), science, education, research, and development (19.89%, N = 7), as well as social, health & beauty (19.89%, N = 37). Further professional fields included trade, logistics & transport (6.99%, N = 13), construction, ancillary construction trades, wood & building service engineering (6.45%, N = 12), and tourism, hospitality & recreation (5.91%, N = 11).

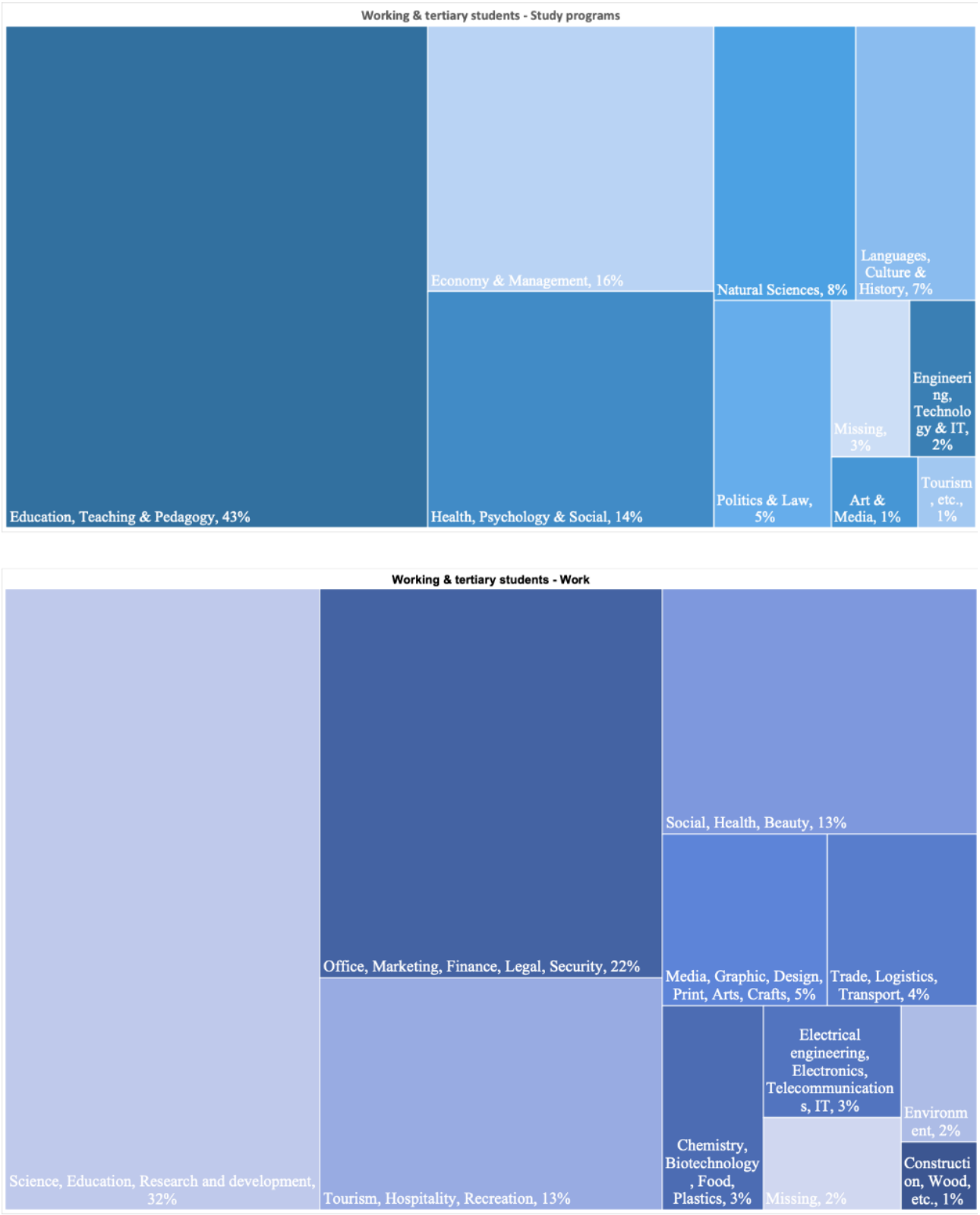

Figure 8: Distribution of educational and professional fields among working & tertiary students

The tree maps show the distribution of professional and educational realms of the young adults who worked and studied at the same time. Almost half of the studies pursued by these young adults (43%, N = 103) were related to education, teaching & pedagogy. Economy & management were studied by 16% (N = 37) and 14% (N = 33) were enrolled in a study program relating to health, psychology & social. More than half of the professions pursued by these young adults were related to science, education, research and development (32%, N = 76) or office, marketing, finance, legal & security (22%, N = 52). Jobs within the field of tourism, hospitality & recreation were practiced by 13% (N = 32) and another 13% (N = 31) were employed in the field of social, health & beauty. The most popular study programs corresponded to the most prominent professions in the sample, which is logical since people usually pursue jobs based on their studies. The distribution can be explained by the sampling method of snowball and convenience sampling.

6.2 Data overview

As already mentioned above, to facilitate comparison, the overall scales and subscales were aggregated. In Table 9, the descriptive statistics of the overall scales are presented.

Table 9: Descriptive statistics of all scales

	Valid	Missing	Mean	SD	Skewness	Kurtosis	S-W	S-W p-value	Min	Max
Recreational ISLL_norm	653	0	2.416	0.610	0.444	0.178	0.987	<.001	1.000	4.755
FLE_Total_norm	637	16	3.745	0.701	-0.663	0.373	0.969	<.001	1.000	5.000
Educational ISLL_ norm	443	210	2.990	1.224	0.066	-1.168	0.946	<.001	1.000	5.000
Professional ISLL _norm	419	234	2.748	1.354	0.344	-1.204	0.910	<.001	1.000	5.000

Shapiro-Wilk tests revealed that the data departs significantly from normality (W ranging from 0.910 to 0.987, <.001 for all scales). According to Field (2017, p. 64), in the case of normally distributed data, skewness and kurtosis are 0. In view of skewness and kurtosis, the values diverge from 0, pointing to non-normal distribution of the data. Histograms were also generated and inspected (see Figure 9).

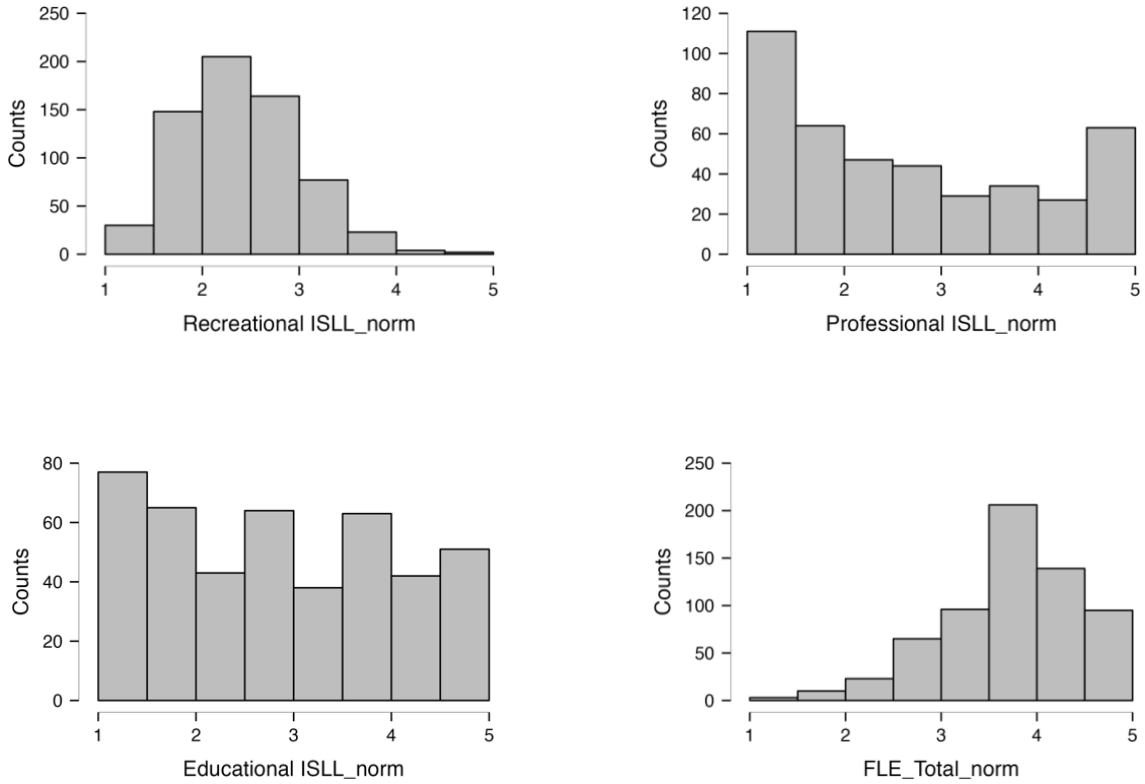

Figure 9: Histograms of ISLL (recreational, professional and educational) and FLE scale data

The histograms show that the data is distributed asymmetrically in all four cases. While recreational ISLL is closest to normal distribution as reflected in the bell curve shape and the kurtosis coefficient near zero, it has a right skew, and hence a focus on lower values. On the contrary, FLE is negatively skewed, showing that the data is concentrated towards higher values. With regard to professional and educational ISLL, the negative kurtosis coefficients and the platykurtic curve indicate that the data is widely dispersed. Hence, the histograms underlined the assumption that the data was not normally distributed. As a result, for inferential statistical analyses, non-parametric tests, more specifically, Kruskal-Wallis tests, Wilcoxon signed-rank tests and Spearman correlations were conducted. For (multiple) linear regression models, only the residuals need to be normally distributed (Field, 2027, p. 515). Therefore, regression models were computed without violating this assumption.

6.3 Recreational ISLL (RQ1)

Recreational ISLL engagement was evaluated based on 653 responses on the recreational ISLL scale. Using a Likert scale, the participants were asked to rate how frequently they engaged in 49 activities listed on the scale. Recreational ISLL engagement was high, as 95.3% of all participants indicated that they participated in at least one activity on a daily basis. Hence, out of 653 people, only 31 young adults did not engage in daily recreational ISLL. The boxplot below (see Figure 10) illustrates the data of the recreational ISLL scale [1 = (almost) never, 5 = (almost) daily].

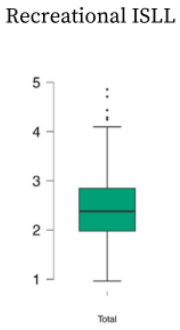

Figure 10: Boxplot showing the dispersion of recreational ISLL

The data was spread around the mean (M = 2.41, SD = .61) and showed rather low variability among the participants (IQR = .837). The boxplot shows that outliers were detected in the upper range. For boxplots of the recreational ISLL subscales, please see Figure 14. Figure 11 provides a more detailed overview of the frequency distribution of recreational ISLL activities.

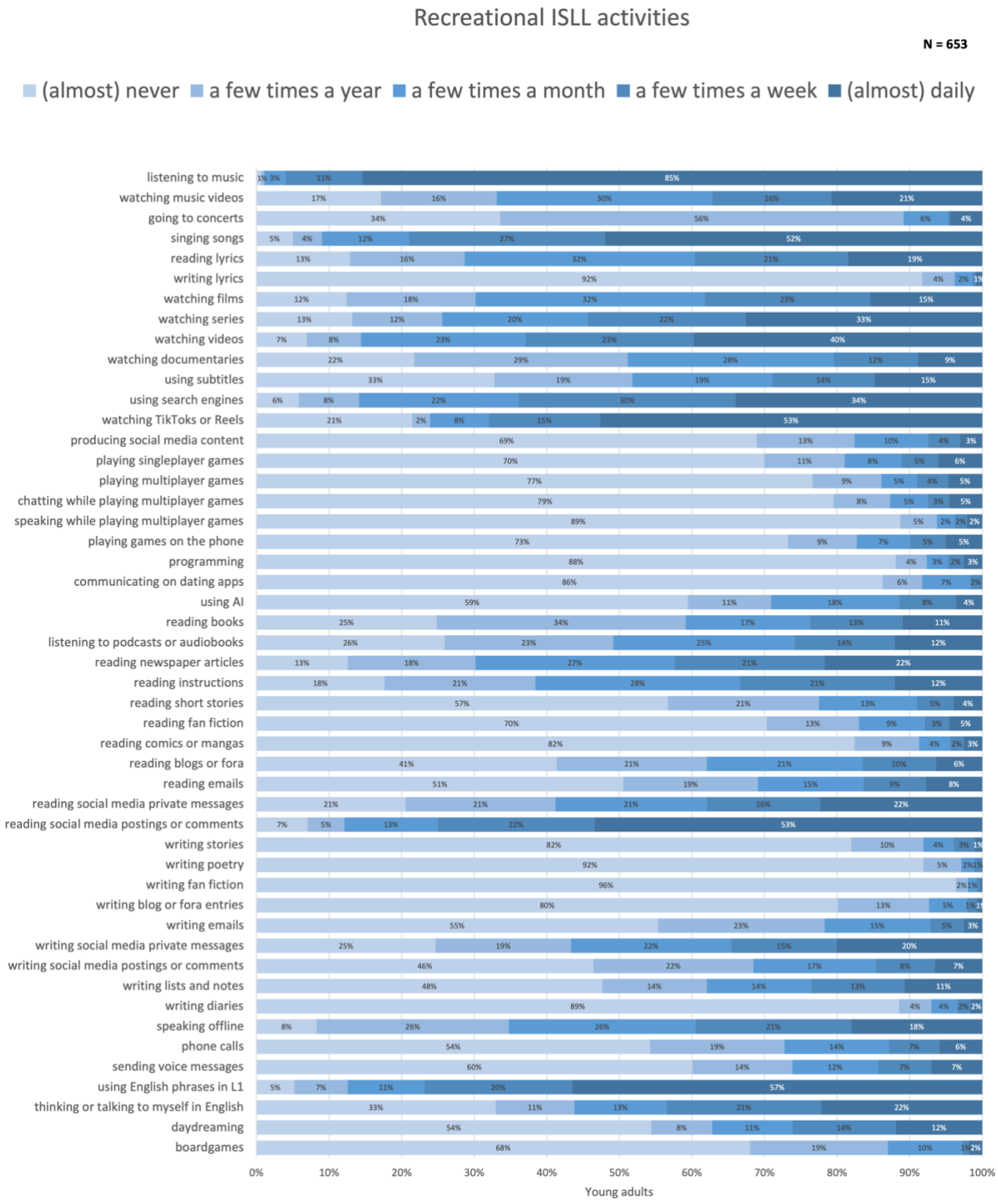

Figure 11: Frequency distribution of all items on the recreational ISLL scale

The dark blue segments on the right side of the chart depict the most popular activities, in which young adults are involved (almost) on a daily basis, are *listening to music* (85%), *using English phrases in L1* (57%), *watching TikToks or Reels* (53%), *reading social media postings or comments* (53%), and *singing songs* (52%). When considering activities which are done by at least 50% a few times a week or more often, 96% of all participants *listen to music*, 79% *sing English songs*, 77% *use English phrases in L1*, 75% *read social media postings or comments*, 68% *watch TikToks or Reels*, 64% *use search engines*, 63% *watch videos*, 55% *watch series*. Except for the brief act of *using English phrases in L1*, and the activities *of singing English songs* and partly also *using search engines*, the most popular activities are receptive, which means that while engaging in these activities, English content is consumed as opposed to created. Five out of the eight most popular activities, which are done at least a few times a week by more than 50% of the participants, include multimodal content, and three activities incorporate audiovisual media. While 70% indicated that they *watch films* at least a few times a month, almost half of the participants (48%) indicated that they *use English subtitles* a least a few times a month when watching audiovisual content. Considering the most unpopular activities on the left side, indicated by the light blue segments, the chart shows that 96% of young adults (almost) never engage in *fan fiction writing* and 92% are (almost) never involved in *writing poetry* or *lyrics*. Only two people indicated that they *write fan fiction* on a daily basis, one person claimed that they *write poetry* daily and six people stated that they *write lyrics* every day. In contrast to the most popular activities, these three niche activities involve the use of active language skills and usually do not include multimodal features.

When asked for involvement in further recreational ISLL activities in an open question, the activities depicted in the word cloud were mentioned (see Figure 12).[11] The size of the activities in the cloud

[11] Mentioned activities, which were already included in the scales were excluded from the qualitative analysis of the open questions.

represents the number of occurrences in the data set, which was coded inductively in MAXQDA 2022.

Figure 12: Word cloud depicting additional recreational ISLL activities

(Online) shopping was mentioned by 37 participants, followed by *theater* with 20 occurrences, *cinema* with 18 and *sports courses* with 17 cases. Furthermore, *musical* and *travelling* were mentioned by six participants each, and four participants each stated that they further use English in the contexts of *yoga*, *professional development* and *choir*. The remaining activities were either featured only once, twice or three times in the data (see Appendix D for a complete list). By means of qualitative content analysis (Kuckartz & Rädiker, 2019), the reported activities were categorized into the following domains:

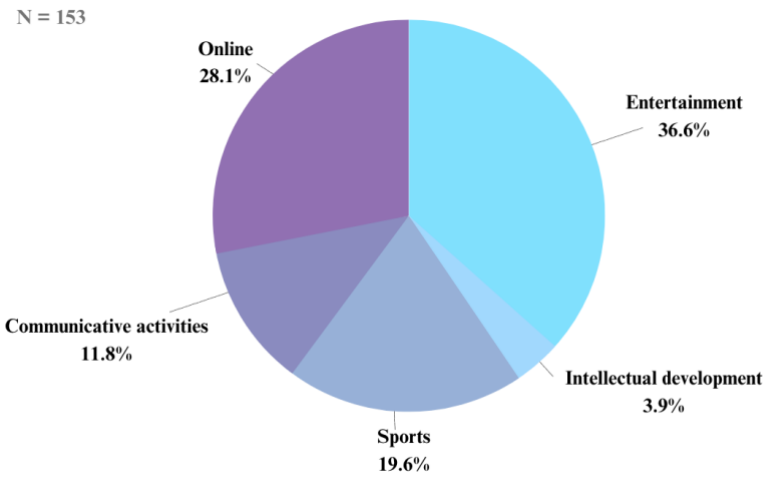

Figure 13: Domains of further recreational ISLL activities

The most prominent additional recreational ISLL domains are *entertainment* (e.g., theater or attending a pub quiz), *online activities* (e.g., online shopping or tutorials) and *sports* (e.g., sports courses or going to the gym). *Communicative activities* (e.g., activism or multilingual friend groups) as well as *intellectual development* (e.g., research) account for the rest. A list with all activities, respective total occurrences, and allocation to domains can be found in D.

Zooming out from individual activities to adopt a broader view of recreational ISLL, subscales have been generated based on previous research, reliability analysis and CFA (see CFA of the ISLL scale for the composition of the subscales). Table 10 depicts the descriptive statistics of the subscales.

Table 10: Descriptive statistics of recreational ISLL subscales

	Valid	Mean	SD	Skewness	Kurtosis	S-W	S-W p-value	Min	Max
ISLL_Viewing_norm	653	2.99	.86	-0.13	-0.41	0.99	< .001	1.0	5.0
ISLL_Digital_norm	653	2.13	.63	0.94	1.17	0.95	< .001	1.0	5.0
ISLL_Multidimensional_norm	653	3.03	.76	0.21	-0.46	0.98	< .001	1.0	5.0
ISLL_Reading_norm	653	2.37	.74	0.68	0.39	0.97	< .001	1.0	5.0
ISLL_Written_and_spoken_production_norm	653	2.39	.75	0.65	0.36	0.97	< .001	1.0	5.0
ISLL_Online_interaction_norm	653	2.07	.71	0.69	-0.17	0.95	< .001	1.0	4.50

The mean values range from 2.07 for *ISLL Online interaction* to 3.03 for *ISLL Multidimensional* with standard deviations between .63 (*ISLL Digital*) and .86 (*ISLL Viewing*). Shapiro-Wilk tests revealed that the data was not normally distributed (W ranging from .95 to .99, $p < .001$). The descriptive statistics of the subscales are illustrated in the form of boxplots in Figure 14.

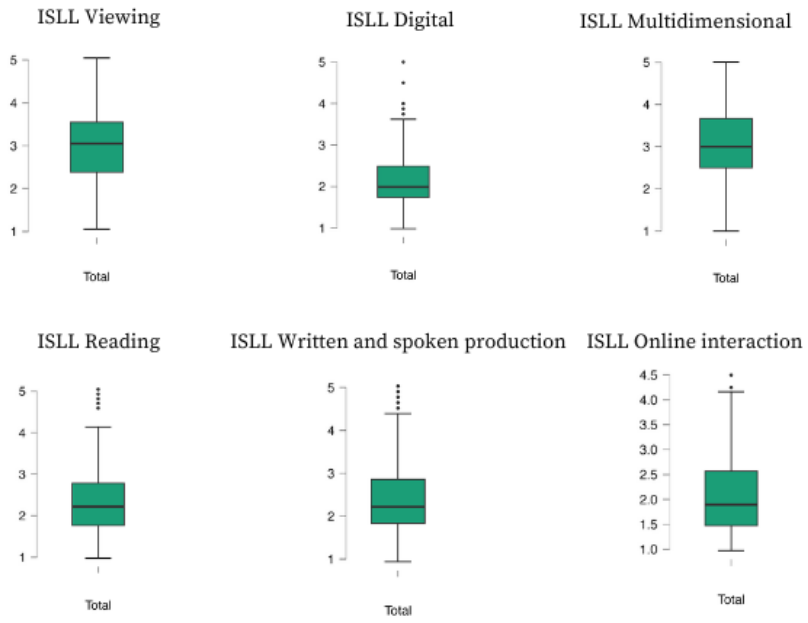

Figure 14: Boxplots visualizing the ISLL subscales

The boxplots show that the scores on the recreational ISLL subscales are predominantly located in the middle and lower part of the Likert scale. Also, it is evident that there are some outliers in the upper tail for *ISLL Digital*, *ISLL Reading*, *ISLL Written and spoken production* and *ISLL Online interaction*. To detect any differences between the three subgroups, the mean values of the overall recreational ISLL scale and the subscales were visualized in Figure 15.

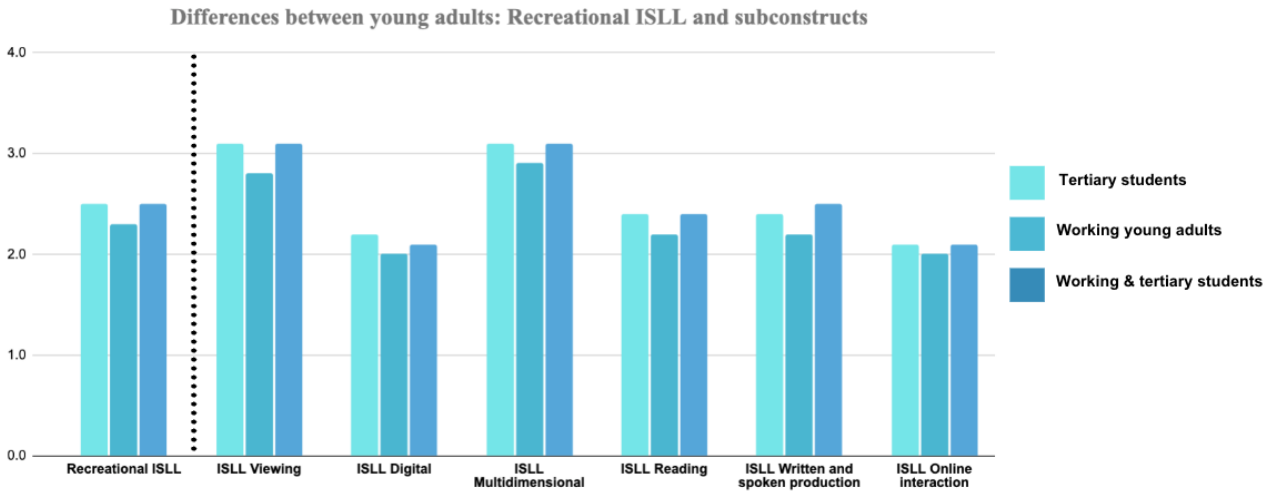

Figure 15: Mean values of recreational ISLL and subconstructs

The chart shows subtle differences. The standard deviations range from .55 for *ISLL Digital* among working young adults to .94 for *ISLL Viewing* among working young adults, where more variation in the answer distribution was detected (see also Table 14). To statistically examine the differences between the subgroups, a number of Kruskal-Wallis tests were conducted. The non-parametric version of ANOVA was computed with the overall recreational ISLL scale as well as the subscales. The overall test revealed significant differences between the subgroups for overall recreational ISLL ($H(2)=11.644$, $p = .003$). Pairwise comparisons using Dunn's post hoc test with Bonferroni corrections showed that compared to working young adults, tertiary students ($p = .006$) and working & tertiary students ($p = .004$) scored significantly higher on the overall recreational ISLL scale.

Table 11: Kruskal-Wallis tests investigating possible differences in ISLL subconstructs between the subgroups

Kruskal-Wallis Tests	Statistic (H)	df	p
ISLL Viewing	8.853	2	.012*
ISLL Digital	12.067	2	.002*
ISLL Multidimensional	5.624	2	.060
ISLL Reading	12.836	2	.002*
ISLL Written and spoken production	17.168	2	<.001*
ISLL Online interaction	4.124	2	.127

Another Kruskal-Wallis test showed that there were significant differences between the groups for *ISLL Viewing* ($H(2)=8.853$, $p = .012$). Based on the results of pairwise Dunn's post-hoc tests using

Bonferroni correction, tertiary students (p = .033), and working & tertiary students (p = .022) engaged more frequently in *ISLL Viewing* activities compared to working young adults. Furthermore, compared to working young adults, tertiary students (p = .002) showed greater involvement in *ISLL Digital*. Concerning *ISLL Reading* and *ISLL Written and spoken production*, tertiary students (p = .011; p = .001) and working & tertiary students (p = .003; p < .001) showed higher values than working young adults. In sum, in the cases where the differences between the three subgroups were significant, an emerging trend for tertiary students and working & tertiary students to engage more frequently in recreational ISLL in total, *ISLL Viewing*, *ISLL Reading* and *ISLL Written* and spoken production was perceived. Regarding *ISLL Digital*, only tertiary students had significantly higher scores compared to working young adults. No statistically significant differences were observed between the subgroups for *ISLL Multidimensional* and *ISLL Online interaction.*

Considering additional demographic variables, according to Kruskal-Wallis tests, there were significant differences between self-perceived proficiency levels (H(5)=158.009, p < .001). A post-hoc Dunn's test with Bonferroni corrections revealed that there were neither significant differences between elementary (A1) speakers and any higher level nor between pre-intermediate (A2) speakers and intermediate (B1) or upper intermediate (B2) speakers. Also, there was no significant difference in ISLL between advanced (C1) and proficient (C2) speakers. However, B2 speakers had significantly higher ISLL than B1 speakers (p < .001), C1 speakers had significantly higher recreational ISLL engagement than A2, B1 and B2 speakers (p < .001) and C2 speakers showed significantly more recreational ISLL behavior than A2, B1 and B2 speakers (p < .001).

Moreover, a Mann-Whitney U test, the non-parametric version of an independent samples t-test, revealed a significant difference between members of different generations (U = 56496.500, p < .001). Members of the Gen-Z (M = 2.49, SD = .59) engaged significantly more in recreational ISLL

activities than Millenials (M = 2.28, SD = .6). Also, a Kruskal-Wallis test resulted in significant differences between the highest level of education and recreational ISLL (H(8)=32.451, p < .001). Post-hoc Dunn's tests with Bonferroni corrections demonstrated that compared to holders of an apprenticeship diploma, people with a university entrance exam (p < .001), a school-leaving certificate (p = .017), and a Bachelor's degree (p = .017) had higher levels of recreational ISLL. Furthermore, another Mann-Whitney U test (U = 43969.500, p < .001) revealed that people who had stayed abroad in an English-speaking country for more than a month had significantly higher recreational ISLL engagement (M = 2.6, SD = .6) compared to those who had not (M = 2.36, SD = .59). Regarding gender, the levels of recreational ISLL did not reveal a significant difference.

6.4 Professional ISLL (RQ1)

In view of professional ISLL engagement, 30.1% of all working young adults and working tertiary students stated that they used at least one of the four skills related to language learning on a daily basis. The boxplot in Figure 16 depicts the dispersion of answers on the scale.

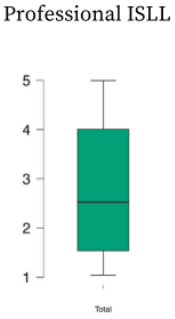

Figure 16: Boxplot showing the dispersion of professional ISLL

Approximately 50% of all participants indicated rather low to maximal weekly professional ISLL engagement. This suggests that there was a notable variation in professional ISLL behavior among young adults who were employed and possibly also studying (IQR = 2.5; see also Figure 16). Figure

17 further shows how frequently working young adults as well as working tertiary students use the four skills in the context of their work.

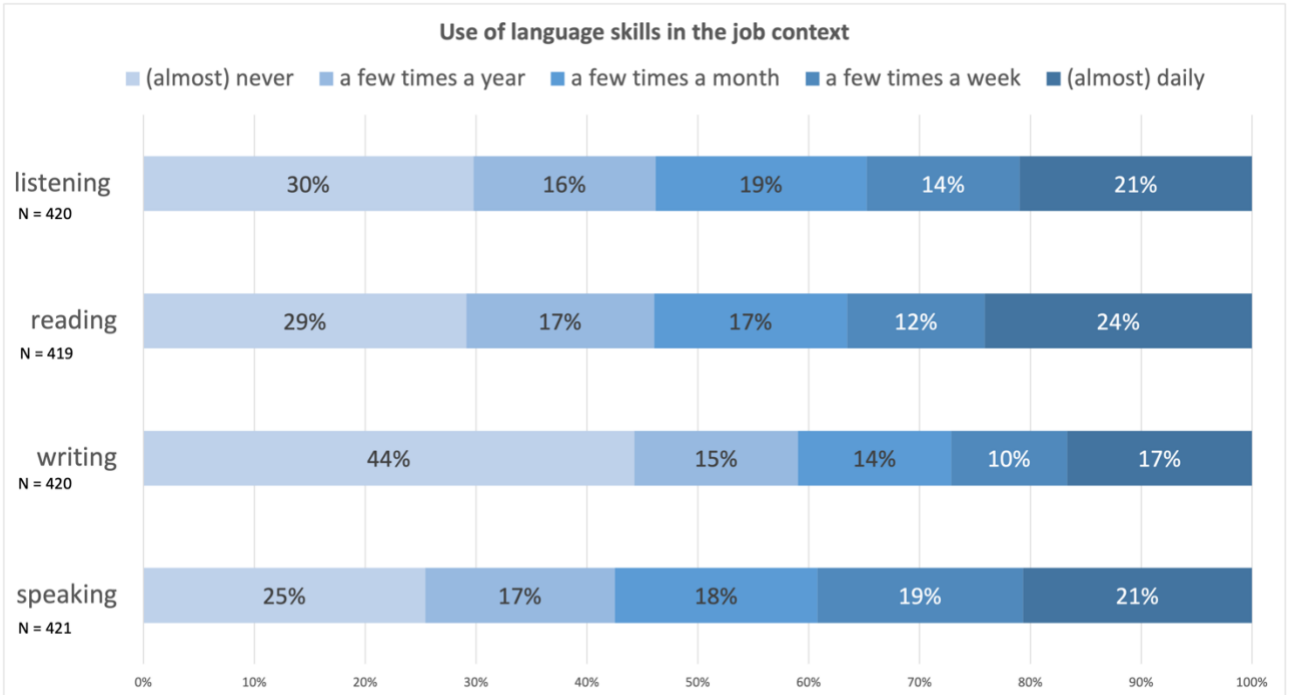

Figure 17: Frequency distribution of the four skills on the professional ISLL scale

Each of the four skills individually is used by 17% to 24% of all participants on a daily basis. More than half of the young adults use the skills *listening* (54%), *reading* (53%) and *speaking* (58%) at least a few times a month in their professional context. *Writing* constituted an exception as only 41% of the participants use this skill at least a few times a month, and 44% (almost) never write for professional purposes. While the productive skill *writing* is used least often, the productive skill *speaking* is needed most often: at least a few times a year by 75%.

A Wilcoxon signed-rank test revealed that participants who were working, used receptive skills (M = 2.83, SD = 1.43) significantly more often than productive skills (M = 2.66, SD = 1.39) in the context of their job: Z = 8925.5, $p < .001$). The effect size was small ($r_B = .32$). According to Loewen and Plonsky (2015, p. 57), the effect size r_B can be interpreted as small if .40, medium if .70, and as large if 1.0. A Kruskal-Wallis test ($H(1)=15.795$, $p < .001$) and post-hoc Dunn's tests with Bonferroni

correction showed that working young adults used English significantly more often for their work (professional ISLL) compared to working & tertiary students.

As the professional ISLL scale asked for the frequency of skills used in the participants' work contexts, an open question aimed to explore the settings and tasks, in which they use English in the job context. The following word cloud represents the scenarios mentioned by the participants according to the frequency of their occurrence.

Figure 18: Word cloud depicting professional ISLL activities

Communication with clients, patients and suppliers constituted the most frequent professional ISLL activity (76 occurrences), *Communication with colleagues* (54 cases) followed by *Emails* (23 instances), *research* (twelve cases) and *phone/video calls*, *literature research*, *teaching English* (eleven instances each). *Writing reports* was mentioned ten times each. *Parent-teacher meetings* and *teaching in English* occurred in nine instances each. For a complete list of the frequencies of the activities, please refer to Appendix D. All of the activities mentioned were grouped into the following categories:

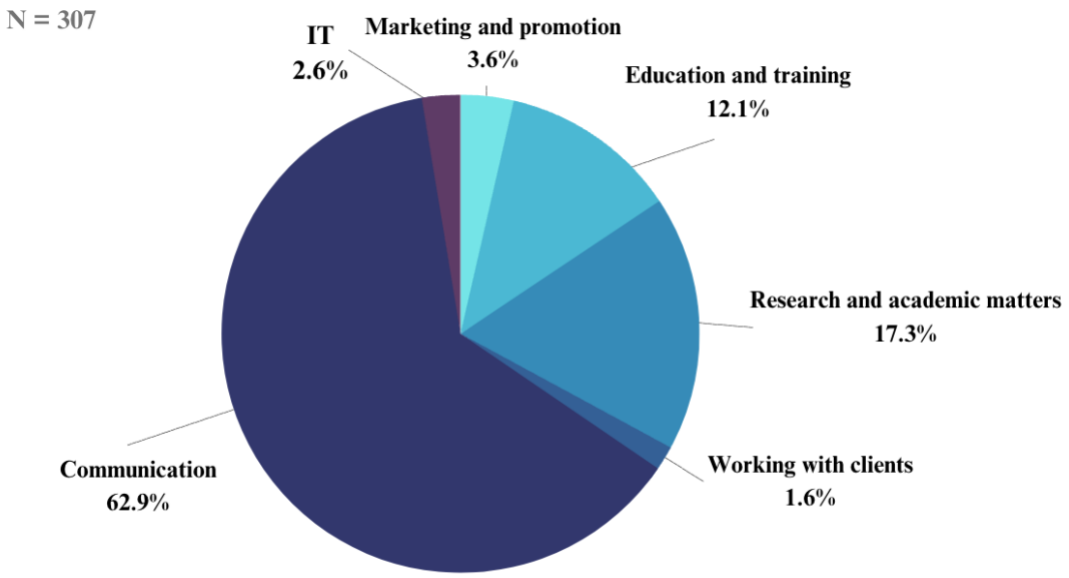

Figure 19: Domains of further professional ISLL activities

More than half of all activities mentioned were related to *communication* (e.g., video/phone calls or parent-teacher meetings). *Research and academic matters* (e.g., writing reports or presentations) as well as *education and training* (e.g., professional development or tutoring) nearly accounted for a third. The rest was shared by *marketing and promotion* (e.g., social media and content creation), *IT* (e.g., software and programming) and *working with clients* (e.g., wine tastings or guided tours). A list with all activities, respective total occurrences, and allocation to domains can be found in the Appendix D.

6.5 Educational ISLL (RQ1)

With regard to ISLL in the context of their studies, 25.3% of the tertiary students and working tertiary students indicated that they used at least one of the four skills on a daily basis. The boxplot in Figure 20 illustrates the variability of the data.

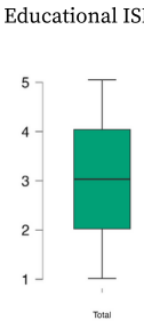

Figure 20: Boxplot depicting the dispersion of educational ISLL

Approximately 50% of all participants indicated annual to weekly educational ISLL engagement (IQR = 2), which indicates that educational ISLL varied among the participant groups. Figure 21 further illustrates how frequently the language skills of *listening*, *reading*, *writing* and *speaking* are used by the participants who are currently studying

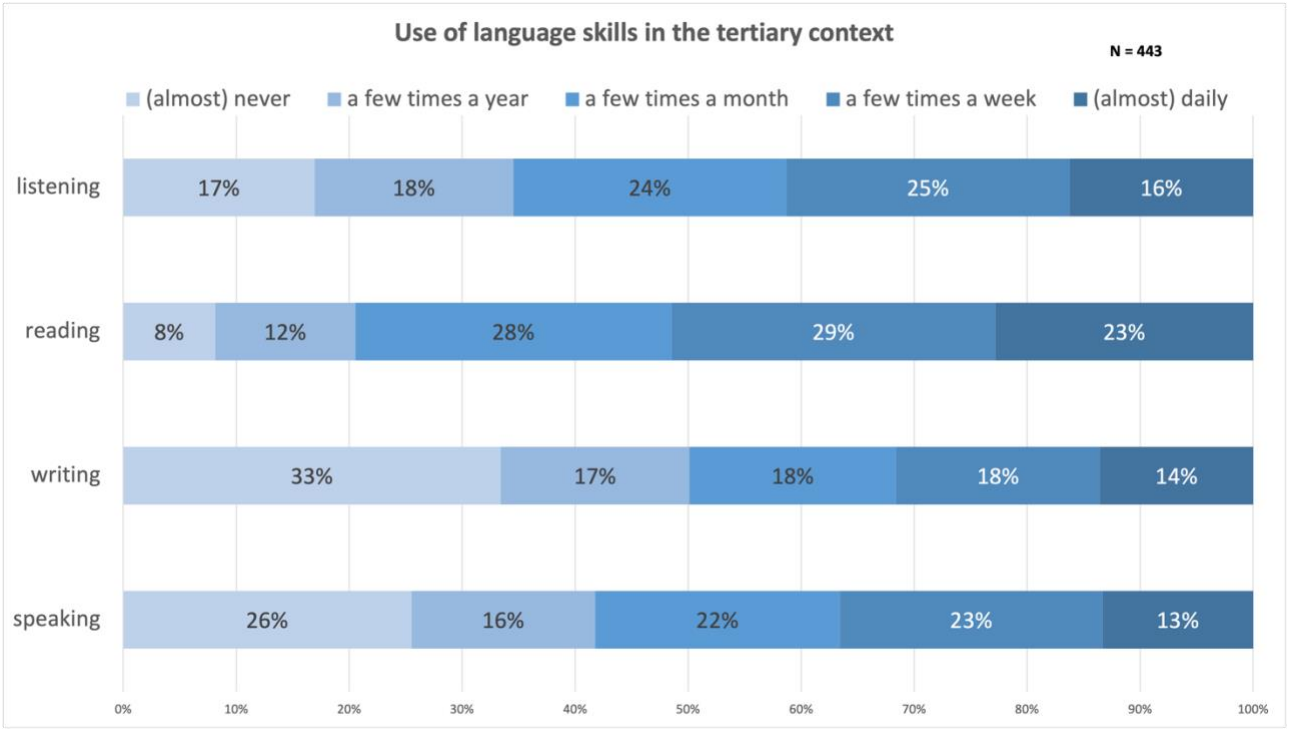

Figure 21: Frequency distribution of the four skills on the educational ISLL scale

All skills are used (almost) daily by 13% (*speaking*) to 23% (*reading*). Furthermore, at least 50% of all participants stated that they need all skills at least a few times a month: *listening* (65%), *reading* (80%), *writing* (50%) and *speaking* (58%).

Considering the number of participants who (almost) never use the four English language skills, the percentages range from 8% (*reading*) to 33% (*writing*). It can be inferred that passive skills are used more frequently than active skills in the tertiary context. A Wilcoxon signed-rank test confirmed this assumption as participants who were studying needed receptive skills (M = 3.26, SD = 1.2) significantly more often than productive skills (M = 2.72, SD = 1.36) in the context of their tertiary education: Z = 2368, p < .001).

Furthermore, in an open question, the participants were asked to name specific educational ISLL activities, which are illustrated in the word cloud below (see Figure 22). The size of each activity in the cloud represents the number of occurrences in the data set.

Figure 22: Word cloud depicting educational ISLL activities

The word cloud illustrates that *literature* was mentioned most frequently by the participants (157 occurrences). Furthermore, *academic writing* occurred in 28 instances and university courses made up for 26 cases. *Communication with colleagues & lecturers* was mentioned by 16 participants and

13 people referred to video tutorials. All activities mentioned were grouped into the following domains:

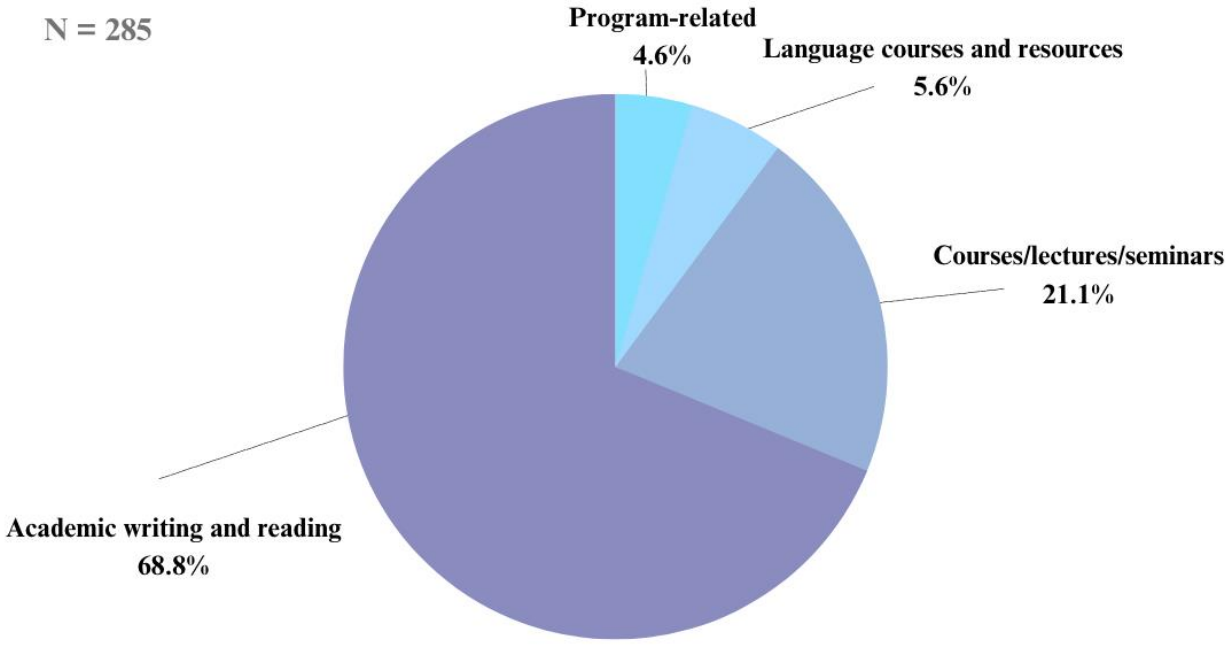

Figure 23: Domains of educational ISLL activities

The pie chart shows that *academic writing and reading* (e.g., reading literature or thesis writing) almost accounted for 2/3 of all educational ISLL activities. Activities related to university *courses/lectures/seminars* made up for 21.1% (e.g., communication with colleagues & lecturers and exercises). The rest was shared by *language courses and resources* (e.g., Business English or Italian-English dictionary), and *program-related* comments (e.g., students in EMI programs). A list with all activities, respective total occurrences, and allocation to domains can be found in the Appendix D.

6.6 FLE (RQ2)

With a mean value of 3.75 and a dispersion around the mean (SD = .7, IQR = .837), FLE was relatively high in the current sample of young adults as it remained above the neutral point. The boxplot illustrated the dispersion of the data (see Figure 24).

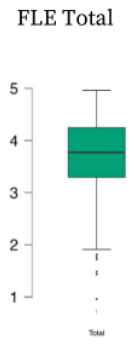

Figure 24: Boxplot depicting the dispersion of the FLE scale

On average, approximately 75% of the young adults indicated agreement with the FLE statements. This narrow range of variation is notable. There were some outliers in the sample, which did not show a high level of FLE. The detailed answer distribution of the young adults' responses to the FLE scale is illustrated in Figure 25.

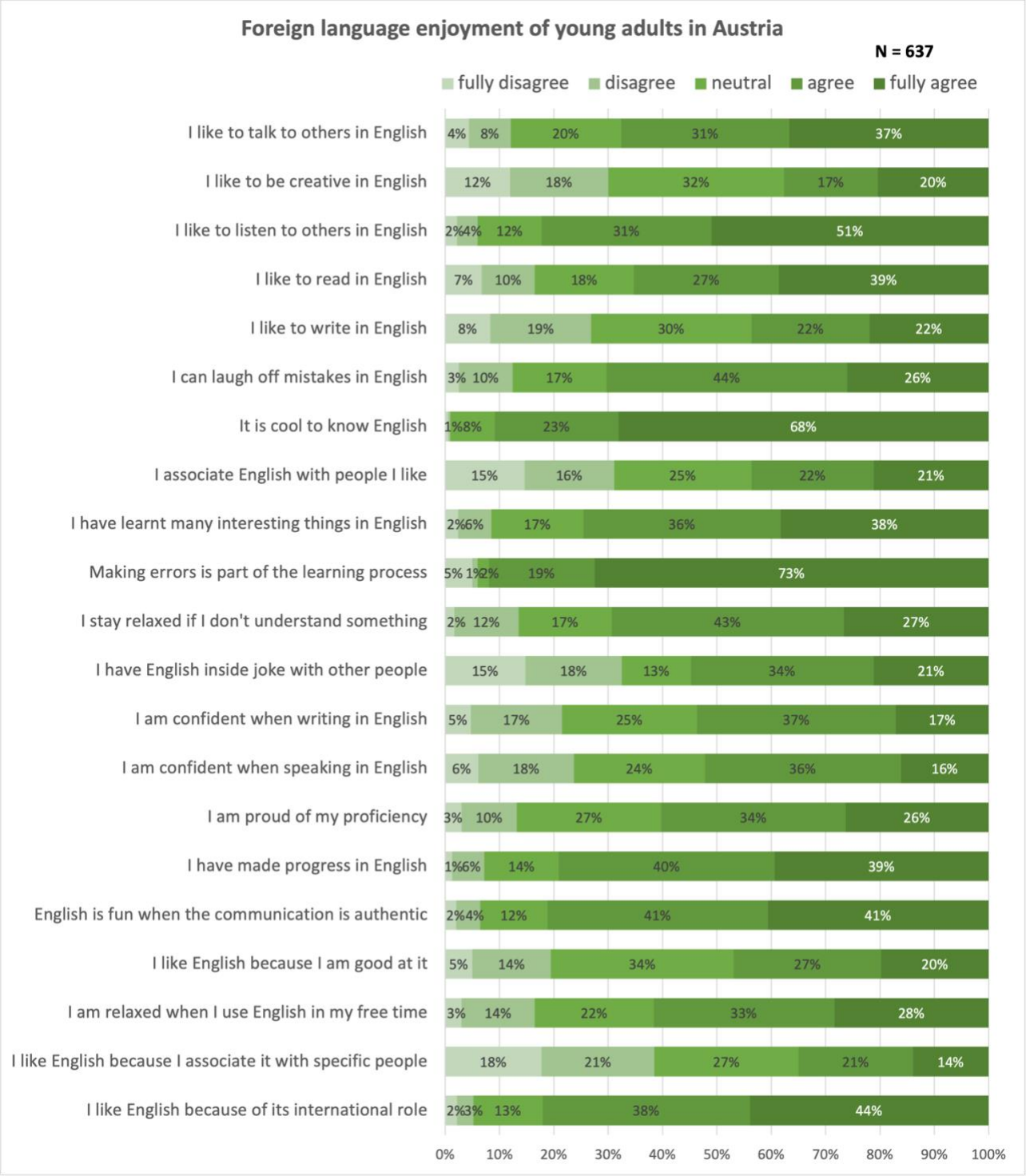

Figure 25: Answer distribution of FLE scale

More than 50% of young adults fully agreed that they *like to listen to others in English* (51%), *it is cool to know English* (68%) and *that making errors is part of the learning process* (73%). Except for the items *I like to write English*, *I associate English with people I like*, *I like to be creative in English*, *I like English because I am good at it* and *I like English because I associate it with specific people*,

more than 50% of young adults at least agreed with the remaining items. At least 30% disagreed or fully disagreed with similar items: *I like to be creative in English* (30%), *I associate English with people I like* (31%), *I have inside jokes with other people* (33%) and *I like English because I associate it with specific people* (39%).

Based on previous research (e.g., Dewaele & MacIntyre, 2016), reliability analysis and confirmatory factor analysis, the items were grouped into two subscales: *FLE-Private* and *FLE-Social* (see CFA of the FLE scale for the composition of the subscales. In Table 12, the descriptive statistics of the subscales are presented.

Table 12: Descriptive statistics of FLE scales

	Valid	Mean	SD	Skewness	Kurtosis	S-W	S-W p-value	Min	Max
FLE Private	637	3.881	0.701	-0.662	0.255	0.964	< .001	1.000	5.000
FLE Social	637	3.596	0.768	-0.574	0.204	0.974	< .001	1.000	5.000

The mean values of the subscales are rather high with 3.89 for *FLE Private* and 3.6 for *FLE Social* and standard deviations of .7 and .77. Shapiro-Wilk-tests have shown that the data is not normally distributed (W = .96 and .97, p < .001). Figure 26 illustrates the results of the two subscales.

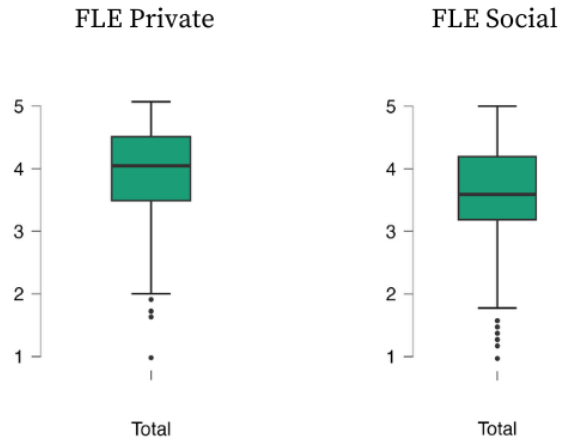

Figure 26: Boxplots visualizing FLE subscales

The boxplots depict a subtle difference between the mean values of *FLE Private* and *FLE Social*. To further examine this difference, a Wilcoxon signed-rank test, the non-parametric version of a paired sample t-test, was conducted. The test revealed that young adults had significantly higher private FLE (M = 3.88, SD = .7) than social FLE (M = 3.6, SD = .77; Z = -14.572, p < .001). The effect size r_B was medium (r_B =- .67). Turning to potential distinctions between the subgroups, Figure 27 visualizes the mean values each subgroup scored on the total FLE scale and on the two subconstructs.

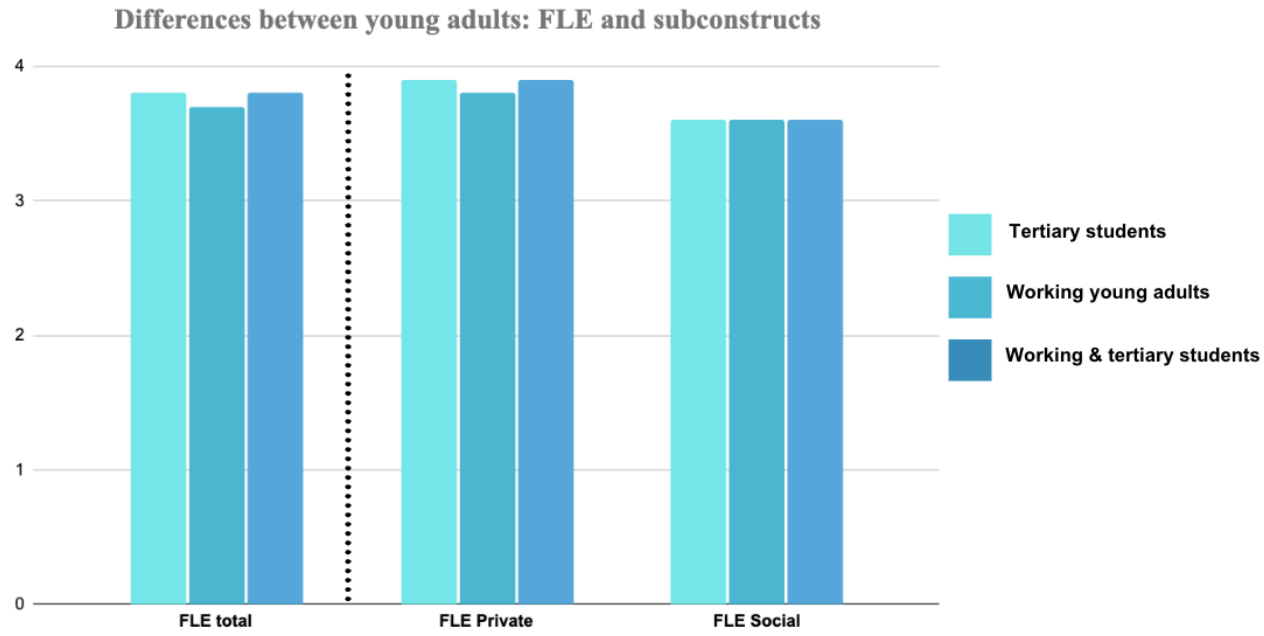

Figure 27: Mean values of FLE total and subconstructs

The standard deviations range from .67 for *FLE Private* among working & tertiary students to .79 for *FLE Social* among tertiary students. To further investigate the differences between these three subgroups, a series of Kruskal-Wallis tests was conducted (Table 13).

Table 13: Kruskal-Wallis tests investigating possible differences in FLE between young adults

Kruskal-Wallis Tests	Statistic (H)	df	p
FLE Total	1.730	2	.421
FLE-Private	3.922	2	.141
FLE-Social	0.768	2	.681

As the test results show, no significant differences between the groups were found for both the two individual factors and the overall FLE scale. Nevertheless, regarding generation, a Mann-Whitney U test revealed a significant difference ($U = 51627.000$, $p = .036$) as members of the Gen-Z ($M = 3.8$, $SD = .69$) had significantly higher FLE than Millenials ($M = 3.67$, $SD = .72$). Furthermore, a significant difference in FLE between young adults with differing educational attainment was detected by a Kruskall-Wallis test ($H(8)=16.141$, $p < .040$). However, a post-hoc Dunn's test with Bonferroni corrections did not uncover significant results for holders of certain degrees. Another Kruskall-Wallis test showed that there were significant differences in FLE between different proficiency levels ($H(5)=238.743$, $p < .001$). Post-hoc Dunn's tests with Bonferroni corrections showed that in almost all cases, people with a higher proficiency level had higher levels of FLE (p ranging from $\leq.001$ to .041).[12] Although people who were more proficient had higher FLE, here, the differences were not significant. Mann-Whitney U test ($U = 49538.00$, $p < .001$) revealed that people who had stayed abroad in an English-speaking country for more than a month had significantly higher levels of FLE ($M = 4.09$, $SD = .66$) than those who did not ($M = 3.65$, $SD = .69$). Regarding gender, no significant differences in FLE between people identifying as men, women or non-binary were found.

6.7 Relationship between ISLL and FLE (RQ3)

After the evaluation of the four scales with regard to their characteristic values and having uncovered differences between the subgroups, in a subsequent step, the relationships between the scales is examined. Therefore, Spearman correlations were chosen since the data is not normally distributed ($W = .959$, $p < .001$). Figure 28 illustrates the correlation coefficients and significance levels between the variables: the darker the color of the square, the stronger the correlation. According to Loewen

[12] Exceptions constituted the lower proficiency levels: There were no significant differences between A1 and A2 speakers, A1 and B1 speakers, A1 and B2 speakers, as well as A2 and B1 speakers.

and Plonsky (2015, p. 57) in applied linguistics, correlation coefficients can be interpreted as small if r_s = .25, medium if r_s = .40 and large if r_s = 65.

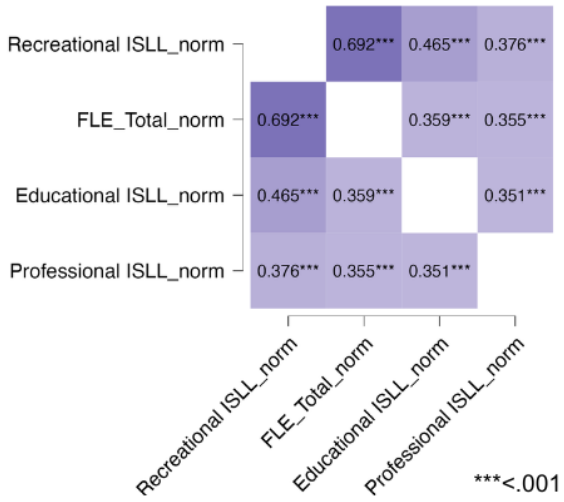

Figure 28: Heatmap of Spearman correlation coefficients of the scales

The analysis revealed that all four scales (recreational, educational, professional ISLL and FLE) have significant relationships with each other. The heatmap illustrates that recreational ISLL and FLE showed the highest significant correlations (r_s = .692, p <.001) with a large effect size of Fisher's z = .851 (Loewen & Plonsky, 2015, p. 57). Professional and educational ISLL also correlated significantly with FLE (r_s = .355, p <.001; r_s = .359, p <.001) and showed small to medium effect sizes (z = .371; z = .376). Considering these correlation coefficients, it is important to keep in mind that correlations only provide information about the strength of a relationship between variables and do not imply causation (Goss-Sampson, 2019, p. 59).

To examine my hypothesis (H3) that ISLL predicts FLE, the relationships between each of the three ISLL scales with FLE are relevant to the present thesis. Therefore, three simple linear regression models were computed. Firstly, the two variables with the strongest correlation, i.e., recreational ISLL and FLE, were examined. The positive correlation coefficient suggests a positive linear relationship between the two variables, which is also visible in the scatterplot below.

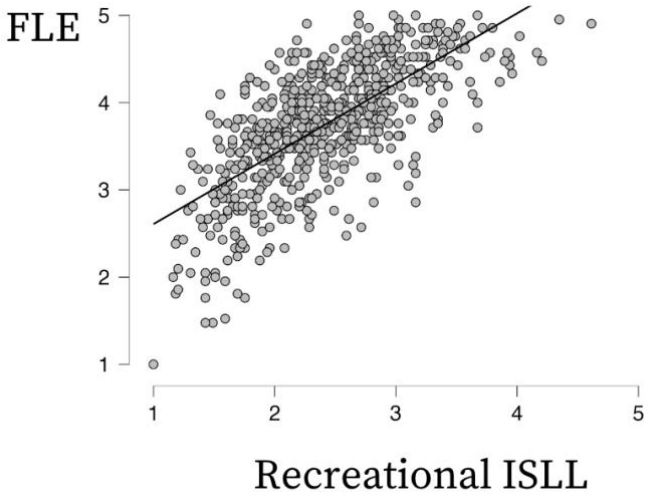

Figure 29: Correlation plot of FLE and recreational ISLL

To further investigate this relationship, a univariate linear regression model was conducted in JASP. The model F(1)=580 ($p < .001$) was statistically significant and explained 47.7% of the variance in FLE ($R^2 = .477$). R^2 can be interpreted as small if .02, medium if .13, and large if .26, as suggested (Field, 2017, p. 518). In the case of recreational ISLL, the effect was large. A Q-Q plot of standardized residuals confirmed that the residuals were normally distributed. The Durbin-Watson, which examines correlations between residuals, is 1.844, and therefore, between 1 and 3, as recommended (Goss-Sampson, 2019, p. 68). Hence, also the assumption of independent errors was met.

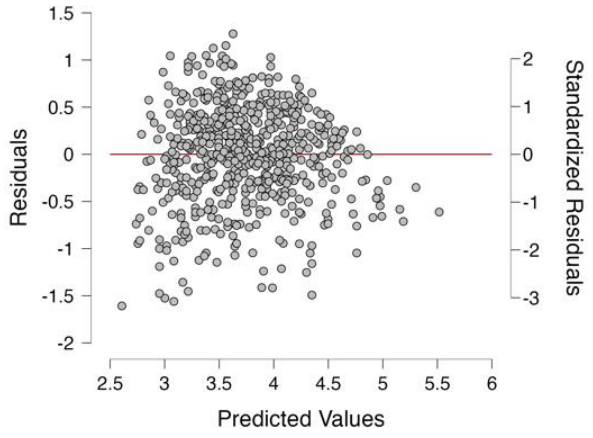

Figure 30: Residual plot recreational ISLL and FLE

Since the residuals are situated around the baseline (see Figure 30), the assumption of homoscedasticity was met (Goss-Sampson, 2019, p. 68). Furthermore, the regression coefficient for

FLE was significant with b = .805 (SE = .033, p < .001), meaning that for each unit increase in recreational ISLL, FLE is expected to increase by .805 units. In other words, recreational ISLL predicted FLE, which provides distinct support for my hypothesis (H3).

Secondly, a simple linear regression model for professional ISLL and FLE was computed. Figure 31 illustrates the positive correlation between the two variables. In comparison to Figure 29, the possible linear relationship is not as clearly visible but still present.

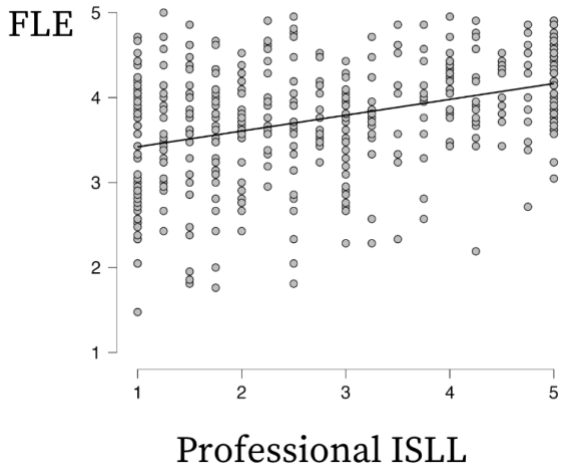

Figure 31: Correlation plot of FLE and professional ISLL

The linear regression model (F(1) = 64.602, p < .001) was statistically significant and explained 13.2% of the variance in FLE (R^2 = .132). This means that 86.8% of the variation in FLE remained unaccounted for. In this case, the effect size was medium. The Durbin-Watson was 2.101, and therefore, between 1 and 3, as recommended (Goss-Sampson, 2019, p. 68). A Q-Q plot of standardized residuals showed that the errors are normally distributed.

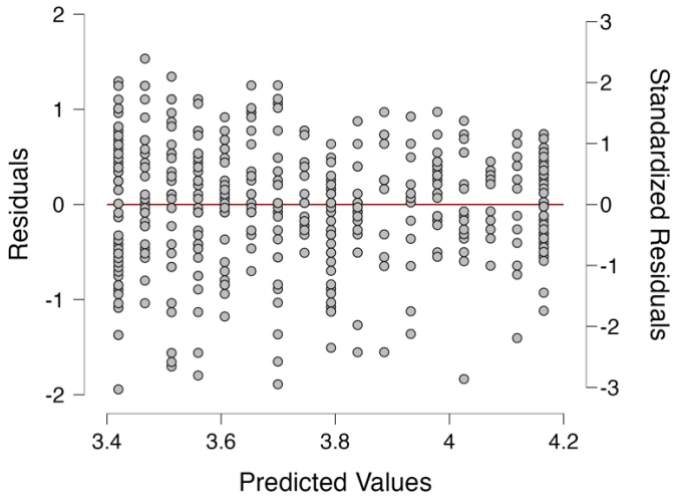

Figure 32: Residual plot professional ISLL and FLE

Figure 32 shows that the residuals are situated around the baseline. Therefore, the assumption of homoscedasticity has been met (Goss-Sampson, 2019, p. 35). The regression coefficient was significant ($b = .186$, $p < .001$). Hence, for every increased frequency unit in professional ISLL, FLE is expected to rise by .186 units. This result supports the hypothesis that ISLL, in this case professional ISLL contributes to FLE.

Thirdly, another univariate linear regression model for educational ISLL and FLE was generated. The scatterplot in Figure 33 indicates a linear relationship between FLE and educational ISLL.

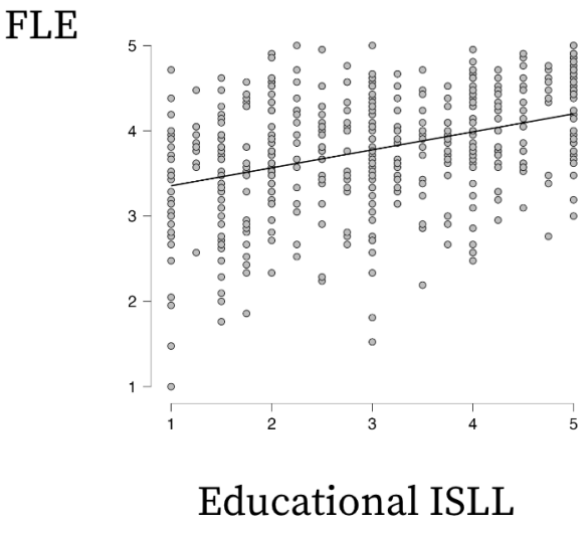

Figure 33: Correlation plot of FLE and educational ISLL

The results of the linear regression model were significant (F(1)=69.709, p < .001). and explained 13.6% of the variance in FLE (R^2 = .136). Here, the effect size was medium. The Durban-Watson Statistic was 1.867, and hence situated between 1 and 3. The assumption of normally distributed residuals was checked by means of a Q-Q plot.

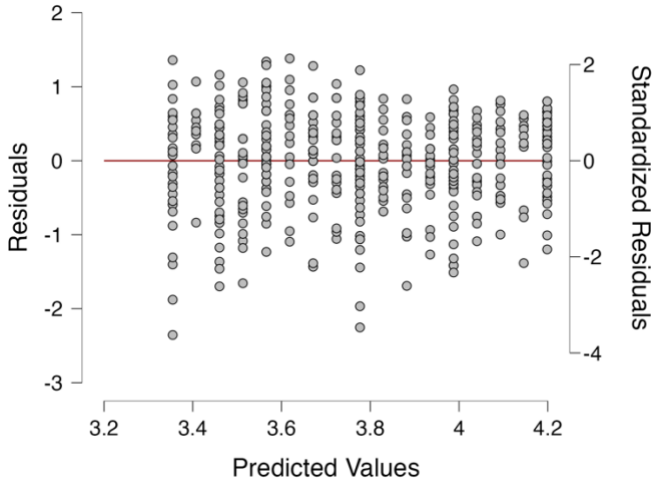

Figure 34: Residual plot educational ISLL and FLE

Again, the residuals are situated around the baseline (see Figure 34), which means that the assumption of homoscedasticity was satisfied. The regression coefficient was significant with b = .211 (p < .001), which means that for every unit increase (frequency) in educational ISLL, FLE is estimated to rise .211 units. This result provides further evidence in support of hypothesis H3.

Lastly, a multiple linear regression model using forced entry was computed with FLE as the dependent variable and educational, professional and recreational ISLL as predictor variables to examine whether a combined effect is present. A Q-Q plot of standardized residuals was computed to confirm that the residuals were normally distributed. According to Loewen and Plonsky (2015, p. 119), multicollinearity, a high correlation of two continuous variables (.80 or stronger), can be problematic for multiple regression. Yet, multicollinearity can be detected by the VIF score, which should not exceed 10. As the VIF scores for all scales were between 1.22 and 1.4, the assumption of

the absence of multicollinearity was satisfied. The assumption of independent residuals was also given as the Durban-Watson Statistic was 2.028. According to Field (2017, p. 518), to detect a large effect, a model with three predictors requires a sample size of at least 36, which is definitely met. Hence, the univariate linear as well as multiple linear regression models calculated for the present thesis satisfied all assumptions required for regression analyses.

The multiple regression model was significant with $F(3)=61.395$ ($p < .001$). However, while recreational ISLL remained a significant predictor in the multiple regression model (<.001), professional and educational ISLL did not yield significant results (see Table 14). R^2 was .477, which means that the significant predictor, recreational ISLL, explains 47.7% of the variance in FLE as already demonstrated in the respective univariate linear regression above.

Table 14: Multiple linear regression coefficients (ISLL and FLE)

Coefficients						
Model		**Unstandardized (b)**	**Standard Error**	**Standardized**	**t**	**p**
H_0	(Intercept)	3.791	.044		85.848	< .001
H_1	(Intercept)	1.909	.144		13.282	< .001
	Educational ISLL_norm	-.008	.034	-.014	-0.248	.805
	Professional ISLL_norm	.034	.029	.065	1.196	.233
	Recreational ISLL_norm	.735	.066	.649	11.161	< .001

In summary, while recreational, educational and professional ISLL predicted FLE in univariate linear regression models, the predictors of educational and professional ISLL lost their predictive power in the multiple linear regression model. This could be due to the rather low variance accounted for by these two variables. The multiple regression model shows that for each unit increase on the recreational ISLL Likert scale [(almost) never, a few times a year, a few times a month, a few times a week, (almost) daily], FLE is predicted to increase by b = .735 units on the FLE Likert scale [fully disagree, disagree, neutral, agree, fully agree] (see also Figure 31).

7 Discussion

In the following, firstly, a concise answer to each research question featuring the most important findings is offered. Secondly, the findings are discussed with the relevant literature.

7.1 RQ 1

RQ1a: *How do young adults in Austria engage with English in their free time?*

(Almost) daily recreational ISLL engagement was reported by 95.3% of all participants, i.e., 622 out of 653 young adults. The data was dispersed around the mean and demonstrates relatively low variability (M = 2.41, SD = .61, IQR = .837), which suggests consistency in recreational ISLL behavior among young adults in the sample. With regard to the clustered items in the context of their subscales, the mean values spanned from 2.07 for *ISLL Online interaction* to 3.04 for *ISLL Multidimensional*, with standard deviations between .63 for *ISLL Digital* and .86 for *ISLL Viewing*. The activities which stand out, as they were undertaken (almost) daily by the majority of participants, were *listening to music* (85%), *using English phrases in L1* (57%), *watching TikToks or Reels* (53%), *reading social media postings or comments* (53%), and *singing English songs* (52%). Similarly, in view of activities that at least half of the participants pursued a few times a week or more often are *listening to music* (96%), *singing English songs* (79%), *using English phrases in L1* (77%), *reading social media postings or comments* (75%), *watching TikToks or Reels* (68%), *using search engines* (64%), *watching videos* (63%), and *watching series* (55%). Regarding *English subtitles*, close to half of the participants (48%) reported using subtitles for audiovisual content at least a few times a month. Apart from *using English phrases in L1, singing English songs,* and *using search engines,* the most prominent activities were of a receptive nature. The least popular activities, in which the majority of young adults were (almost) never involved, were *fan fiction writing* (96%), *writing poetry* (92%), and *writing lyrics* (92%). When asked for additional recreational ISLL activities, *(online) shopping* was

reported by 37 participants, followed by *theater* with 20 cases, *cinema* with 18, and *sports courses* with 17 instances. Qualitative content analysis demonstrated that the principal recreational ISLL domains were *entertainment* (36.6% of the mentioned activities, N = 153), *online activities* (28.1%), and *sports* (19.6%), followed by *communicative activities* (11.8%), and *intellectual development* (3.9%).

The daily ISLL involvement by nearly all young adults (95.3%) is consistent with previous research in similar settings and the employment of comparable instruments. For instance, Ghamarian-Krenn (2023, p. 231; 316) reported that 97.3% of the tertiary students majoring in English engaged in EE (nearly) always and remained stable over time. Similarly, Schwarz (2020, p. 212) showed that 96.3% of upper-secondary students were involved in at least one EE activity on a daily basis, and (Arnbjörnsdóttir, 2018, p. 43) found that 90 to 95% of young adults in Iceland heard English every day. Differing results about the frequency of ISLL behavior, such as by Lee (2020a; 2020b), who reported weekly IDLE involvement, reflect the need for further validation of instruments for the measurement of ISLL, which has been tackled only fairly recently by Ghamarian-Krenn (2023), Arndt (2023), Sundqvist and Uztosun (under review), and to a certain degree also by the present thesis (see 5.3). Yet, this is a challenging endeavor as new digital ISLL activities emerge at a rapid pace, for instance, AI tools or trending social media platforms like TikTok, making it almost impossible to stay ahead of developments. Furthermore, since the frequency of ISLL engagement was collected utilizing Likert scale ratings, statements about the exact amount of time spent on these activities are unavailable. I decided against asking the participants for durations of ISLL activities because retrospective estimations of time spent on activities can be imprecise, especially if the person is immersed in the action in a flow-like state (Csikszentmihalyi, 2009). Moreover, the Likert scale data, which was interpreted as continuous data, was required for specific statistical analyses. In order to document the exact amount of time spent on ISLL, a different instrument measuring manifest as

opposed to solely latent variables is necessary: the language diary (e.g., Arndt & Rose, 2023; Jensen, 2017; Schwarz, 2020), for example, in the form of the Lang-Track App by Arndt et al. (2023) or a combination of a language diary and a questionnaire as operationalized by Arndt (2023) are more suitable.

The most popular types of recreational ISLL activities are also mostly in line with prior research: *listening to music* (e.g., González-Fernández, 2022), *singing English songs* (Ghamarian-Krenn, 2023), *reading social media postings and comments* (e.g., Ghamarian-Krenn & Schwarz, forthcoming), *watching videos* (e.g., Ghamarian-Krenn, 2023), *watching series* (e.g., Miglbauer, 2017) and *using search engines* (Ghamarian-Krenn, 2023). After music, the runner-up in popularity was *using English phrases in L1*, reported by 57% on a daily and 77% on a weekly basis. The use of anglicisms in the German language is addressed by a whole research domain (e.g., Onysko, 2007). As the act of using an English word or phrase while talking in German is short-lived, it is debatable whether it counts towards ISLL activities, which typically require more time than just a few seconds. Nevertheless, the fact that anglicisms are widely used among (young) adults in Austria (cf. Lenz, 2023) points towards the prominent role of English words and phrases among this cohort. Interestingly, the third most popular activity, *watching TikToks or Reels*, which is an activity pursued by 53% of all young adults on a daily and 68% on a weekly basis, is a rather novel phenomenon. Although TikToks have been mentioned in the context of video materials in the latest research on the topic by Schurz and Sundqvist (2022, p. 11), Schurz et al. (2022, p. 7) and Schurz (2022, p. 267), the short video format has not been subject to isolated in-depth investigation by any of the European ISLL studies reviewed above. This activity and similar ones to follow will most likely be of substantial interest to future ISLL studies, most importantly for IDLE and OILE research.

When it comes to ISLL activities, which were practiced by more than 50% at least weekly, differences were visible when compared to Ghamarian-Krenn's (2023) study, which resembles the current research context best, were visible. In her study, out of 43 activities, 19 were practiced at least *often* by more than 50% and up to 96% (*listening to music*) of all participants. In contrast, among the present participant sample, merely eight out of 49 activities were performed at least weekly by more than 50% and up to 96% (*listening to music*). The reason presumably lies within the construction of the participant groups of the two studies: While Ghamarian-Krenn's (2023) participants were young adults majoring in English, the current sample consists of Austrian young adults who are not English majors. It is, therefore, plausible that English majors show more interest in English in general. Furthermore, they are encouraged to immerse themselves in English activities by lecturers in language competence courses (Heaney, 2021), which is reflected in the high involvement in EE. However, two of the least popular activities in the present study (*writing lyrics* and *writing fanfiction*) were also among the least favored ones by English majors (Ghamarian-Krenn, 2023, p. 236). While 70% indicated that they *watch films* at least a few times a month, 48% reported *using English subtitles for audiovisual content* at least a few times a month. This result is roughly in line with Ghamarian-Krenn (2023, p. 261) who found that 50.79% of English major students used few English subtitles whereas 36.51% used them very often. However, according to Cineplexx CEO Papousek, the current trend for the most recent blockbuster movies *Barbie* and *Oppenheimer* lies within watching movies in their original version without any subtitles (Nussmayr, 2023, p. 42). It will be interesting to see how this development unfolds as it could have certain implication on the Austrian media landscape, such as more opportunities to consume media in English. Furthermore, in accordance with previous studies (e.g., Miglbauer, 2017; Ghamarian-Krenn & Schwarz, forthcoming, p. 11), the top-ranked activities were mostly receptive.

Considering the additional recreational activities mentioned by the participants, it is evident that the list of leisure activities among young adults is extensive. The most frequently mentioned activity *(online) shopping* was initially included in the questionnaire but was deleted after the piloting process because of a low Cronbach α value in the respective subscale. The second most frequently mentioned activity, *theater*, was contained in Ghamarian-Krenn's (2023, p. 153) first pilot round but was excluded because of low engagement and, therefore, also omitted in the present ISLL scale. Future research, particularly focusing on social or collaborative activities, such as *sports*, which account for 19.6% of all additional activities mentioned (N = 153), or *communicative activities* (11.8%), for example, *activism*, would provide fruitful insights into these understudied ILSS scenarios. More specifically, it would be beneficial to incorporate these activities into future ISLL instruments or explore them with qualitative methods.

Regarding the validated subconstructs (*ISLL Viewing*, *ISLL Digital*, *ISLL Multidimensional*, *ISLL Reading*, *ISLL Written and spoken production*, *ISLL Online interaction*), participants obtained the highest mean scores on *ISLL Multidimensional* (M = 3.04, SD = .76) and *ISLL Viewing* (M = 2.99, SD = .86) and the lowest on ISLL *Online interaction* (M = 2.07, SD = .71). This difference can be attributed to the item grouping of the two most prominent activities, i.e., *listening to music* and *singing English songs*, under the subconstruct *ISLL Multidimensional*. Similarly, *ISLL Viewing* contains only activities of receptive nature, such as the popular activities of *watching videos*, *watching series*, and *watching films*. Conversely, nine out of twelve activities on *ISLL Online interaction* are productive, which explains the lower mean score for this subconstruct.

While the internal consistency of the subscales was more than satisfactory, confirmatory factor analysis showed that although the model was significant, only a mediocre fit was present. Two prior studies have contributed to EE scale development by conducting factor analyses on Likert-scale-

based instruments. Due to satisfactory internal consistency and the results of exploratory factor analysis on individual theoretically grounded factors, Ghamarian-Krenn (2023, p. 314) proposed the factors *Fiction-oriented reading*, *Information-oriented reading*, *Communication-oriented reading*, *Creative writing*, and *Written communication* in addition to *English music*, *English video material*, *English online*, *English gaming*, and *English speaking*. Similarly, based on exploratory factors analysis, confirmatory factor analysis, and satisfactory reliability analysis, Sundqvist and Uztosun (under review, p. 4) presented the factors *EE Internalized, EE Gaming, EE Digital Creative, EE Niche Activities, EE Viewing, EE, Music*, *EE Reading*, and *EE Listening*. All three studies found one or more factors related to watching video material in English, digital English activities, and reading. Furthermore, Ghamarian-Krenn (2023) and Sundqvist and Uztosun (under review) discovered factors in connection to gaming and music. In the current thesis, items related to gaming and communicating during gaming were allocated to *ISLL Digital* and *ISLL Online interaction*. Items related to music were allotted to various factors. This suggests that there are copious ways to categorize items into factors, such as categorizations by genre, as in Ghamarian-Krenn's reading factors, by activities (e.g., gaming, music), or by skills and combination of skills (e.g., online interaction, listening). In the current study, factor analysis was conducted to obtain a reliable questionnaire. However, future studies could further examine existing ISLL factor structures to find out more about the underlying ISLL constructs to improve and validate test instruments by excluding redundant items (i.e., items that are similar and highly correlated). By adhering to the principle of parsimony (Field, 2018, p. 1122), the way to a standardized test instrument for ISLL could be paved. As already discussed above, due to the dynamic nature of (digital) ISLL activities, this is a difficult task. Nevertheless, the implementation of a consistent scale would be helpful to be able to compare results in a more meaningful way.

RQ1b: *How do young adults in Austria engage with English in their professional and educational context?*

(Almost) daily professional ISLL was reported by 30.1%, i.e., 126 out of 419 young adults who have an occupation. Approximately half of the participants reported monthly to weekly professional ISLL behavior in all skills apart from writing, which suggests a high dispersion in professional ISLL engagement among young adults who were employed, several of them also studying (IQR = 2.5). Considering the four skills individually, each of them was used (almost) daily by 17% to 24% of all participants. *Listening* (54%), *reading* (53%), and *speaking* (58%) was used by more than half of the participants at least a few times a month as opposed to *writing* (41%). The productive skill *speaking* is required most often (at least a few times a year by 75%), whereas the productive skill *writing* is needed least often (at least a few times a year by 56%). In the professional context, receptive skills were used significantly more often than productive skills ($Z = 8925.5$, $p < .001$, $r_B = -.32$). When inquired about the specific professional ISLL activities, the three most important endeavors reported were *communication with clients, patients and suppliers* (76 occurrences), *communication with colleagues* (54 cases) and *emails* (23 instances), which require receptive and productive skills. The activities (N = 307) were grouped into the following domains: *communication* (62.9%), *research and academic matters* (17.3%), *education and training* (12.1%), *marketing and promotion* (3.6%), *IT* (2.6%), and *working with clients* (1.6%).

The fact that (almost) daily professional English use was indicated by almost a third of the sample provides even more evidence for the predominance of English in Austria in addition to German, as described by Smit and Schwarz (2019, p. 109). More specifically, these findings are in favor of the classification of language practices as "globalized bilingualism" (Smit & Schwarz, 2019, p. 309) and the presence of the contact type of *Global Englishes* (Smit & Onysko, forthcoming). The skills related to spoken communication are needed almost equally often, which could be explained by the frequent occurrence of lingua franca scenarios in the workplace context, where English constitutes the shared

language of a group of people working together. Nevertheless, the fact that receptive skills were needed significantly more often than productive skills points to a considerable amount of time spent on information processing and uptake. This is partly also illustrated in the professional ISLL activities mentioned by the participants, where written and spoken communication with customers and colleagues account for the majority. The rest of the domains (*research and academic matters education and training*, *marketing and promotion*, *IT*, and *working with clients*) are congruent with the most popular occupations in the sample: *education, teaching & psychology*, *economy & management* as well as *health, psychology & social*. In her study, Arnbjörnsdóttir (2018, p. 42) emphasizes that among the Icelandic population, daily English engagement varied tremendously with regard to people's occupation, as illustrated by the daily reading practices of almost 60% of managers, but only 30% of farmers/fishermen/laborers. Further research in the Austrian context would shed light on different educational ISLL practices in different occupations. The findings on professional ISLL contribute to the deeper understanding of the use of English in the work context in Austria as to date there is only limited research on specific professional domains, such as tourism (e.g., Gonçalves, 2020) or multinational companies (e.g., Stajic, 2015).

Concerning the educational domain, (almost) daily educational ISLL engagement was documented by 25.3% of (employed) tertiary students. The fact that approximately half of all participants reported annual to weekly educational ISLL engagement (IQR = 2) suggests that, similar to professional ISLL practices, educational ISLL behavior varies among young adults who are studying (and partly also working). Each skill was used (almost) daily by 13% to 23%. At least half of the participants engaged in *writing* (50%), *speaking* (58%), *listening* (65%), and *reading* activities (80%) at least several times per month. With regard to (almost) no involvement, 26% indicated that they (almost) never *speak* and 33% indicated that they (almost) never *write* in English in the context of their studies, whereas the proportions are lower for receptive skills. A Wilcoxon signed-rank test confirmed that receptive skills

were used significantly more often than productive skills ($Z = 2368$, $p < .001$, $r_B = -.86$). The most frequent educational ISLL activities mentioned by the participants were *literature* (157 occurrences), *academic writing* (28 cases), and *university courses* (26 instances). Concerning the domains, 68.8% of all mentioned activities (N = 285) were related to *academic writing and reading*, 21.1% to *courses/lectures/seminars*, 5.6% to *language courses and resources*, and 4.6% were various *program-related* activities and circumstances.

(Almost) daily educational ISLL engagement was slightly lower (25.3%) than professional ISLL involvement (30.1%), but receptive skills were also used significantly more often in the tertiary domain. When it comes to skills used at least a few times monthly, notably higher educational engagement for *writing*, *listening*, and reading *activities* – with the exception of *speaking*, which was used at least monthly by 58% in both domains, is visible. *Reading* is the most necessitated skill, used by 80% at least a few times a month, which can be attributed to required readings in the context of university studies. Since English is the dominating lingua franca for academic texts in most research areas (Klein, 2021), this is a plausible result. This could also explain the higher numbers for *writing* (50%) because academic student papers are increasingly often expected to be written in English (Rheindorf, n.d.). This inference is also reflected in the educational ISLL activities the participants mentioned: The domain of *academic reading and writing*, which includes tasks such as *thesis writing* and *reading literature* accounted for the preponderance of activities. The raised percentage for at least monthly *listening* by 65% could point to EMI seminars, which make up for 21.1% of the indicated activities and also include *communication with colleagues & lecturers*, as well as program-related activities (4.6%), which contain *EMI programs*. These findings are roughly in line with Gaisch et al. (2021, p. 297) who detected bilingualism in HEI in a range of realms including publishing research and postgraduate study programs. Similar to the ISLL engagement in the professional domain described above, the levels of educational ISLL provide further evidence for "globalized

bilingualism" (Smit & Schwarz, 2019, p. 309) and the existence of the contact type of *Global Englishes* in Austria (Smit & Onysko, forthcoming).

RQ1c: *Are there differences in recreational informal second language learning practices between tertiary students, tertiary students who are working part-time and young adults who are working full-time?*

Several differences between the three groups were detected. Concerning recreational ISLL, tertiary students ($p = .006$) and working & tertiary students ($p = .004$) showed significantly higher recreational ISLL engagement. Taking the recreational ISLL subscales into account, a pattern was detected as tertiary students and working & tertiary students achieved significantly higher results for *ISLL Viewing* ($p = .012$), *ISLL Reading* ($p = .002$), and *ISLL Written and spoken production* ($p < .001$). Only tertiary students exhibited significantly higher *ISLL Digital* engagement. No differences were detected for *ISLL Multidimensional* and *ISLL Online interaction.* A series of further significant differences was found with regard to other demographic variables. When it came to self-perceived proficiency, a trend for significant differences between higher and lower proficiency levels was detected. However, there were neither significant differences between elementary (A1) speakers and any higher levels, nor between pre-intermediate (A2) users and B1 or B2 speakers. Furthermore, no significant difference in recreational ISLL was detected between advanced (C1) and proficient (C2) users. Regarding the participants' membership to a generation, compared to the older cohort of the Millennials ($M = 2.28$, $SD = .6$), Gen-Z scored significantly higher on the recreational ISLL scale ($M = 2.49$, $SD = .59$, $p < .001$). In view of the highest educational attainment, young adults with a university entrance exam ($p < .001$), a school-leaving certificate ($p = .017$), and a Bachelor's degree ($p = .017$) reported significantly more recreational ISLL involvement than people with an apprenticeship diploma. However, this result should be treated cautiously as the sample size of holders of an apprenticeship diploma might be too low to make valid inferences ($N = 7$). Also, young adults who had spent over a month in an English-speaking country exhibited significantly more

recreational ISLL engagement (M = 2.61, SD = .6, $p < .001$) as opposed to those who had not (M = 2.36, SD = .59). There are no significant differences in recreational ISLL between different genders.

The finding that (employed) tertiary students show significantly higher recreational overall ISLL as well as *ISLL Viewing*, *ISLL Reading*, and *ISLL Written and spoken production* levels could be connected to the notable levels of monthly educational ISLL involvement of tertiary as well as working & tertiary students discussed above. This interpretation also finds support in the sizeable significant correlation between recreational and education ISLL ($r_s = .465$, $p < .001$). Concerning the group of unemployed tertiary students who additionally pursued significantly more activities related to *ISLL Digital*, the high recreational ISLL levels could be related to an overall greater abundance of free time and vacation compared to the other two subgroups. However, this might not be true for all tertiary programs as programs at Universities of Applied Sciences usually have more mandatory on-site classes than other forms of tertiary education (Glas, 2023). Another possible reason for the increased recreational ISLL engagement by (employed) tertiary students could lie in the age cohorts of the respective subgroups. While in the present sample, working young adults consisted mostly of Millenials (70.59%), almost all tertiary students (90.52%) and more than half of working & tertiary students (65%) are Gen-Z, who show significantly higher recreational ISLL levels. This could be attributed to their status as so-called digital natives. Since they grew up in a globalized world immersed in digital technology and social media, it is likely that they were exposed to a higher quantity of naturally occurring English content at an earlier stage than their older counterparts, thereby creating an early habit of engaging in recreational ISLL. This result is also in line with Arnbjörnsdóttir (2018, p. 42f.) who also discovered higher recreational English use among the younger proportions of the Icelandic population. The fact that no differences were detected between the subgroups for *ISLL Multidimensional* and *ISLL Online interaction* could be rooted in the general

popularity of the items among young adults in these two subconstructs, which include items related to music and social media.

The rough pattern for higher recreational ISLL among users with a higher self-perceived proficiency is consistent with previous literature. Ghamarian-Krenn (2023, p. 278), Busby (2021, p. 72) as well as González-Fernández (2022, p. 36) demonstrated that specific EE activities were predictors of vocabulary knowledge. On the contrary, Lee and Dressman (2018, p. 439) found that diversity of IDLE activities, rather than frequency, correlated with aspects of proficiency. The finding that there are no significant differences in recreational ISLL between lower proficiency levels and between advanced (C1) and proficient (C2) speakers indicates less recreational ISLL engagement among speakers of lower proficiency groups. However, more research is needed to confirm this inference. Higher recreational ISLL engagement among people with experience abroad constitutes a similar case. The result that young adults with higher educational attainment showed significantly more recreational ISLL than holders of an apprenticeship diploma might also be connected to different levels of formal language education. This result was in line with prior research, which also found differences between higher and lower educational attainment (e.g., Ghamarian-Krenn, 2023, p. 267). While the current study did not find gender differences on the overall recreational ISLL scale, other studies demonstrated disparities between the frequency of the mean time pursuing EE (Schwarz, 2020, p. 223) as well as between different EE activities (Ghamarian-Krenn, 2023, p. 265).

7.2 RQ 2

RQ2a: *To what extent do young adults in Austria enjoy engagement with English?*

Austrian young adults in the sample show relatively high FLE (M = 3.75, SD = .7) with relatively low dispersion (IQR = .837). Full agreement with the following statements was expressed by more than half of the sample: *making errors is part of the learning process* (73%), *it is cool to know English*

(68%) and *like to listen to others in English* (51%). Except for four items, more than half of the participants at least agreed with the remaining 17 FLE items. Concerning the subconstructs, young adults had significantly higher levels of private FLE (M = 3.88, SD = .7) than social FLE (M = 3.6, SD = .77; Z = -14.572, p < .001).

The rather high FLE level of the current sample is in line with previous research showing similar means and standard deviations, such as M = 3.82, SD = .42 (Dewaele & MacIntyre, 2014, p. 247), M = 3.68, SD = .53 (Botes et al., 2023, p. 10) and M = 3.68, SD = .61 (Resnik & Dewaele, 2020, p. 6). Similar to Dewaele and MacIntyre (2014, p. 261), FLE levels were relatively consistent. A first assumption that the high level of FLE could be due to the well-educated sample was refuted by statistical analyses. A possible reason for this result could also be related to the increased likelihood of taking an online survey related to the English language if actually fond of the English language (Wilson & Dewaele, 2010, p. 115). Also, considering the high frequency of professional and educational as well as recreational ISLL practices presented above, FLE could be rooted in these ISLL practices. This case will be discussed in more detail in 7.3. In light of Fredrickson's (2001) broaden-and-build theory, frequent positive experiences of learning and social interaction, in this case, FLE, over time contribute to the well-being of individuals (Fredrickson & Joiner, 2018, p. 194). Positive upward spirals induce permanent alterations in neural structure, which contribute to the strengthening of inner resources, such as resilience, positive thinking, and regulating emotions (Hanson et al., 2023, p. 142-145). This suggests that higher levels of FLE foster abilities connected to well-being. For language acquisition, according to Dewaele and MacIntyre (2014, p. 261), enjoyment might imply a facilitation of language learning processes. Considering the deteriorating mental health among children and young adults in Austria[13] and Europe in general in the context of

[13] 41.3% of young people (aged 18 to 24) in Austria and 23.7% of all adults experienced symptoms of depression between 2020 and 2021 (OECD & European Union, 2022).

multiple crises (OECD & European Union, 2022; Lehner & Schober, 2023), frequently experiencing a variety of positive emotions, such as for example FLE, could contribute to sustaining mental wellbeing.

Concerning the difference between the subconstructs, Moskowitz and Dewaele (2020, p. 528) as well as Resnik and Dewaele in the context of in-person FL classes (2020, p. 15) also detected higher descriptive personal FLE (M = 3.96, SD = .82; M = 3.88, SD = .6) than social FLE (M = 3.39, SD = .88; M = 3.65, SD = .72). With regard to the single FLE items, this could have reasons pertaining to creative processes involved in the exploration of a second language (*I like to be creative in English*), inward pride (*I am proud of my proficiency*) and personal achievements (*I have made progress in English*) after having dedicated personal resources to the acquisition of the second language. Also, in social settings, confidence in productive language skills is required to a greater extent (e.g., *I am confident when speaking in English*). However, in educational and professional ISLL settings, receptive skills are used more frequently, and in the recreational setting, receptive activities are the most popular. Furthermore, FL speakers might experience higher pressure to express themselves accurately and fluently in social interactions compared to when on their own. To confirm this inference, items measuring FLA would be needed. However, including the concept of FLA was beyond the scope of the current study.

Since to my knowledge this is the first study to examine FLE in a non-educational setting, the FLE scale was specifically adapted to this setting. Therefore, two FLE subconstructs originally designed and validated by Dewaele and MacIntyre (2016), further validated by Botes et al. (2021), and widely implemented by FLE researchers were built upon: *FLE Private* and *FLE Social*. As some items from the FLES and the S-FLES did not fit the current context (e.g., *We form a tight group*) because the current enrollment in an FL class was not a participation criterion, the scale was customized to the

current setting with novel items based on literature and examined in the piloting process. Although the two subscales used showed high internal consistency (α = .85 to .86), the CFA only resulted in a mediocre model fit. Therefore, there is an urgent need for future studies to focus on the underlying subconstructs and factor structure of FLE and instrument development in non-educational contexts.

RQ2b: *Are there differences in foreign language enjoyment between tertiary students, tertiary students who are working part-time and young adults who are working full-time?*

There were no significant differences in foreign language enjoyment between the three subgroups. However, considering additional socio-demographic factors, a series of significant differences in FLE was detected. Members of the Gen-Z (M = 3.8, SD = .69) showed significantly higher FLE than Millenials (M = 3.67, SD = .72, p = .036). Although a significant difference between people with different educational attainment was detected at first (p = .04), post-hoc tests did not yield significant results. Moreover, significant differences between young adults with different proficiency levels were found. In most instances, young adults with a higher proficiency level had significantly higher levels of FLE (p ranging from ≤ .001 in most cases to .006 for A1-C1 and .041 for A2-B2). Interestingly, although participants with a higher proficiency level always showed higher FLE, there were no significant differences for the lower proficiency levels: A1 and A2 speakers, A1 and B1 speakers, A1 and B2 speakers as well as A2 and B1 speakers. Furthermore, young adults with experience abroad of at least a month in an English-speaking country had significantly higher FLE levels (M = 4.09, SD = .66, p < .001) than those who did not (M = 4.65, SD = .68). There was no disparity in FLE with regard to gender.

The fact that there were no significant differences between the three subgroups indicates that regardless of occupation or tertiary education, there were consistent levels of FLE among all young adults, which is also reflected in the low variability (IQR = .837). Hypothesis H2b was thereby

rejected. Nevertheless, the significant difference between members of different generations was a novel result, as prior research reported increased FLE among older people (Dewaele & MacIntyre, 2014, p. 262; (Dewaele et al., 2018, p. 691). Higher FLE levels among members of Gen-Z in the current sample might be linked to raised recreational ISLL involvement during childhood and adolescence. The discordant findings from previous studies could be ascribed to the study setting of researching FLE in the context of foreign language classes in both cases. Furthermore, the study by Dewaele et al. (2018) is fundamentally different from the current circumstances as the study was conducted in Great Britain and the foreign languages examined were not English, but mostly French, Spanish, and German. The study authors assume that the reason for lower levels of FLE among younger FL learners lies in the British school system focusing on test results. The conflicting result by Dewaele and MacIntyre (2014) could be explained by the decade which has passed between their and the present data collection. Technical improvements, the emergence of Web 2.0, and resulting ad-hoc access to incessant English-language media possibly account for this shift. As age and possible effects on FLE have not been thoroughly investigated by many studies (Botes et al., 2022, p. 208), further research is required to draw conclusions.

Possibly attributed to a similar reason, the current study did not identify significant differences in FLE with regard to the highest educational attainment. This was discordant with Dewaele and MacIntyre's findings (2014, p. 252) which demonstrated lower scores of FLE for mid-high school groups than speakers with a BA, MA, or PhDs. However, concerning FLE and self-perceived proficiency levels, there was an overlap between the current study and Dewaele and MacInytre (2014, p. 250), which only found small differences between lower-intermediate and intermediate speakers, but higher levels of FLE for higher proficiency levels. A meta-study by Botes et al. (2022, p. 217) further confirmed this finding and inferred that speakers with higher FLE were inclined to report higher self-perceived proficiency levels. Increased FLE among young adults in the current sample

who had spent time abroad is a reasonable consequence of at least a month-long immersion in the language and culture. As opposed to the majority of previous research, which indicates that females have higher FLE (Dewaele & MacIntyre, 2014, p. 254; Dewaele et al., 2016, p. 51), there were no significant differences in FLE with regard to gender, which is in line with the results by Alenezi (2020). This provides evidence against the stereotype that women are more interested in languages than men.

7.3 RQ 3

RQ3: *What is the relationship between informal second language engagement and foreign language enjoyment among young adults in Austria?*

Spearman correlations of recreational ISLL and FLE showed a large significant association (r_s=.692) with a large effect size (z = .851). On top of that, a simple linear regression model even revealed that recreational ISLL predicted FLE (F(1) = 580, p < .001, R^2 = .477, b = .805). This result provided considerable evidence in favor of the hypothesis (H3) that ISLL is a predictor of FLE. Two further univariate linear regression models demonstrated that higher FLE was also associated with higher professional ISLL (F(1) = 64.602, p < .001, R^2 = .132, b = .186) and educational ISLL (F(1) = 69.709, p < .001, R^2 = .136, b = .211). Thereby, the hypothesis received further validation. To investigate a potential combined effect, a multiple linear regression model with recreational, educational, and professional as covariates and FLE as dependent variable resulted in a significant model output (F(3) = 61.395, p < .001). However, only recreational ISLL remained a significant predictor (R^2 = .477, b = .73), whereas educational and professional ISLL lost their predictive strength.

In light of the above, recreational ISLL can be added to the list of variables associated with FLE, such as WTC (e.g., Barrios & Acosta-Manzano, 2021), self-perceived proficiency (Dewaele & MacIntyre, 2014), FL achievement (Dewaele, 2023), positive FL attitudes (Dewaele, 2023), and the personality

traits of intellectual humility (Moskowitz & Dewaele, 2020), TEI (e.g., Resnik & Dewaele, 2020), learner autonomy (Resnik & Dewaele, 2021), as well as conscientiousness, extraversion and agreeableness (Botes et al., 2023). Concerning the predictive power of recreational ISLL on FLE, the present study results further confirm the findings by Barrios and Acosta-Manzano (2021, p. 15) who also found that OCFLU predicted FLE among Spanish adult FL learners as well as Lee et al. (2021, p. 10) who showed that IDLE predicted higher FLE among Korean EFL secondary school students. Although these results are discordant with Uzun (2017, p. 15) who did not find significant associations between FLE, watching English-language TV and listening to English music, this could be due to their use of only two items to ask for ISLL engagement. The result that educational and professional predicted FLE in univariate regression models indicates that work- and education-related skill-based activities also possess predictive power for FLE. However, the effect is not as strong as for recreational ISLL. Furthermore, the predictive power of recreational ISLL for FLE is in line with Arndt's (2023) contextual model of engagement in ISLP where ISLL mediates affective development. It could be assumed that, in accordance with the broaden-and-build theory, frequent experiences of ISLL lead to more FLE, which then contributes to overall mental wellbeing as resources like resilience are strengthened. However, a longitudinal study design is necessary to provide more evidence for this inference.

8 Conclusion

The present thesis set out to shed light on informal secondary language learning practices and enjoyment among young adults in Austria aged 18 to 35 years. More specifically, the study investigated recreational, professional, and educational ISLL involvement and FLE levels among tertiary students, working young adults, and working & tertiary students to detect potential differences. The study aimed to contribute to a deeper understanding of the role of English among Austrian young adults. More precisely, four items on the *research shopping list* were addressed:

1) the investigation of recreational ISLL among not only tertiary students but also young adults in the professional sphere as called for by Schwarz (2020, p. 351)
2) the role of professional and educational ISLL among young adults as recommended by Socket and Toffoli (2020, p. 483)
3) the exploration of FLE disconnected from formal language instruction
4) the relationship between ISLL and FLE as prompted by Arndt (2023, p. 7)

For this reason, a questionnaire drawing upon items from previous research was designed, piloted, and validated by means of reliability analysis and CFA. The resulting data provided by 653 young adults in Austria received primarily quantitative analysis, but also qualitative exploration.

Almost all participants (95.3%) indicated (almost) daily recreational ISLL involvement. The top five ISLL activities, which were pursued (almost) daily by the majority of participants, were *listening to music* (85%), *using English phrases in L1* (57%), *watching TikToks or Reels* (53%), *reading social media postings or comments* (53%), and *singing English songs* (52%). Almost a third (30.1%) of working young adults and working & tertiary students reported (almost) daily use of English in the professional setting. The activities which were pursued in English (N = 307) were related to the domains of *communication* (62.9%), *research and academic matters* (17.3%), *education and training* (12.1%), *marketing and promotion* (3.6%), *IT* (2.6%), and *working with clients* (1.6%). Similarly, 25.3% of tertiary students and working & tertiary students engaged in (almost) daily educational ISLL. The domains of the mentioned activities (N = 285) were related to *academic writing and reading* (68.8%), *courses/lectures/seminars* (21.1%), *language courses and resources* (5.6%), *as well as program-related* activities and circumstances (4.6%). In both settings, receptive skills were needed significantly more often than productive skills. The high levels of recreational ISLL involvement as well as the use of English in the workplace and university context present further evidence for the prevalence of "globalized bilingualism", as described by Smit and Schwarz (2019, p. 309). Officially, Austria is monolingual with the exception of three minority languages in some regions. However, the language practices reported in the present thesis align with the description that, especially for the

younger generations, English can be considered as “default additional language” in Austria (Smit & Schwarz, 2019, p. 309).

With regard to differences between the three subgroups, tertiary students and working & tertiary students showed significantly higher levels of recreational ISLL than working young adults. This could have several reasons, one of them being connected to the composition of generations in the current sample: While working young adults consisted mostly of Millenials (70.59%), almost all tertiary students (90.52%) and more than half of working & tertiary students (65%) are Gen-Z, who show significantly higher recreational ISLL levels. Since members of Gen-Z grew up fully immersed in digital media, compared to Millenials, it is possible that they encountered elevated naturalistic English-language content at an earlier stage in their lives.

FLE among young Austrian adults was relatively high and consistent among the sample. There were no differences between the three subgroups. However, again FLE was significantly higher among Gen-Z participants, which could be connected to the same reason mentioned for the high levels of ISLL among members of Gen-Z. Furthermore, the study demonstrated that FLE was predicted by recreational ($b = .805$), educational ($b = .211$), and professional ($b = .186$) ISLL individually. Recreational ISLL had the highest predictive power. This points to the assumption that, in line with Fredrickson’s (2011) broaden-and-build, theory, high levels of ISLL, which consequently foster FLE, strengthen resources related to mental wellbeing. Since ISLL emerged from SLA research, it is plausible to also draw a pedagogical implication for formal language instruction: Based on the finding that interest in recreational ISLL is high, practitioners can motivate their students to indulge in their hobbies in English. Not only does this have a positive impact on vocabulary knowledge (e.g., Ghamarian-Krenn, 2023), but also on FLE.

It should be noted that there are several limitations to the study, which go in tandem with recommendations for future research. Firstly, the fact that the participants in the current sample had notably higher educational attainment than the Austrian population in the cohort could have led to a distortion of the results. Secondly, although the internal consistency of all subscales was satisfactory, the CFA did not yield acceptable model fits. Further inspection of the items and EFA could provide more information on the construction of fitting subscales. Thirdly, the design and validation of an FLE scale disconnected from language instruction settings would need further attention than could be allocated in the present context. Therefore, qualitative interviews on FLE with language users who are not attending FL classes could provide inspiration for additional items. Subsequently, the subconstructs would need to be tested in several piloting rounds by means of reliability analysis and factor analysis before the actual data collection. However, since the validation was not a research question underlying the present thesis, this procedure would have overstepped the scope. To obtain a more detailed insight into the ISLL practices of individuals, qualitative ethnographic case studies with follow-up interviews would be intriguing. Moreover, a quantitative longitudinal study on ISLL, FLE levels, and aspects of psychological wellbeing among children and young adults could shed light on the long-term effects of ISLL and FLE on mental health. Research on ISSL practices among understudied age cohorts, such as pensioners, might also provide insightful results.

In summary, the present thesis has demonstrated that a considerable number of young adults in Austria not only engage frequently in ISLL practices in their free time, but the use of English also plays an integral role in educational and professional work contexts. Furthermore, not only do they mostly enjoy pursuing their hobbies in English, but they also derive enjoyment from professional and academic pursuits. This vividly paints the status of English as an additional second language among the younger cohorts in Austria (cf. Smit & Schwarz, 2019, p. 309). The progression of this development promises to be intriguing considering that the elevated use of and interest in the language

could result in expanded avenues for English-language engagement across all three settings in Austria.

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Appendix

Appendix A: German Abstract

Das digitale Zeitalter eröffnet stetig neue Möglichkeiten für das informelle Erlernen von Zweitsprachen (ISLL; Dressman, 2020, S. 1). Dieses moderne Phänomen blieb von Wissenschaftler*innen aus dem Bereich des Fremdsprachenlernens nicht unentdeckt (z. B. Sundqvist, 2009; Sockett, 2014) und hat zur Entstehung des neuen Forschungsfeldes des informellen Zweitsprachenerwerbs (ISLL) geführt. Studien zu affektiven Faktoren wurden innerhalb dieses Bereichs jedoch nur im begrenzten Maße durchgeführt (Arndt, 2023). Daher behandelt die vorliegende Arbeit die Beziehung zwischen ISLL und Foreign Language Enjoyment (FLE), einer positiven Emotion, die von Nutzer*innen einer Sprache erlebt wird, wenn ein perfektes Zusammenspiel von Herausforderung und Kompetenz beim Gebrauch der Sprache erreicht wird (Botes et al., 2022; Dewaele & MacIntyre, 2016). Die vorliegende Studie untersucht ISLL-Praktiken und FLE von 653 jungen Erwachsenen im Alter von 18 bis 35 Jahren in Österreich. Dies erfolgt mittels einer validierten Umfrage auf der Grundlage von adaptierten bestehenden Skalen (z. B. Schwarz, 2020; Ghamarian-Krenn, 2023; Resnik & Dewaele, 2020). Neben ISLL-Praktiken im Freizeitbereich erforscht diese Studie auch die Verwendung von Englisch in Arbeits- und Tertiärbildungskontexten.

Fast alle Teilnehmer*innen (95,3%) gaben an (nahezu) täglich Hobbys auf Englisch nachzugehen. Im Bildungskontext berichteten 30,1%, dass sie nahezu (täglich) mindestens eine der vier Sprachfertigkeiten nutzen und 25,3% verwendeten Englisch (fast) täglich im beruflichen Kontext. Im Vergleich zu jungen Arbeitnehmer*innen erzielten Studierende und beschäftigte Studierende höhere Werte auf der ISLL-Skala. Die FLE-Niveaus waren relativ hoch und konsistent (M = 3,75, SD = 0,7) – es gab keine Unterschiede zwischen den drei Untergruppen. Mitglieder der Generation Z hatten

jedoch signifikant höhere Werte für ISLL im Freizeitbereich und FLE als Millennials. Darüber hinaus waren Freizeit-, Bildungs- sowie berufliche ISLL-Praktiken Prädiktoren für FLE. Die Ergebnisse legen nahe, dass die Teilnahme junger Erwachsener an informellen Praktiken des Zweitsprachenerwerbs in allen Freizeit-, Arbeits-, und Tertiärbildungskontexten zum Zustand des „globalized bilingualism“ [globalisiertem Billingualismus] (Smit & Schwarz, 2019, S. 309) in Österreich beiträgt. Außerdem führen häufiger Englischgebrauch gemäß Fredrickson’s (2011) *broaden-and-build* Theorie zu erhöhter FLE, was wiederum das allgemeine psychische Wohlbefinden verstärken könnte.

Appendix B: Online survey

English & You: Die Bedeutung von Englisch in deinem Leben

Diese Umfrage richtet sich an junge Erwachsene zwischen 18 und 35 Jahren, die gerade in Österreich leben oder den Großteil ihres Lebens in Österreich verbracht haben. Leider kannst du nicht an der Studie teilnehmen, wenn Englisch deine Erstsprache ist oder du in einem Studium der Anglistik (z.B. English and American Studies, Englisch Lehramt oder Translationswissenschaft mit Englischfokus) inskribiert bist oder ein solches bereits abgeschlossen hast. Achtung: Wenn du nur einzelne englischsprachige Kurse besucht hast oder die Arbeitssprache deines Studiums Englisch ist, kannst du trotzdem gerne an der Studie teilnehmen.
→Die Umfrage wird anonym durchgeführt und alle Antworten werden streng vertraulich behandelt. Die Daten werden für wissenschaftliche Zwecke verwendet. Das Ausfüllen des Fragebogens dauert circa 10 Minuten.

Englischsprachige Musik

*** Ich höre englischsprachige Musik**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir englischsprachige Musikvideos an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich singe englische Lieder (z.B. Karaoke oder wenn ich einen Ohrwurm habe)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich gehe auf Konzerte mit englischsprachiger Musik**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englische Songtexte (z.B. auf Spotify)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe englische Songtexte**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Filme auf Englisch

*** Ich schaue mir Filme auf Englisch an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir Serien auf Englisch an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir Videos auf YouTube, Vimeo, etc. auf Englisch an (keine Musikvideos)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir Dokumentationen auf Englisch an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir Filme, Serien, Videos, etc. mit englischen Untertiteln an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Englisch online

*** Ich gebe englischsprachige Schlagwörter in Suchmaschinen (z.B. Google) ein, wenn ich im Internet recherchiere**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schaue mir englischsprachige TikToks oder Reels an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich produziere digitale Inhalte auf Englisch, um sie dann online zu posten (z.B. Instapostings, TikToks, Podcasts, etc.)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich spiele Computerspiele (Singleplayer) auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich spiele Computerspiele (Multiplayer) auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Wenn ich gemeinsam mit anderen Spieler*innen Computerspiele spiele, benutze ich Englisch im Chat**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Wenn ich gemeinsam mit anderen Spieler*innen Computerspiele spiele, spreche ich Englisch über TeamSpeak, Mumble, etc.**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Ich spiele Handyspiele auf Englisch (z.B. Clash of Clans)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Ich programmiere auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Wenn ich Datingapps nutze, kommuniziere ich mit meinen matches auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Ich nutze Apps, die auf künstlicher Intelligenz basieren auf Englisch (z.B. ChatGPT)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Lesen auf Englisch

* **Ich lese Bücher auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Ich höre mir englischsprachige Podcasts, Hörbücher und Radiosendungen (z.B. Fm4) an**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

* **Ich lese englische Zeitungsartikel, Magazine oder allgemein englischsprachige Nachrichten (online oder offline)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese Informationstexte auf Englisch (Gebrauchsanweisungen, Rezepte, etc.)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englische Kurzgeschichten**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englische Fanliteratur**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englischsprachige Comics oder Mangas**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englische Blogs oder Foren (z.B. über Gaming)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englischsprachige Emails (außerhalb des Arbeits- und Ausbildungskontexts)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englische Nachrichten, die via SMS, WhatsApp, Signal, Facebook Messenger, Insta DMs, etc. gesendet wurden**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich lese englischsprachige Postings und Kommentare auf sozialen Netzwerken**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Schreiben auf Englisch

*** Ich schreibe Geschichten auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe Gedichte auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe englischsprachige Fanliteratur**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe Blogeinträge oder Forumsbeiträge auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich verfasse Emails auf Englisch (außerhalb des Arbeits- und Ausbildungskontexts)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe englische Nachrichten via SMS, WhatsApp, Signal, Facebook Messenger, Insta DMs, etc.**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich verfasse englischsprachige Postings oder Kommentare für soziale Medien**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe englischsprachige Listen oder Notizen**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schreibe Tagebuch auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Englisch sprechen

*** Ich spreche Englisch mit anderen Menschen (offline)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich (video-)telefoniere auf Englisch (außerhalb des Arbeits- und Ausbildungskontexts)**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich schicke Sprachnachrichten auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich benutze englischsprachige Wörter oder Phrasen, wenn ich auf Deutsch rede**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich denke oder spreche mit mir selber auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich tagträume auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

*** Ich spiele Brettspiele auf Englisch**

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich gehe weiteren Freizeitaktivitäten auf Englisch nach, nämlich:
Sportkurse, Theaterbesuche, Onlineshopping, etc.

Auf der nächsten Seite geht es weiter. :)

WEITER »

Pause

*** Ich schätze meine Englischkenntnisse folgendermaßen ein:**

erste Grundkenntnisse (A1)	vertiefte Grundkenntnisse (A2)	selbstständige Sprachverwendung (B1)	fließendes Sprachlevel (B2)	verhandlungssicheres Sprachniveau (C1)	Kenntnisse auf Erstsprachenniveau (C2)

*** Ich kenne Personen, mit denen ich regelmäßig außerhalb des Ausbildungs- oder Arbeitskontexts Englisch spreche**

JA

NEIN

*** Ich habe bereits länger als einen Monat in einem englischsprachigen Land gelebt (Schüler*innenaustausch, Erasmus, Arbeitsaufenthalt, ...)**

JA

NEIN

Freude an Englisch

*** Ich unterhalte mich gerne mit anderen auf Englisch (online und offline)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich lebe mich gerne auf Englisch kreativ aus**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich höre anderen Leuten gerne zu, wenn sie Englisch reden (online und offline)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich lese gerne auf Englisch (online und offline)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich schreibe gerne auf Englisch (online und offline)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich kann über Fehler, die ich auf Englisch mache, lachen**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich finde es cool, Englisch zu können**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich verbinde Englisch mit einer oder mehreren bestimmten Personen, die ich mag (z.B. eine gute Freundin oder ein Arbeitskollege)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich habe viele spannende Dinge auf Englisch gelernt**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Fehler gehören zum Sprachlernprozess**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Wenn ich auf Englisch etwas nicht verstehe, bleibe ich entspannt**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Kontrollfrage: Klicke hier bitte "Ich stimme überhaupt nicht zu" an, da deine Antworten sonst nicht gewertet werden können**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich habe englischsprachige Insider-Witze mit meiner Familie, Freund*innen, Kolleg*innen, etc.**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Wenn ich etwas auf Englisch schreibe, fühle ich mich souverän und selbstsicher**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Wenn ich auf Englisch rede, fühle ich mich souverän und selbstsicher**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich bin auf meine Englischkenntnisse stolz**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich habe Fortschritte in meinem Englisch gemacht**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Auf Englisch zu kommunizieren macht mir Spaß, wenn die Kommunikation authentisch ist, das heißt zum Beispiel, wenn Englisch die einzige Sprache ist, über die ich mich mit meinem Gegenüber verständigen kann (online und offline)**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

*** Ich mag Englisch unter anderem, weil ich gut darin bin**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

* **Ich bin entspannt, wenn ich in meiner Freizeit auf Englisch kommuniziere**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

* **Ich mag Englisch unter anderem, weil das die Sprache ist, mit der ich mich mit bestimmten Freund*innen, Arbeitskolleg*innen, etc. unterhalte**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

* **Ich mag Englisch unter anderem, weil Englisch im internationalen Kontext eine wichtige Bedeutung hat**

Ich stimme überhaupt nicht zu	Ich stimme eher nicht zu	neutral	Ich stimme zu	Ich stimme völlig zu

Juhuu, bald hast du es geschafft! Jetzt nur noch ein paar Fragen zu deiner Person und deinem Beruf/Studium. :)

ZURÜCK WEITER »

Pause

* **Ich identifiziere mich als ....**

WEIBLICH

MÄNNLICH

DIVERS

* **Mein Alter**

18 35

* **Mein höchster Schulabschluss ist ...**

PFLICHTSCHULABSCHLUSS

LEHRABSCHLUSS

BMS

REIFEPRÜFUNG (MATURA, ABITUR, BERUFSREIFEPRÜFUNG)

STUDIENBERECHTIGUNGSPRÜFUNG

BACHLORABSCHLUSS

MASTERABSCHLUSS ODER ABSCHLUSS EINES DIPLOMSTUDIUMS

PHD

ANDERES:

* **Zu welcher Gruppe gehörst du?**

→Solltest du dich gerade in einer Übergangsphase oder in Elternkarenz befinden, ordne dich bitte der Gruppe zu, die dir davor entsprochen hat

→Praedoc-Stelle/Dissertationsstelle: Bitte in die dritte Kategorie (studieren und arbeiten gleichzeitig) eintragen

ICH STUDIERE AN EINER UNIVERSITÄT, PH ODER FH

ICH ARBEITE MINDESTENS 7 WOCHENSTUNDEN (UND STUDIERE NICHT)

ICH STUDIERE UND ARBEITE GLEICHZEITIG (MEHR ALS 7 WOCHENSICH STUDIERE AN EINER UNIVERSITÄT, PH ODER FH)

ICH BESUCHE EINE SCHULE FÜR BERUFSTÄTIGE (ABENDSCHULE), MACHE EINEN AUFBAULEHRGANG, WERKMEISTER-, BAUHANDWERKER- UND MEISTERSCHULE ODER EIN KOLLEG

Es folgen ein paar Fragen zu dir und deiner Tätigkeit. :)

ZURÜCK WEITER »

Pause

Ich studiere …

-Bitte klicke auf die Überkategorie, in die auf dein Studium am besten zutrifft.

-Solltest du mehrere Studien gleichzeitig verfolgen, klicke bitte das an, auf dem dein Fokus aktuell liegt.

BILDUNG, LEHRAMT & PÄDAGOGIK

ENGINEERING, TECHNIK & IT

GESUNDHEIT, PSYCHOLOGIE & SOZIALES

KUNST & MEDIEN; MEDIEN & DESIGN;

NATURWISSENSCHAFTEN

POLITIK & RECHT

RELIGION & PHILOSOPHIE

SPRACHEN, KULTUR & GESCHICHTE

TOURISMUS, EVENTS & SPORT

WIRTSCHAFT & MANAGEMENT

Ich spreche Englisch in meinem Studium

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich schreibe auf Englisch in meinem Studium

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich lese in meinem Studium englischsprachige Inhalte

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich höre in meinem Studium englischsprachige Inhalte

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich benutze Englisch für folgende ausbildungsbezogene Aktivitäten (z.B. englischsprachige Literaturrecherche):

Als Dankeschön für die Teilnahme werden 3x15€ Wunschgutscheine verlost. Wenn du teilnehmen willst, kannst du hier deine Emailadresse angeben.

ZURÜCK WEITER »

Pause

*** Ich arbeite in der folgenden Branche:**
Bitte klicke auf die Branche, in die dein Job am besten reinpasst.

BAU, BAUNEBENGEWERBE, HOLZ, GEBÄUDETECHNIK

BERGBAU, ROHSTOFFE, GLAS, KERAMIK, STEIN

BÜRO, MARKETING, FINANZ, RECHT, SICHERHEIT

CHEMIE, BIOTECHNOLOGIE, LEBENSMITTEL, KUNSTSTOFFE

ELEKTROTECHNIK, ELEKTRONIK, TELEKOMMUNIKATION, IT

HANDEL, LOGISTIK, VERKEHR

LANDWIRTSCHAFT, GARTENBAU, FORSTWIRTSCHAFT

MASCHINENBAU, KFZ, METALL

MEDIEN, GRAFIK, DESIGN, DRUCK, KUNST, KUNSTHANDWERK

REINIGUNG, HAUSBETREUUNG, ANLERN- UND HILFSBERUFE

SOZIALES, GESUNDHEIT, SCHÖNHEITSPFLEGE

TEXTIL UND BEKLEIDUNG, MODE, LEDER

TOURISMUS, GASTGEWERBE, FREIZEIT

UMWELT

WISSENSCHAFT, BILDUNG, FORSCHUNG UND ENTWICKLUNG

Ich spreche in meiner Arbeit Englisch

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich schreibe in meiner Arbeit auf Englisch

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich lese in meiner Arbeit englischsprachige Inhalte

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

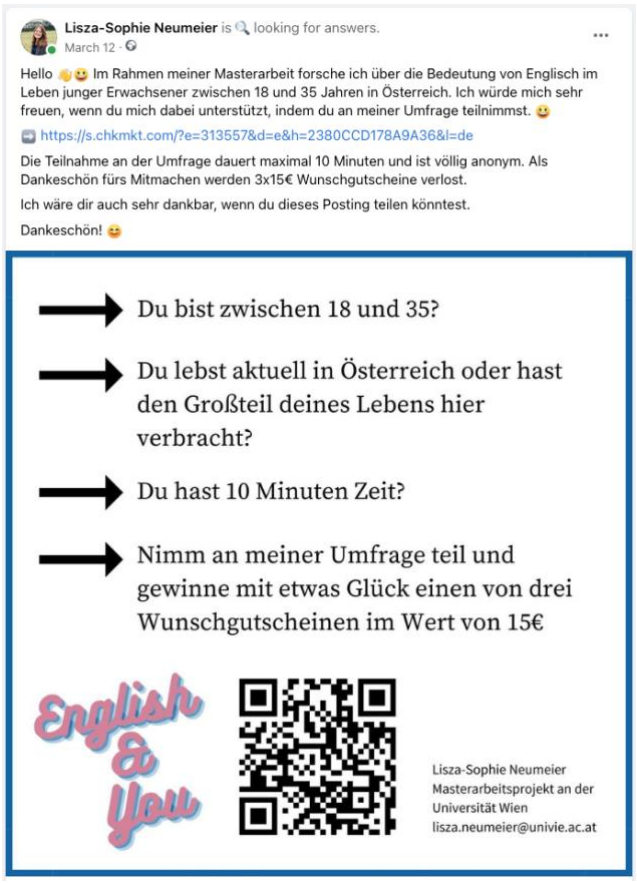
Ich höre in meiner Arbeit englischsprachige Inhalte

(fast) nie	ein paar Mal pro Jahr	ein paar Mal pro Monat	ein paar Mal pro Woche	(fast) täglich

Ich benutze Englisch für folgende arbeitsbezogenen Aktivitäten:

z.B. Kund*innengespräche auf Englisch

Appendix C: Distribution of the questionnaire via social media (example postings)



Appendix D: Results of the qualitative content analysis

Table D.1: Further recreational ISLL activities

Domain	ISLL activities	Count
Entertainment	-Theater (20) -Cinema (18) -Musical (6) -Standup comedy (3) -Pub quiz (2) -Entertainment (2) -Watching interviews (1) -Cooking shows (1) -Opera (1) -Performances (1) -Quizshow (1)	56
Online	-(Online) shopping (37) -Live streaming platforms (2) -Tutorials (2) -Apps (1) -Language learning apps (1)	43
Sports	-Sports courses (17) -Yoga (4) -American Football (2) -Gym (2) -Roller derby (1) -Volleyball (1) -Soccer (1) -Tennis (1) -Ballet (1)	30
Communicative activities	-Travelling (6) -Choir (4) -Role-play games (3) -Multilingual friend group (2) -Drinking tea (1) -Acting (1) -Activism (1)	18
		Sum: 163

Table D.2: Professional ISLL activities

Domain	ISLL activities	Count
Communication	-Communication with clients, patients and suppliers (76) -Communication with colleagues and business partners (54) -Emails (23) -Phone/video calls (11) -Parent-teacher meetings (9)	193

	-Meetings (7) -Communication with students (8) -Notes (2) -Communication with refugees (1) -Communication with employer (1) -Job applications (1)	
Research and academic matters	-Research (12) -Literature research (11) -Writing reports (10) -Presentations (7) -Writing publications (3) -Reading reports (3) -Conducting interviews (2) -Workshops (2) -Conferences (2) -Projects (1)	53
Education and training	-Teaching English (11) -Teaching in English (9) -Professional development (6) -Didactic materials (5) -Tutoring (3) -Correcting English texts (2) -Assessment (1)	37
Marketing and promotion	-Social media (4) -Content creation (3) -Translations (2) -Marketing (2)	11
IT	-Software (4) -Programming (2) -Documents (2)	8
Working with clients	-Wine tastings (1) -Border control (1) -Guided tours (1) -Physiotherapy (1) -Providing directions (1)	5
		Sum: 307

Table D.3: Educational ISLL activities

Domain	**ISLL activities**	**Count**
Academic writing and reading	-Literature (157) -Academic writing and reading (28) -Master's thesis (8) -Bachelor's thesis (2) -Researching technical terms (1)	196
Courses/lectures/seminars	-University courses (26) -Communication with colleagues & lecturers (16)	60

	-Presentations (8) -Exercises (6) -Exams (2) -Protocols (1) -Note-taking (1)	
Language courses and resources	-Video tutorials (8) -English classes (5) -Business English (2) -English-Italian dictionary	16
Program-related	-EMI Program (11) -Singing (1) -Planning	13
		Sum: 285

Appendix F: Questionnaire items, their sources and subconstructs

Source	Source	Subconstruct
Englisch in deiner Freizeit		
Englischsprachige Musik		
Ich höre englischsprachige Musik	Ghamarian-Krenn (2023)	ISLL Multidimensional
Ich schaue mir englischsprachige Musikvideos an	Ghamarian-Krenn (2023)	ISLL Viewing
Ich singe englische Lieder (z.B. Karaoke oder wenn ich einen Ohrwurm habe)	Ghamarian-Krenn (2023)	ISLL Multidimensional
Ich gehe auf Konzerte mit englischsprachiger Musik	Ghamarian-Krenn (2023)	ISLL Viewing
Ich lese englische Songtexte (z.B. auf Spotify)	Ghamarian-Krenn (2023)	ISLL Reading
Ich schreibe englische Songtexte	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Filme auf Englisch		
Ich schaue mir Filme auf Englisch an	Ghamarian-Krenn (2023)	ISLL Viewing
Ich schaue mir Serien auf Englisch an	Ghamarian-Krenn (2023)	ISLL Viewing
Ich schaue mir YouTube Videos (keine Musikvideos) an	Ghamarian-Krenn (2023)	ISLL Viewing
Ich schaue mir Dokumentationen auf Englisch an	Ghamarian-Krenn (2023)	ISLL Viewing
Ich schaue mir englischsprachige Filme, Serien, Videos, etc. mit englischen Untertiteln an	Neumeier	ISLL Reading
Englisch online		
Ich gebe englischsprachige Schlagwörter in Suchmaschinen (z.B. Google) ein, wenn ich im Internet recherchiere	Ghamarian-Krenn (2023)	
Ich schaue mir englischsprachige TikToks oder Reels an	Neumeier	ISLL Digital

Ich produziere digitale Inhalte auf English, um sie dann online zu posten (z.B. TikToks, Insta postings, Blog postings, podcasts, etc.)	Sundqvist & Uztosun (under review)	ISLL Digital
Ich spiele Computerspiele (Singleplayer) auf Englisch	Ghamarian-Krenn (2023)	ISLL Digital
Ich spiele Computerspiele (Multiplayer) auf Englisch	Ghamarian-Krenn (2023)	ISLL Digital
Wenn ich gemeinsam mit anderen Spieler*innen Computerspiele spiele, spreche ich Englisch über TeamSpeak, Mumble, etc.	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich spiele Handyspiele auf Englisch (z.B. Clash of Clans)	Neumeier	ISLL Digital
Ich programmiere auf Englisch	Neumeier	ISLL Digital
Wenn ich Datingapps nutze, kommuniziere ich mit meinen matches auf Englisch	Neumeier	
Ich nutze Apps, die auf künstlicher Intelligenz basieren auf Englisch (z.B. ChatGPT)	Neumeier	ISLL Digital
Lesen auf Englisch		
Ich lese Bücher auf Englisch	Ghamarian-Krenn (2023)	ISLL Reading
Ich höre mir englischsprachige Podcasts, Hörbücher und Radiosendungen (z.B. FM4) an	Ghamarian-Krenn (2023)	ISLL Multidimensional
Ich lese englische Zeitungsartikel, Magazine oder allgemein englischssprachige Nachrichten (online oder offline)	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese Informationstexte auf Englisch (Gebrauchsanweisungen, Rezepte, etc.)	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese englische Kurzgeschichten	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese englische Fanliteratur	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese englischsprachige Comics oder Mangas	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese englischsprachige Blogs oder Foren (z.B. über Gaming)	Ghamarian-Krenn (2023)	ISLL Reading
Ich lese englischsprachige Emails	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich lese englische Nachrichten, die via SMS, WhatsApp, Signal, Facebook Messenger, Ista DMs, etc. gesendet wurden	Ghamarian-Krenn (2023)	ISLL Online interaction

Ich lese englischsprachige Postings und Kommentare auf sozialen Netzwerken	Ghamarian-Krenn (2023)	ISLL Online interaction
Schreiben auf Englisch	Ghamarian-Krenn (2023)	
Ich schreibe Geschichten auf Englisch	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Ich schreibe Gedichte auf Englisch	Neumeier	ISLL Written and spoken production
Ich schreibe englischsprachige Fanliteratur	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Ich schreibe Blogeinträge oder Forumsbeiträge auf Englisch	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich verfasse Emails auf Englisch (außerhalb des Arbeits- und Ausbildungskontexts)	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich schreibe englische Nachrichten via SMS, WhatsApp, Signal, Facebook Messenger, Insta DMs, etc.	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich verfasse englischsprachige Postings oder Kommentare für soziale Medien	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich schreibe englischsprachige Listen oder Notizen	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Ich schreibe Tagebuch auf Englisch	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Englisch sprechen		
Ich spreche Englisch mit anderen Menschen (offline)	Ghamarian-Krenn (2023)	ISLL Written and spoken production
Ich (video-)telefoniere auf Englisch (außerhalb des Arbeits- und Ausbildungskontexts)	Ghamarian-Krenn (2023)	ISLL Online interaction
Ich schicke Sprachnachrichten auf Englisch	Neumeier	ISLL Online interaction
Ich benutze englischsprachige Wörter oder Phrasen, wenn ich auf Deutsch rede	Neumeier	ISLL Written and spoken production
Ich denke oder spreche mit mir selber auf Englisch	Ghamarian-Krenn (2023)	ISLL Multidimensional

Ich tagräume auf Englisch	Sundqvist & Uztosun (under review)	ISLL Multidimensional
Ich spiele Brettspiele auf Englisch	Ghamarian-Krenn (2023)	ISLL Multidimensional
Ich gehe weiteren Freizeitaktivitäten auf Englisch nach, nämlich:		
Freude an Englisch (FLE)		
Ich unterhalte mich gerne mit anderen auf Englisch (online und offline)	Neumeier	FLE Social
Ich lebe mich gerne auf Englisch kreativ aus	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Ich höre anderen Leuten gerne zu, wenn sie Englisch reden (online und offline)	Neumeier	FLE Private
Ich lese gerne auf Englisch (online und offline)	Neumeier	FLE Private
Ich schreibe gerne auf Englisch (online und offline)	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Ich kann über Fehler, die ich auf Englisch mache, lachen	(Dewaele & MacIntyre, 2014, p. 273)	FLE Social
Ich finde es cool, Englisch zu können	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Ich verbinde Englisch mit einer oder mehreren bestimmten Personen, die ich mag (z.B. eine gute Freundin oder ein Arbeitskollege)	based on Resnik & Schallmoser (2019, p. 550)	FLE Social
Ich habe viele spannende Dinge auf Englisch gelernt	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Fehler gehören zum Sprachlernprozess	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Wenn ich auf Englisch etwas nicht verstehe, bleibe ich entspannt	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private

Ich habe englischsprachige Insider-Witze mit meiner Familie, Freund*innen, Kolleg*innen, etc.	(Dewaele & MacIntyre, 2014, p. 273)	FLE Social
Wenn ich auf Englisch schreibe, fühle ich mich souverän und selbstsicher	Neumeier	FLE Social
Wenn ich auf Englisch rede, fühle ich mich souverän und selbstsicher	Neumeier	FLE Social
Ich bin auf meine Englischkenntnisse stolz	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Ich habe Fortschritte in meinem Englisch gemacht	(Dewaele & MacIntyre, 2014, p. 273)	FLE Private
Auf Englisch zu kommunizieren macht mir mehr Spaß, wenn die Kommunikation authentisch ist, das heißt zum Beispiel, wenn Englisch die einzige Sprache ist, über die ich mich mit meinem Gegenüber verständigen kann (online und offline)	Neumeier	FLE Social
Ich mag Englisch unter anderem, weil ich gut darin bin.	based on Resnik & Schallmoser (2019, p. 552)	FLE Private
Ich bin entspannt, wenn ich in meiner Freizeit auf Englisch kommuniziere	based on Dewaele & MacIntyre (2016, p.222)	FLE Social
Ich mag Englisch unter anderem, weil das die Sprache ist, mit der ich mich mit bestimmten Freund*innen, Arbeitskolleg*innen, etc. unterhalte	Neumeier	FLE Social
Ich mag Englisch unter anderem, weil Englisch im internationalen Kontext eine wichtige Bedeutung hat	Neumeier	FLE Social