

# Multilingual Upbringing:

Sociolinguistic factors affecting English  
language acquisition

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### Abstract

English has become more of an inevitability than a possibility within our globalised world. Many of today's youth experience a multilingual upbringing as they are exposed to English in addition to other languages through their potentially multinational and multilingual family and other factors. With so many potential languages present during a speaker's youth, this degree project seeks to find relations if the presence of 'three-or-more' or 'two-or-fewer' languages during a learner's early upbringing (ages 0-12) may affect their English language proficiency positively and/or negatively. This research paper also attempts to find any other contributing factors that may affect English language acquisition (ELA) positively and/or negatively. These questions are answered by acquiring primary data through a three-step process and connecting the results with past studies. The three-step process is conducted on 51 upper secondary school pupils and consists of a survey about multilingual upbringing and ELA, a data collection and analysis phase focusing on acquiring their English 5 national exam grades and analysing survey results, which is then concluded with interviewing three participants that were nominated based on their survey results. The results within this study reveal that possessing 'three-or-more' acquisitioned languages during early upbringing is higher English proficiency compared to the group 'two-or-fewer'. No positive factors affecting ELA could be identified. And the negative factors affecting ELA were determined to be 'language motivation (upbringing)', 'language confidence', 'English exposure & usage' and the emerging factor 'English ownership attitudes. The emergence of the affecting factor 'linguistic identity' was discovered; however, insufficient data was gathered to determine it as a positive and/or negative factor. To conclude this study, the results can be viewed as indecisive due to this study's potential limitations and flaws.

### Keywords

English language acquisition (ELA), learner upbringing, extramural English, learning motivation, English exposure and usage.

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# 1. Introduction

Language is without a doubt a fundamental aspect of our daily lives that revolve around communication and interaction within this ever-so-connected world. Many fail to fully grasp the complexity of language as there are countless of fluctuating and adjusting factors that affect how, why, and when language is learnt and used. Therefore, the topics of language trajectories, language development and their acquisition remain relevant fields of study worth further research. Out of the factors that have been explored, it is commonly known that language development and acquisition work best during a learner's upbringing. An example elaborated by Giroud, Baum, Gilbert, Phillips, and Gracco (2020) is that exposure to a single language during an early stage in life can provide "robust perceptual abilities as well as encoding of the language-specific phonetic contrasts until at least young adulthood" (p. 7). If we further acknowledge that the world is more globalised than it has been for the past centuries, it should come as no surprise that most individuals have been exposed to foreign and/or secondary languages. The most prevalent and common of these languages within 'western' countries is the English language which has over a long period dominated and established itself as a lingua franca within business, media, and many other sectors/fields. With this domination in mind, exposure to the English language has become an inevitable part of a learner's upbringing within this age of digitalisation as media platforms catered towards youth who use English as a standardised language. As Sundqvist & Sylvén (2016) suggest, extramural English activities in the wake of globalized digitalisation could be in the form of watching TV series, video games, music, and much more.

With the perception of early childhood monolingual development acknowledged as exemplified by Giroud et al. (2020) and that the English language has developed itself as a lingua franca within this globalised world, a question arises concerning bilingual and multilingual language acquisition. If we are to expect that many users of English are not native speakers, as conveyed through Kachru (1985) and his text about the three circles of world Englishes, then it is highly likely that many grow to be bilingual or multilingual, so in turn – how does exposure to multiple languages during a learner's upbringing affect their English language acquisition and development? This in essence is a fascinating topic to delve into, especially with a focus on English language acquisition as it is most commonly available and spoken amongst many today. This is the topic this degree project will explore with the following research questions in mind:

- In what way can the factor 'number of languages' present during a learner's early upbringing be connected to levels of English proficiency?
- Are there any other factors that may positively and/or negatively contribute towards English language acquisition?

This paper will seek to answer these questions with a three-step process to acquire its primary data. Firstly, a survey about a sample of pupils' language trajectories and more will be conducted on three groups of students from an upper secondary school in Sweden. Secondly, acquisition of the pupils' national exam grades will be collected from the school's database with the permission of the schools' personnel and an analysis will be

performed to connect the results of the survey with the English language national exam grades. Thirdly, a further in-depth interview will be conducted on specific pupils that show any significantly noticeable links between their survey answers and their national exam grades. For more information about the process and procedures, see the methodology section of this paper. With all of this acknowledged, let us proceed to the '*background*' section of this thesis to observe and analyse the current progress within the field of multilingualism, language acquisition and upbringing/childhood.

## **2. Background**

### **2.1. Definitions and Clarifications**

For clarification purposes, it is important to define that first language (L1) learning within this thesis involves the language/s that are frequently present at home and are normally obtained through a learner's close family members (parents, brothers/sisters and potentially, siblings). This usually entails a single language, but in the case of multicultural parents or families with different primary languages, the case of L1 may represent L1s (plural/multiple) languages. Second language (L2) represents the first foreign language outside of the home and family context. Similarly, third language (L3) represents the second foreign language, fourth language (L4) for the third foreign language and so forth. When discussing English language acquisition (ELA), we will not view it with the focus and context of it being a foreign language, but instead from a more general perspective. However, the definition of English as their first foreign language (EFL), puts into focus acknowledging it as a foreign language (similar to L2, L3, etc), unless clarified otherwise. Additionally, when discussing bilingualism, it represents the possession of two languages, whilst multilingualism involves three or more languages.

### **2.2. Previous Research**

Language acquisition has been a highly relevant study as the world continues to globalise with English set as the lingua franca within many sectors and fields. Within the general field of language acquisition, studies show that the developmental progress of languages widely vary for each child, as expressed by Brown (2020) and her study into first language acquisition among children. She elaborates on how there are both biological and language-environmental factors that affect a child's language development. Even though they are not equally manifested, biology is most evident in the first year of an infant, which she describes as the 'nine-month revolution' that she claims to be comparable in widely different cultural and social environments. She further addresses how a child's ease of language learning during infancy and early childhood is dependent on linguistic patterns and their frequency (Brown, 2020). In essence, much of what is learnt is dependent on a child identifying patterns by constantly frequently being exposed to them. A similar line of argument has been expressed by Giroud et al. (2020) and their study about second language learning with focus on observing and analysing how the brain (biologically) is connected to early childhood language exposure and learning. These two studies show that parallels can be drawn between L1 and L2 learning/acquisition.

Focusing more specifically on ELA, much of the same has been identified to affect language development. And arguably, one of the most important factors is the amount of English exposure and usage when discussing its acquisition. Many seem to believe that the most crucial input of exposure that affects a learner's language acquisition and development emerges from school and/or other educational institutions, however, as expressed by Sánchez (2020), that is not exactly the case. She elaborates how it is through the engagement of many extramural English activities that a learner advances in their English language proficiency and development (Sánchez, 2020). The notion of extramural English being a positive factor of development can further be supported by Azzolini, Campregher & Madia (2022) and their findings that informal English exposure through media and other cultural products can strongly and positively advance a learner's English language competence (ELC). Similarly, a study presented by Sundqvist & Sylvén (2016) revealed that cumulative exposure to high-quality English input positively affected English oral proficiency and that starting age plays a (less) significant role than input through exposure. In addition to quality, the importance of quantity is a factor of equal importance for input as explained by Paradowski & Bator (2016). The authors continue by stating that if a child is taught to be multilingual (by for example learning English), the surrounding environment should provide them with opportunities of using the languages (Paradowski & Bator, 2016). In essence, a child should be exposed to a high quality and quantity of English and then find an output of usage (whether extramural or not) to be able to acquire and develop it. Ultimately, it all boils down to usage as claimed by Sundqvist & Sylvén (2016):

Further, in a review study by Moyer (2014), the author concludes that length of residence (in the target language country), formal instruction, and even early onset (i.e., early frequent exposure to the L2)—factors traditionally viewed as critical for successful L2 development—did not matter that much for development. What mattered more was the learners' consistent use of the L2 in ways that had personal significance for them. (p.98-99)

Arguably, many would agree on the statement that consistent usage with personal significance to the learner is an important learning factor, however, some may criticize this approach for disregarding the importance of the more 'traditionally viewed' critical factors of L2 learning. Azzolini et al. (2022) express that there are many studies within these fields and that these findings show mixed results, which makes it difficult to draw clear conclusions. They elaborate by comparing data between multiple authors and studies. Some of the presented results found there to be no association between starting age and language proficiency regarding oral performance, whilst on the contrary, others claimed that earlier onset of language learning is one of the most important formal educational factors that affect language development (Azzolini et al., 2022). There is also the discussion of whether being bilingual (since birth) over monolingual can affect the acquisition of an L2 or L3, some studies suggest that to be the case, whilst other research shows the opposite (Sánchez, 2020). One such case is the study by Byland, Hyltenstam & Abrahamsson (2020) that found the age of acquisition on being central towards L2 language acquisition rather than bilingualism. Similarly, Conger (2010) and her findings non-conclusively indicate that formal bilingual education (in school) either interferes or has no effect at all within ELA. Essentially, the results regarding age and bilingualism are mixed as expressed by Sánchez (2020), which further supports the mixed results claim

by Azzolini et al. (2022). In other words, researchers have not reached a collective consensus on what enhances language acquisition (and ELA) for all learners, however, many would agree that language trajectories and their development are individual for each learner. The complexity of individuality is further backed by Pfenninger (2020) who elaborates how findings suggest that “different learner populations (monolinguals, simultaneous bilinguals, sequential bilinguals) are differentially affected by age of EFL onset effects, partly due to individual differences (e.g. (bi)literacy skills), partly due to contextual effects that mediate successful L3 outcomes” (p.167). She also clarifies the importance of acknowledging a sociolinguistic context within language learning and how factors such as the quality of home environment English positively impact learners regardless of age. These home environments or family circumstances are highly valued as they provide a child with the opportunity to use and switch between languages, which in turn enhances executive functions within language development (Pfenninger, 2020).

Sociolinguistic, sociocultural, and other forms of social contexts in relation to language are also worthy of recognition. This is best summarised by Johnson & Zentella (2017) who describe the concern of a language gap among learners within disadvantaged (e.g. low-income) communities and families. These cases are individual and do not apply to all, however, factors such as poverty, education, culture, language, and linguistic minorities may be present as the gap, which then impacts general language learning and acquisition for these individual learners (Johnson & Zentella, 2017). Furthermore, the addressed argument of individuality is further explained by Azzolini et al. (2020) and that:

Young people’s ELC development responds to a number of individual characteristics, school factors and out-of-school activities, which contribute to students’ English proficiency over and beyond language distance and even net of students’ competence in their own country’s language. Individual-level variation in ELC is prominent. (p.158)

Language attitudes, learning motivation and language ownership are topics worth discussing. Norton (1997) describes through her text that language, identity and English ownership intertwine with each other and that the focus on individual accounts has been overlooked. She advocates this belief by stating:

“I take the position, following West (1992), that identity relates to desire—the desire for recognition, the desire for affiliation, and the desire for security and safety. Such desires, West asserts, cannot be separated from the distribution of material resources in society. People who have access to a wide range of resources in a society will have access to power and privilege, which will in turn influence how they understand their relationship to the world and their possibilities for the future.” (Norton, 1997, p.410)

Within the statement, it is precisely these factors that are relevant for English language ownership. However, affiliation, recognition and privileges are not the same for everyone, which is something expressed by Darvin (2017). He explains how social class inequalities are noticeably prevalent within this globalised world where English as a lingua franca (ELF) dominates. Class differences and inequalities affect youth by distilling English language inferiority among non-native English speakers. He further elaborates on the dividing notion among English speakers due to issues surrounding linguistic nationalism,



imperialism, and dominance. The by-product of these attitudes and behaviours in turn affects a learner's linguistic confidence/motivation, insecurities (about English ownership and variant), and sense of agency, which Darvin (2017) discovers through his research on two Filipino adolescents in Vancouver with differentiating social class statuses. These attitudes and behaviours regarding English linguistic hierarchy could be present due to the pushed ideology of inner, outer, and expanding circles of English, which was drafted by Kachru (1985). The fundamental theory gives high prestige to English native speakers within the inner circle, which is the norm of English that all other learners should try to strive towards. Individuals within the outer circle with EFL and learners within the expanding circle (that have no historical ties to English) are therefore frowned upon and considered to be inferior, which is arguably what Kachru (1985) describes. The inferiority attitude in term has been connected to learning motivation, which itself can affect learning outcomes as conveyed by Lin, Chen & Liu (2017). The authors point out in their study how higher learning motivation corresponds to better learning outcomes (Lin et al., 2017).

In summary of the previous studies, there are many theories, concepts and studies that connect themselves to language learning, development, and acquisition. However, it is difficult to conclude what works for everyone, as language trajectories are personal for each learner. Many authors/researchers present through multiple studies that extramural English through informal exposure and usage is fundamentally the most important aspect of ELA. Whilst others advocate for English usage in a more home/family context, whether informally or formally. In terms of language attitudes and ownership, there is a general bias favouring English speakers within the inner circle of English. These inequalities promote the idea of inferiority for non-native English speakers and can cause uncertainty and inequalities, which in term can affect learning outcomes among learners.

### **3. Methodology**

The acquisition of primary data for this degree project is divided into three sections and steps to reach concluding research results that can be discussed and further analysed. As mentioned in the introduction section, the first step consists of a survey, the second step focuses on data collection and its analysis, and the third step concludes with a follow-up interview directed toward participants who filled in the survey. Following and performing these steps would lead to results that can be used to answer the research questions (RQs) about whether a higher or lower quantity (number) of languages present during an individual's upbringing may show connecting factors towards the positive and/or negative. The specific determiners created and used within the RQs, '*three-or-more*' and '*two-or-fewer*' were selected through a single piloting poll with 40 random participants (see appendix A) from my volunteer work that came from different backgrounds, ages, cultures and more. By piloting the poll, participants were able to discover and directly convey any potential wording problems related to the poll, which is a factor of concern usually revealed with 12-25 piloting participants as elaborated by Presser, Couper, Lessler, Martin, Martin, Rothgeb & Singer (2004) and their chapter on methods for testing and evaluating survey questions. Additionally, the piloting provided some expectations

on how the results could look like. The results indicated that a fairly equal two-group split (50/50) could be attained by categorising the participants into groups of '*three-or-more*' and '*two-or-fewer*', rather than groups of '*four-or-more*' and '*three-or-fewer*' that could potentially lead to an unequal split (80/20).

It is worth acknowledging that the three-part methodology procedure to acquire primary data to answer the RQs is of a satisfactory and optimal design level from a personal standpoint. However, it is far from being perfect as there are limiting factors that have affected the overall design of the primary data acquisition. Two of the most prevalent design considerations that were present and had to be adjusted were associated with cost and timeliness factors. These two factors, along with many others, are discussed by Leeuw & Collins (1997) and their chapter about data collection methods and survey quality. The authors explain that while many would choose not to incorporate the discussion of cost considerations into their methodology design, it is still a formal assessment used to create and identify the 'best' methods available. Furthermore, one should not confuse that the discussion and implementation of cost design features are 'cost efficient' rather than 'low cost' choices, since many seem to portray it as a way to 'cut corners' as explained by Leeuw & Collins (1997). The same mindset could be applied towards the timeliness factor and that the methodology was adjusted due to some perceiving it as an 'easier' or 'lazy' alternative. However, the original wish to perform a larger quantity of interviews that would have been both lengthier and more in-depth would not have been realistically performable due to both cost and timeliness factors. The costs to cover travel expenses and the timeliness of this degree project needing to be accomplished within a limited period of time were limitations within this present study. With these factors acknowledged, one must adjust and do the 'best' they can with what they have, resulting in the current methodology to be performed.

### **3.1 The Participants**

For the RQs to be answered, the participants were chosen to be upper secondary school pupils (gymnasie-elever) attending the same school within the inner-city of Stockholm and are at the estimated age of 16-17. Three economy-programme classes (altogether 83 pupils) studying English 6 (6<sup>th</sup> school year of English learning) were requested to be part of this survey and accepted. These groups/classes of pupils were specifically chosen from the same school to provide as homogenous results as possible given the time and accessibility limitations. Connections and relations towards the school and two out of three classes were already established before this degree project, specifically during the third practicum semester. This will make the incorporation of the survey and the interviews both easier and smoother to operate. We shall call these two groups 'Class A' (28 pupils) and 'Class B' (29 pupils), while the third group with lacking relations shall be called 'Class C' (26 pupils) during the presentation and discussion of data results. Furthermore, with these well-built relations in place, the possibility to gain access and collect the pupils' data became an option as this would typically not work with a school that does not know the researcher.

### **3.2 Methods & Procedures**

The first part of the process is the survey that will act as a determiner in cooperation with the next 'Data Collection & Analysis' phase. The purpose of using these two processes is for the selection of participants that will be required for the third 'Follow-up Interviews' procedure.

The survey was presented and filled out by the three classes during their scheduled lesson and did not take longer than 20 minutes to complete. Additionally, within that time, an introduction and explanation of the survey were done by me for the pupils in the form of a single PowerPoint slide and speech to clarify the purpose. Transparency was an important factor to briefly discuss as to what, how and when their data would be used. However, they were not briefed in detail about the degree project's purpose/goals and were both told and shown (using the PowerPoint) that it simply ventured into the topic of multilingualism, their upbringing and the languages they learnt and were exposed to. The PowerPoint mainly was used to transparently describe the three-step process on how their data would be used as previously mentioned. The importance of privacy and anonymity was explained to the pupils by clearly conveying that all given data was to be made anonymous so as not to reveal anyone's identity. All identity-related survey questions such as their full name and class code/name were required to connect their survey data with their set English 5 national exam grade. The usage of their national 5 exam grade was also revealed upon agreeing to the survey's terms and conditions which could be found on the very first page of the Google Form survey (see appendix B). The pupils had the option during the presentation of the survey to decline the offer and cancel their participation whenever they wanted during the 'filling in' process. Any submitted forms could be requested to be deleted by contacting me via email, which could be found at the introduction of the survey. Alternatively, they could contact their current English teacher who would then contact me to get their data deleted. Upon clarifying transparency, privacy and anonymity, the option to decline and mid-way cancel their participation, and briefly explaining the research process, the participants were then informed that it would be greatly appreciated if they were to choose, accept and perform the nominated in-depth interview. With everything explained, the pupils would be requested to fill in the survey that could be obtained from their school portal. Alternatively, the pupils could scan a QR-code from the introductory PowerPoint slide using their phones. Upon completion, the pupils were instructed by their teacher to continue with their ongoing English 6 assignments/projects until most are done with the survey.

The second part of the process was focused on observing, clarifying/revising, and analysing the survey data. In addition, the collection of the participating pupils' national 5 exam grades were gathered as they consented to it during the survey's terms and conditions. The first step was to store all the original unedited data entries from the survey in the event of unforeseen circumstances transpiring. This was followed up with separating and excluding all unserious responses, requests by pupils to be excluded from the study (none appeared), and any responses that were deemed to be incomplete. The data was also refined for the sake of categorisation and to make it more comprehensible to analyse. Any potential misunderstandings were edited upon their identification by comparing their individual survey answers. An example of misunderstanding was for them to exclude the subject 'Moderna språk' as a language from their upbringing (unless

they were exposed to it outside of school), as it is taught in schools to many at an estimated age of 11-12. However, some of the participants misunderstood the question and accidentally included it, prompting a revision of their data by comparing if they learnt a language later throughout their life (usually including 'Moderna språk'). For clarification's sake, 'Moderna språk' is a foreign language taught at school (excluding English) and the most common languages are Spanish, French, and German. This should not be confused with 'Modersmål', which is a school subject about the pupil's mother-tongue (excluding Swedish). Upon clarifying and revising any necessary data responses, the next step was to analyse the edited data and determine which participants shall be requested for the third process involving a follow-up interview. The nomination phase was concluded by observing their answers and putting into focus the number of languages present during their upbringing (ages 0-12), their language trajectories, language exposure, language usage and personal beliefs regarding language development based on their experiences. Higher emphasis was put on the English language; however, other languages would also be considered as they may be relevant towards English language acquisition and development in relation to their English proficiency. This led to the nomination of three participants out of a handful of other pupils. These three interviewees were given the pseudonyms Matilda (participant nr. 20 – Class A), Viktor (participant nr. 36 – Class B) and Dennis (participant nr. 43 – Class B) who accepted to be interviewed.

The third part of the process consisted of follow-up interviews that were performed at the pupil's school during lecture time as they will be working on an independent project. They were all interviewed individually on two different dates due to them being from different classes (A and B). The interviews took place in a scheduled room within the school library to provide privacy from other pupils who may interfere with the interviews. The length of each interview varied, but on average they were roughly 18 minutes long. The interviews were performed solely in English. The participants were provided with two identical copies of a consent form that clarifies how the data would be collected and used. The data would be collected using a mobile application called Otter that voice records and automatically transcribes the voice recording to an acceptable degree of accuracy. A few edits were done for the clarification of certain quotes due to the application's inaccuracy. Additionally, questions regarding privacy were present to assure them that they would be anonymous by providing them with pseudonyms. The participants got to keep one of the consent form copies, whilst the other was safely stored away for safekeeping. The interview questions were semi-structured and made the interviews possible to diverge into other questions and topics if deemed intriguing.

### 3.2.1 The Survey Questions

The main focus of the survey was to acquire data and information related to the students' perceived English language proficiency, their language trajectories, language exposure and usage, learning motivation and more. Many of the questions were focused on their upbringing, which was classified as ages 0-12. The two primary reasons why the determinator for upbringing was 0-12 was so to exclude the school subject 'Moderna språk' and their teenage years (typically categorised with ages 13-19). The reason for wanting to exclude 'Moderna språk' is the difficulty of being able to consider it as an acquired language and part of your upbringing. Normally, 'Moderna språk' is introduced

as an optional course that starts in 6<sup>th</sup> grade (ages 11-12) and most learners are not exposed to the language outside of their school hours. It is difficult to consider it an acquired language and a part of a learner's upbringing if they only have studied and been exposed to it for roughly a year. As for wanting to exclude their teenage years, it does not sound like their upbringing anymore, but more of an exploration phase as they mature towards adulthood. In essence, plenty of change transpires throughout these teenage years, and it may affect their answers that are primarily focused on upbringing with an emphasis on 'childhood'.

The contents of the survey were constructed into six sections as follows (see appendix B for full survey questions):

1. Introduction and Terms & Conditions – Introduction of the topic, the purpose of the research and the filling in of terms & conditions.
2. Identification – The participants will provide identification for the analysis of their data and are informed about their anonymity in the resulting degree project.
3. Language Development & Upbringing (ages 0-12) – Focus on the participant's language acquisition and trajectories among family, friends and school.
4. English language during early childhood (ages 0-12) – Focus on the participant's English language acquisition through exposure and usage.
5. English proficiency today – The participants will self-evaluate their English speaking/reading/listening/writing proficiency and rate their English learning motivation.
6. Concluding language development questions – Optional in-depth question about their language trajectories and acquisition that delves into possible difficulties, language exposure and personal opinions about whether the number of languages present may affect their language development.

Many of these sections are self-explanatory and state the main intent for their inclusion. However, highlighting some of the core content questions may be necessary to provide context and reason for having them.

The third section about language development and upbringing acts as categorisation to answer the research question regarding the number of languages present. They are also to state what languages they are and if any of them are related to their family. The estimated age of exposure and process of slowly starting to learn the language was asked too. The participants are also required to state if English was ever present during the ages 0-12. A few examples of English exposure were also added to clarify what could count as 'present'. If a participant answered 'no' to being exposed to English at ages 0-12, they would skip the fourth section. Answering 'yes' would continue as normal to section four. By having these upbringing (ages 0-12) questions about how many, which and when they were exposed and started learning a language, it provides us with enough data in combination with the sixth section to be able to conclude if participants misunderstood a question. This makes it possible to exclude their 'Moderna språk' subject (as instructed) that they accidentally might have included as 'Spanish (age 11)'. Similarly, we can revise their inputted data if they answered 'yes' that they were exposed to English, and forgot to fill it as a language present during their childhood/upbringing. This can also be done vice versa by those who answered 'no' but included it as an exposed language on one of the other questions. However, a flaw presents itself in these cases. By answering 'no' by

accident, this results in the participants skipping the fourth section focused on their English language exposure and usage. Fortunately, participants can still discuss their English language exposure and usage in the concluding sixth section. Regardless of accidentally skipping the fourth section, these participants will still be considered and analysed as part of the survey.

The fourth section delves into sources of English language exposure and usage, how often they were exposed and communicating in English, and how motivated they were on learning English. All these questions are focused on their upbringing within the ages of 0-12 and can be used to draw parallel correlations with sections five and/or six.

The fifth section allows the respondents to self-evaluate their current English language proficiency. The factors that the participants can rate are skills (speaking, reading, listening, and writing) present in all English national 5 exams. The pupil's self-evaluated English proficiency values make it possible to compare their inputted data with their collected English national 5 exam final grade (F to A system). The self-evaluation can also represent a learner's confidence rather than their actual graded proficiency. Furthermore, the current motivation for English learning is also questioned during this section, which can then be compared with their past motivation at ages 0-12 (if data is available).

The sixth section is a completely optional part of the survey that delves into language learning, acquisition, motivation, and development in a broader scope. Questions are not constrained to being English-only as they explore the speaker's other acquired languages. A question worth highlighting is the potential difficulties a learner might have had with a language at ages 0-12, which in turn can be tied to English language difficulties with other learners around the globe. The same question is also addressed by disregarding age and seeing if a respondent has learned a new language after the ages 0-12. Similarly, to section 4, there are questions about their language exposure, usage, and what relations they bear (such as family, friends, etc). They can choose to re-address their English and present new data about other possessed languages (e.g. Swedish, Korean, Persian). As a last question for the participants, they are asked what they themselves believe about the first research question (see Appendix B). Whilst the question will not directly answer the research questions, the answers may provide a statement that can be used indirectly to support an argument and/or case. The answer can be used to construct interview questions (more at '3.2.2 The Interview Questions'). Additionally, the answer may provide inspiration and/or more questions worth delving into at the '5. Analysis & Discussions' section of this survey.

### 3.2.2 The Interview Questions

The follow-up interview questions created were with two goals in mind, to clarify their survey answers and narrow down questions based on the participants. The goal was to expand, elaborate and find more intricate answers that were already provided in the survey. And as previously mentioned, the survey acts to determine which pupils will be selected and requested to participate for the in-depth interviews. By using the survey data, three individuals were chosen, by the pseudonyms Matilda, Viktor, and Dennis. Each of these presented their upbringing and language trajectories in a unique and noteworthy

manner. More general questions appropriate for everyone were created. Similarly, questions catered and focused on each of the participants were also created. All questions together with an explanatory ‘purpose & reason of question’ can be found in Appendix C.

The focus of the interview questions were directed towards language exposure, usage, extramural activities, learning motivation, self-evaluation of English proficiency (and indirectly their confidence), the number of languages present at upbringing and other questions similar to the survey. Many of these general questions were questions repetitions of their answered survey questions. The main purposes are to start with calm and easy questions that act as verification and confirm that the participants answered truthfully, to reveal any potential misunderstandings and/or to identify any incorrect data. The participant-focused questions on the other hand were hand-picked based on their survey answers, their relations towards relevant concepts/theories and past studies.

Matilda states that her language-learning journey has been both confusing and difficult due to the presence of many languages (Arabic, Swedish and English). She proclaimed how Swedish was difficult and became easier as she was exposed to it more as her parents learnt the language and started to use it at home. Therefore, Matilda’s questions are focused on language development through exposure and her ‘confusing’ language trajectories during her upbringing (ages 0-12).

Viktor discusses a lot in his survey data about the English language being a “kids time” language (‘cool’ and ‘hip’?) as he lived in Greece till moving to Sweden in 2018. His exposure and usage of the language was also on a ‘semi-daily’ basis during his upbringing (ages 0-12). He also showed a decrease in English learning motivation when compared to his childhood and today (rating of 5/6 to 3/6). Furthermore, he believes that it “would be harder to ‘master’ a language if your are being ‘bombed’ with other words in other languages”, which itself is an intriguing opinion to further delve into during the interview. Therefore, Viktor’s questions are mainly focused on the term “kids time” in association with the English language, his English exposure and usage, English learning motivation, his acquisition of Swedish starting in 2018 and his attitudes towards multilingual language learning.

Dennis bolsters in his survey data a high quantity of acquisitioned and exposed languages (Swedish, Russian, English, Ukrainian and Laki) during his upbringing (ages 0-12). He has been daily exposed to English starting at age 4 through a higher number of different sources than most participants. The same applies to how he was semi-daily communicating in English outside of school hours through many platforms of communication. However, his motivation for English learning has slightly decreased since his upbringing (rating of 6/6 to 5/6). His self-evaluation showed the highest results (8/8 in all fields of proficiency). And most fascinatingly, he elaborates on having dyslexia without stating on having difficulties with language learning and their acquisition. Interestingly, his written grammar in answering the survey question were somewhat lacking. This might be due to him writing on his phone or rushing through the survey. Furthermore, he elaborates on his answers in more detail with a fluency-over-accuracy attitude than most. He proclaims about language learning and how a learner is “more likely to learn however, you only learn if you can interact directly” and advocates the possession of multiple languages is essential for today’s society. Therefore, Dennis’

questions will be focused on his language trajectories, exposure, usage and role, learning with dyslexia, English motivation and confidence.

### **3.3 Data Collection & Analysis Method**

The methods and analysis of this research follow the principles and processes of content analysis as presented by Elo & Kyngäs (2008). As described by the authors, the aim of content analysis is to systematically and objectively; describe, quantify, and analyse phenomena by condensing broad descriptions. This thesis “wishes to retest existing data in a new context” (Elo & Kyngäs, p.111) by investigating familiar concepts and phenomena (existing data) with a new set of participants (new context). This would automatically categorise this method as ‘deductive content analysis’, rather than the contrary ‘inductive content analysis’ that seeks to delve into phenomena with no previous studies. The authors also clarify how the deductive approach of content analysis may be used to involve the testing of categories, concepts, hypotheses, and models (Elo & Kyngäs, 2008). Therefore, to answer the two research questions as presented in this essay, the method of deductive content analysis will be used.

The first research question venture into the quantity of languages in a speaker’s upbringing and whether the number of acquisitioned languages affects their English language proficiency. To analyse this, emphasis and focus are primarily put into the collected survey results. All current and provided (answered) data from the 51 participants will be categorised to have been in possession of ‘three-or-more’ or ‘two-or-fewer’ languages in association with their upbringing (defined as ages 0-12). Upon separating them into two groups, statistical tests will be made using their English 5 national exam grades. The validity of the English 5 national exam grades can be considered high due to it being a national exam that has strict guidelines that every teacher should follow in relation to evaluation and grading. It can therefore minimally be affected by the teacher and is done by every pupil studying English 5. Furthermore, a mean value will be determined for each of these categorised groups and the grades from F-A. In addition, standard deviation values will be set, and a t-test will be conducted to determine the p-value differentiating these two groups, thus showing us whether statistical significance is present or not. Any participant with no available English 5 exam grade will not be included during this statistical correlation analysis. Such instances of a missing grade will occur to individuals that have either completed it at another school (the data is inaccessible) or not sufficiently completed the English 5 national exam to get a grade. Additionally, a statistical comparison of these two categorical groups will be made using the participants’ survey values of self-evaluations on their current English language skills: speaking, reading, listening, and writing. Since the participants had the option to rate their own proficiency from the value 1 (low proficiency) to 8 (high proficiency), it is difficult to directly compare their self-evaluation values to their English 5 national exam grades F-A. A compromise is therefore made that will define the exact values of each grade. Since the English 5 national exam grades are already collected and there is no presence of the grade F, it will be completely disregarded for this research. We are then left with the grades E to A with values that are constant to the value of 1. We will therefore quantify the exam grades as follows (see table 1): A = 5, B = 4, C = 3, D = 2 and E = 1. Additionally, the self-evaluated data of proficiency will be adjusted to accommodate to



make it comparable and quantifiable within the range of 1-5. The original survey values will start at value 1 and fluctuate with the constant value of 0.57. The equation  $(x - 1) \times 0.57 + 1$  is used where the variable 'x' ( $x \neq 1$ ) represents the participant's self-evaluation mean value. This will translate as follows (see Table 1): 1 = 1, 2 = 1.57, 3 = 2.14, 4 = 2.71, 5 = 3.28, 6 = 3.85, 7 = 4.42, 8 = 4.99 ( $\approx 5$ ). Using the newly defined comparable data, the mean values of both their national exam grade and self-evaluation can be compared and assessed to a certain degree to identify whether it answers the first RQ. Ultimately, the English 5 national exam grade values outweigh their importance when analysing the groups with 'three-or-more' or 'two-or-fewer' and will be the primary determiner for the first RQ. The self-evaluation values will act as a factor affecting (whether positively and/or negatively) English language acquisition, which is more aligned with the second research question.

**Table 1. Raw data comparable to data**

National Exam Grade Values	Self-evaluation Values
E = 1	1 = 1
D = 2	2 = 1.57
C = 3	3 = 2.14
B = 4	4 = 2.71
A = 5	5 = 3.28
	6 = 3.85
	7 = 4.42
	8 = 4.99 ( $\approx 5$ )

The second research question will be assessed using survey data from their self-evaluation of English skills, English learning motivation, sources of English exposure (10) and usage (7), and relevant participant results/discussions from the survey's optional sixth section. Furthermore, the analysis of the nominated in-depth interviews will be made, and it will likely bear a more significant importance compared to the survey data (that may lack elaboration) when answering the second RQ. The self-evaluative data will be viewed as their self-assessment of their English proficiency and as an indirect statement about their level of confidence. This connection is further supported by Su (2021) and her findings that self-perceived overall English proficiency and speaking confidence indicated significant correlations between each other. Therefore, a comparison will be made with the two categorised groups 'three-or-more' and 'two-or-fewer' languages, to see which group is more and less confident based on their self-assessment answers. A higher self-assessed mean value will equate to higher confidence for the sake of this study. Similarly, the participants' answers on their level of English learning motivation during their upbringing, and the number of sources of English exposure and usage will be statistically shown with their respective mean values for each group. Due to the survey including 10 options/sources of exposure and 7 options of usage, each exposure instance will count as the value 0.7. This is to provide equality when analysing both exposure and usage within the context of a singular topic, rather than separate. All mentioned survey data will be compared to both groups' mean national exam grade values to observe if any correlations

may be present. As an example, if (hypothetically) the group with ‘three-or-more’ languages had higher learning motivation and better grades than the group with ‘two-or-fewer’ languages, then it could be argued that learning motivation may contribute positively to English language acquisition. However, if the result of learning motivation would be lower, then you could not be able to draw such a connection.

As for the interviews, they will be used to address the second RQ and will hold significant merit for identifying factors that may affect English language acquisition and its development. The interviews will act as case studies that highlight any topics relevant to answering the RQ. These highlighted cases/factors will be systematically selected (using deductive content analysis) after conducting and analysing the interviews by observing the automatically generated manuscripts and their respective audio recording. The selection of factors to be presented needs to be share relevancy and connections to the participant’s survey answers and the answering of the RQs.

Furthermore, any factors affecting language acquisition in general from the interviews will be considered and valued as a potential factor, regardless of discussed language. These cases and factors will be clarified in the ‘results’ section and may be argued more in-depth for being relevant in the ‘analysis & discussions’ section.

### **3.4 Ethical Considerations**

Privacy and anonymity were highly considered in the construction of three processes for acquiring primary data. They were incorporated in many of the sections to assure that each participant would be anonymous and that no personal data/information would be kept upon the completion of this degree project. Pseudonyms were used to extract and indicate a certain case of data obtained from each of the participants. This information about privacy and anonymity was conveyed during the introduction of the survey through a PowerPoint and was the first thing brought forward. Participants had the choice to decline the survey and in term the whole study. The pupils had also the option to cancel their participation whenever. Any requests to withdraw from the survey required a simple email to me or their teacher (who would then contact me). Similarly, a ‘terms & conditions’ section was added at the beginning of the survey to clearly indicate the purpose of this study and how their data would be used (see Appendix B). Furthermore, those who were nominated for the interview had to sign a consent form to verify their consent to being interviewed, informing them of the purpose of the study, how the data would be collected (through audio recording) and describing how the data may be used (see at Appendix D). Two identical consent forms were filled with the purpose of the participant being able to keep one, whilst the next one is kept safely archived until the completion of the research and this degree project. Any request to modify or withdraw their data would then need to be sent via email.

## **4. Results**

### **4.1 Survey & Grade Results**

The survey was conducted on three upper secondary school classes (corresponding to 83 pupils) from the same school in Stockholm. 53 recorded responses were obtained,

however, two of these forms were not considered since one of them was unfinished and the other did not take the survey seriously. This has led to there being 51 participants for this survey, which corresponds to an overall 61.4% response rate. Class A had 22 participants with 78.6% response rate, Class B had 21 participants with 72.4% response rate, and Class C had 8 participants with 30.8% response rate. This data excludes the two scrapped participant responses. All participants were categorised into two groups ‘two-or-fewer’ (22 individuals) or ‘three-or-more’ (29 individuals) depending on how many languages they possessed and were able to use/speak during their childhood. The two groups have been summarised and compiled together with the English 5 national exam grades and three survey topics (see table 2). Values representing each group for the respective topic have been provided to determine which of them scored higher than the other group. Results show that individuals within the ‘three-or-more’ languages possessed better national exam grades and English learning motivation (based on their upbringing). However, their self-evaluation of English proficiency and English exposure & usage sources were lower. Group ‘two-or-fewer’ had vice versa results compared to the participants categorised within group ‘three-or-more’.

Table 2 – Survey Results: National Exam Grade, Self-evaluation, Exposure & Usage Sources, Learning Motivation (Upbringing)

	Value type and potential min-max values	‘Two-or-fewer’ languages	‘Three-or-more’ languages
English 5 National Exam Grade	Mean (1-5)	2.526*	2.538**
	Standard deviation	1.073	1.104
	Two-tailed P-value and statistical significance	0.9711 (difference is not statistically significant)	
Self-evaluation of English Proficiency	Mean (1-5 converted)	4.077	4.076
	Standard deviation	0.531	0.693
	Two-tailed P-value and statistical significance	0.9955 (difference is not statistically significant)	
English Exposure & Usage Sources	Mean (0-7 converted)	3.112	2.944
	Standard deviation	1.016	1.260
	Two-tailed P-value and statistical significance	0.4860 (difference is not statistically significant)	
English Learning Motivation (Upbringing)	Mean (1-6)	4.381	4.885
	Standard deviation	1.117	1.143
	Two-tailed P-value and statistical significance	0.1360 (difference is not statistically significant)	

Only three decimals are to be used (excluding p-value) and the value will be either rounded up or down depending on its fourth decimal. For clarification, the higher value is coloured green, and the lower value is coloured red. The ‘(converted)’ text included within some value types indicates that these are not the original raw values and have been converted for the purpose of making them comparable (see section 3.3 and table 1 for elaboration).

\*19 out of 22 of the pupils had available grades.

\*\*26 out of 29 of the pupils had available grades.

The presence of relevant and intriguing survey cases out of the 51 participants were narrowed down to nine individuals (including the three interviewees). The six individuals to not be interviewed brought forward some noteworthy observations (see appendix E). Due to lacking elaborative detailing, not much more than what is present in their summaries could be obtained. The English national exam grade and the raw survey data from the self-evaluated English proficiency will be converted using table 1. This is to provide consistency and make them easily comparable.

## **4.2 Follow-up Interview Results**

In this section, all relevant main points and topics discussed within the interviews will be summarised. Each case represents an attempt to investigate specific factors such as extramural English activities, effects of dyslexia, English exposure and usage, etc. What follows here is a representation of what these individuals conveyed in their conversations/interviews.

The first interviewee with the pseudonym Matilda is from class A with the English national exam grade being C (converted to 3) and the converted mean English self-evaluation value of 3.85. And her upbringing languages consisted of Arabic (family language), “Syriac” (indigenous family language), English and Swedish. Matilda expresses within the interview that the English language was primarily exposed through the internet and her siblings. She elaborates how she and her siblings would watch a lot of YouTube videos and listen to English-spoken music. She further explains how she was exposed to an extensive amount of written English texts because of the internet and social media. Matilda believes that these factors and her past (upbringing) interest in English language learning have affected her English positively and wishes to someday use that knowledge to work outside of Sweden. She firmly believes that the English language is a gateway to a good job both within and outside of Sweden. In addition, no difficulties in English language acquisition and its development were expressed in neither the survey nor the interview. As for her other languages, her interest in language learning, in general, has contributed towards her ambitions of currently acquisitioning Korean (self-teaching) and French (school). These two languages are currently somewhat fluent according to her. Furthermore, no statement is made on how she values these languages and what purpose they fulfil. However, a noteworthy exception is made for her Swedish. Since the language spoken at home was Arabic and she was not exposed to Swedish until starting school, it was a difficult language for her. She describes how Swedish was especially challenging towards her early youth due to the limited exposure and required usage in her everyday life. The little Swedish she could speak utilised translanguaging and mixing of other words/phrases from her other acquisitioned languages. She states that those years were confusing and difficult times when communicating in Swedish. This changed sometime later in her upbringing (ages 0-12) as her parents acquisitioned Swedish and began to speak Swedish more at home. Arabic was in a way slowly replaced by Swedish to a point where Arabic started to become uncommon. This led to her Swedish development improving exponentially through constant exposure and usage at home, school, and with friends. She even states that Swedish eventually “came naturally” because of the constant exposure to living in Sweden. A consequence persisting today is

that her Arabic is “very rusty right now”, which she believes is due to its lack of usage and need.

The second interviewee in question is Viktor from class B who had a grade value of 3 (C) and a converted self-evaluation value of 3.422. He possessed Greek (family language) and English during his youth/upbringing (ages 0-12). It was not till the age of 16 (the year 2018) that he started slowly acquisitioning Swedish upon moving to Sweden from Greece. Throughout his childhood, he described English to be a “kids time” language, which was conveyed in the survey. Upon questioning him about the meaning of “kids time”, he responded against the given suggestion by the interviewer of it being a ‘cool’ or ‘hip’ language to use during recess or extramural activities with other classmates. The definition described by Viktor is that English classes were looked down upon by most pupils since most pupils were far ahead of what the school was teaching. He states how no one really spoke English inside the class and that no one took the English classes seriously. Most pupils considered the English lessons to be irrelevant and meaningless to a greater degree. Lessons revolved around messing around, having fun and doing random stuff such as writing on tables in English and speaking in their “lingo” (Greek with “other codified words”, similar to a new dialect according to Viktor). He elaborates on why nobody cared about these English lessons by stating:

Viktor: “Mainly, it was like that because everyone used to do like, private courses. And those things we used to do like in our private school. Like, we have gone through them. So it was like going yet again, and again, and again, the same things was like boring. That’s why we didn’t give like interest, we did not have interest for the classes.”

Interviewer (Henry): “Okay. So I think a lot would have to do with how it was like constructed and presented to you?”

Viktor: “That’s why I said in the start, I don’t know if it was like the school system or something else. But it was like that.

The conversation then moves into the topic of English and its importance. He starts by stating that he and his classmates did not completely ignore English and thought it was an important language due to its global presence. However, he felt like the English classes did not contribute much to his development due to them being considered “kids time”, or in essence, in a level of difficulty to little kids. Due to him and most (95% according to his estimate) of his classmates taking paid private courses, they lost motivation to study it at school since they were far ahead compared to the material being presented in class.

Upon Viktor’s move to Sweden, he did not have a difficult time learning the language. Although, in the beginning, he was not too motivated or interested in learning Swedish and wished to start an English school. This attitude changed in due time as he was exposed to Swedish through extramural activities, friends and much more. It began with language introductory courses for newcomers to Sweden that later progressed towards him going to a public Swedish school. He explains how Swedish “came like automatically” and conveyed that he had no real struggles with Swedish acquisition. Whilst he learnt much

through school and the introductory courses, he proclaims his belief that speaking Swedish with his friends helped him a lot in his Swedish language trajectory.

The third interviewee going under the pseudonym Dennis is from the B class and had the grade value of 2 (D) and showed a maximised and converted self-evaluation value of 5. An important acknowledgement worth mentioning is that his grade would be higher if he was not absent for a section of the English 5 national exam (verified by a teacher at his school). As for the languages he possessed during his upbringing, they are as follows: Russian and Laki (family languages), English, Swedish and Ukrainian. After his upbringing (ages 0-12), he proceeded on learning French and further developing his Ukrainian. He was born in Sweden and has thus been exposed to Swedish on a daily basis. Similarly, English was a frequently exposed and used language by him as he communicated in English, Laki and Russian with his relatives outside of Sweden. He expresses how he learnt English through school, but also through extramural activities such as watching cartoons, browsing the internet and social media platforms, playing video games, listening to music, reading books and much more. He elaborates how he has studied at an international English school for a long time and even lived (and went to school) in the UK for a little over a month. All these factors of exposure, usage and his passion for learning languages were factors that contributed positively to his English language acquisition, according to his own opinion. An exception is made regarding his English accent both he and the interviewer considered to be heavily British influenced. Within three minutes of starting the interview, he expresses his dissatisfaction with having a British accent. Dennis states regarding his accent that “It's not natural. It's kind of like a habit. Because I was trying to do an impression of my friend and then it just stuck with me and from my old teacher's accent as well. It just sounds funny”. Upon hearing this, I as the interviewer tried to convene by relating on having had a similar experience. This was followed up with questions towards Dennis about his connection and identity to the English language and his English variant. Dennis explains how it is embarrassing and that he does not feel like he has “the right to possess this” accent. He further conveys how the British accent confuses him and his friends, and that he tries his best to “be as neutral as possible and just stick with the classic American English that I prefer, and Swedish”. Upon conveying the idea that it is okay to have an accent, the topic was quickly dropped due to Dennis sounding a bit nervous.

Later, after a few other topics, the subject shifted to his English language development and how he believes that due to his dyslexia, he cannot improve his English much, besides perhaps his writing and spelling without great effort. Even with dyslexia, he considers his English to be a solid eight out of eight (non-converted self-evaluation value) in Sweden and states that to be the primary reason for his self-confidence. However, he acknowledges that English language learning has not been easy due to his dyslexia. Pronunciation and other forms of oral speech have not been an issue for him, but the difficulties were in writing and especially in reading. His dyslexia could explain why his survey answers in written form were noticeably filled with errors. It was confirmed that he felt a bit rushed when writing the survey, which could present itself as an additional factor on why it was filled with errors. Still, he considers himself to be very proficient compared to many others in Sweden. Dennis even shows similar confidence in his other languages besides with his French that he is currently studying. He firmly believes that

his difficulties with French have to do with him already possessing many languages and that it can lead to mixing words and confusion. However, his primary argument is his belief that language learning just becomes more challenging as you grow up, not just for him, but for everyone. He conveys how he believes that after the age of 6, a learner should not learn a new language and instead focus on the languages they currently acquisitioning. An environment of engagement for speaking English or any other language is a requirement for language learning according to Dennis. He elaborates extensively that priority needs to be asserted onto interacting with others and that “if you don't interact, you will get no feedback response. No right or wrong. You won't know whether you're doing the correct methods and tools and everything”. Dennis further exemplifies through his own experience of living in the UK that his English back then was “horrid”, but that he learnt much by interacting and living in the UK.

## 5. Analysis & Discussions

The first RQ can be easily answered by utilising the results from table 2. As a reminder, the goals created from this RQ are to answer whether learners with ‘three-or-more’ or ‘two-or-fewer’ languages are connected to lower or higher levels of English language proficiency. And as previously stated, the focus is put upon a learner’s early upbringing (ages 0-12). By observing table 2, the statistical results of ‘English 5 National Exam Grades’ and the two groups, the results show that individuals within the category of ‘three-or-more’ languages possessed higher levels of English proficiency (scoring 2.538) than those from the group ‘two-or-fewer’ languages (scoring 2.526). It is worth acknowledging that the difference between these two groups is marginal and the values are separated by roughly two decimals (more precisely, 0.012). It can be argued that the statistical difference is insignificant to a level where they can be viewed as possessing equal levels of English proficiency. This line of argument is further supported by the presented p-value that was determined by performing a t-test (see table 2). However, to answer the RQs within this thesis, we will acknowledge even the slightest of value differences, whether minimal or not. Therefore, to answer the first RQ, the presence of *three or more* languages during a learner’s early upbringing is connected to higher levels of English proficiency. Similarly, the presence of *two or fewer* languages during a learner’s early upbringing is connected to lower levels of English proficiency. The results concerning the first RQ speak for themselves and cannot be discussed in greater detail without delving in-depth into individual factors using additional context and data. This is an area more suitable for the next RQ.

The second RQ ventures into identifying the presence of relations that may contribute to ELA positively and/or negatively. The results utilised for answering this RQ are focused upon table 2, noteworthy survey cases (see Appendix E) and primarily, on the three interviews with Matilda, Viktor and Dennis. We begin by observing table 2 and the three remaining topics to be analysed: ‘Self-evaluation of English Proficiency’, ‘English Exposure & Usage Sources’ and ‘English Learning Motivation (Upbringing)’. The topics will also diverge and be connected to the noteworthy cases and the interviews.

The survey participants from the two groups self-evaluated themselves somewhat highly and similarly (by using mean values) compared to their actual national exam grades, differing by roughly 1.5 in value between confidence and their mean grade. Therefore, it can be argued using the pupils' mean values that they possessed high levels of confidence, regardless of which group they were placed within. However, does a high level of confidence contribute positively to ELA and its proficiency (exam grade)? By observing the noteworthy cases (as seen in appendix E), there seems to be no consistency or pattern. Participant 3 had the converted grade value of 1 (grade E), whilst bolstering a self-evaluation (confidence) mean value of 4.705. This participant had high confidence levels, which showed the relation of a low grade of value. This connection is immediately lost by observing participant 5, who had a grade value of 3 (grade C) and showed similar levels of confidence (mean value 4.847). The remaining participants showed no consistency in relation to these two participants. In addition, by observing the p-value (0.9955) differentiating these two groups, no statistical significance can be analytically determined. A similar conclusion can be drawn by the interviewee Dennis who scored a grade value of 2 (grade D) and self-evaluation (confidence) value of 5. Interestingly, Dennis himself states to have a high level of confidence and claims it to be a significant factor that contributed to his ELA. Self-perceived proficiency (confidence) may be a factor that assisted him through his English language trajectory, however, it does not seem to directly correspond to a higher level of proficiency as observed through his mean grade value. It can be argued that the present results of this thesis contradict some researchers and their past studies. An example would be Su (2021), who found there to be a significant relation between self-perceived English proficiency and speaking confidence. She clarified how more English-speaking confidence could be related to a learner utilising more strategies for fluency, accuracy, negotiation and more (Su, 2021). This could be the case for Dennis, however, the strategies he may have used remain unknown, as they never emerged during his interview. In essence, confidence may be a factor that positively affects ELA, however, it is a relation that cannot be found in this study when observing confidence, English language proficiency and their p-value. Thus, confidence will be considered a negative contributing factor towards ELA. By clarifying using group 'two-or-fewer', they possessed a lower English grade mean value, but showed (marginally) higher confidence through their self-evaluation of English proficiency. So logically, false (lower grades) plus true (higher confidence) equals false. Thus, a relation cannot be made.

As for the 'English Exposure & Usage Sources', the results from table 2 present us with group 'two-or-fewer' possessing a higher value mean value of '3.112' (SD 1.016) than group 'three-or-more' with '2.944' (SD 1.260). The gap is separated by the value 0.168, which is more than a decimal value. However, the presented p-value (0.4860) still shows us that the difference is still not statistically significant. And by applying the same logic as presented on the previous factor, group 'two-or-fewer' have a lower mean grade value, yet their English exposure and usage value were significantly higher. Therefore, it is not possible to make a connection between exposure and usage with a higher mean grade. This means that English exposure and usage are not positive factors that contribute towards ELA and may be considered negative factors using the same logic as applied earlier. Interestingly, these results would go against the results of many past studies that revealed exposure and usage to be a significant factor within ELA. Researchers such as Brown (2020), Giroud et al. (2020), Sánchez (2020), Azzolini et al. (2022) and



Paradowski & Bator (2016) conveyed that in some way, that language exposure and usage play a crucial role in language acquisition and development. Even the statement presented by Sundqvist & Sylvén (2016) that disregarded the traditional factors of L2 learning and vouched that consistent use of L2 is the single most important factor would go against the results of this current study. Worth acknowledging is that the participants within the survey answered focused on variety rather than intensity when answering this topic, which can be seen as the major flaw when discussing English exposure and usage. In addition, all three interviewed participants claimed exposure and usage to be crucial factors in ELA by referencing important sources such as family interactions, extramural English activities and educational environments. This further supports past studies and their findings about the importance of exposure and usage. Ultimately, by applying the same logic as earlier and observing the p-value, an indecisive verdict open for criticism is that English exposure & usage sources cannot be tied together with higher exam grades (proficiency). Thus, it is a negative factor for ELA within this current study.

For the last topic ‘English learning motivation (upbringing)’ from table 2, there is a clear distinction between the groups ‘two-or-fewer’ with a mean value of ‘4.381’ (SD 1.117) and ‘three-or- more’ with a mean value of 4.885 (SD 1.143). The mean value gap of 0.504 is the highest out of these groups. And the results from the t-test (p-value 0.1360) still indicate there to be no statistical significance. However, it comes closest to showing a statistical difference compared to the other presented topics/factors. If we were to determine a relation by only using the mean values, then it would show there to be a connection. This would then fall into the line of argument supported by Azzolini et al. (2020) and their studies towards the relationship between the individual-level variation of ELC. In essence, individual learner attitudes (such as learning motivation) would be factors that affect English language proficiency (grade). And this would further be supported by the interviewee Dennis who firmly claims that his positive attitudes towards ELA are factors that have positively affected his English language proficiency. However, these arguments are arguably refuted by the p-value that shows there to be no statistical significance between these two groups. Therefore, learning motivation (during upbringing) may not directly be considered a positive factor that affects ELA. Using the logical steps from earlier, this would then fall into being a negative factor. However, it is still worth acknowledging that it came closest to the p-value of 0.05 compared to the three previous factors and may very well be a positive factor, although, not within this study.

If we delve further into the interview by Dennis, we can discover English ownership attitudes as a new emerging factor. Using Dennis’ interview data, it can be concluded as a potential negative factor towards ELA and its development. The main reason for this argument is Dennis’ alienating attitudes towards his possession of a British variant (accent). He states that his accent does not feel natural and made him sound “weird”, which confuses himself and those around him. Further elaboration is presented by Dennis on feeling that he has no right in possessing a British variant and therefore, he is currently aiming towards attaining a more “classic” American accent. Due to the participant’s discomfort, this was not pursued further due to ethical concerns. However, this lines perfectly with the arguments presented by Norton (1997), who conveys how language, identity and English ownership intertwine with each other. These attitudes may be present due to societal norms concerning English variants and their prestige, which possibly

partially originate from Kachru (1985) and his three circles of English. This itself causes social class inequalities and sparks inferiority, which negatively affects non-native speakers' confidence and causes insecurities (Darvin, 2017). The connection between sense of inferiority is also connected to learning motivation, as clarified further by Lin et al. (2017). Therefore, it can be argued that attitudes as a whole play a significant role within ELA, which can be interpreted as both positive and negative contributing factors (although, this is indecisive). It all depends on what is being discussed. In addition, based on the three interviews, no new potential factors emerged except for the attitudes concerning language ownership and linguistic English hierarchies within ELA. Therefore, we can determine that English language ownership as an attitude is a potential negative factor by using the case of interviewee Dennis and the study by Darvin (2017).

## **6. Conclusion**

The first RQ is answered by using the summarised survey data found in table 2. The data shows how three or more languages during a learner's early upbringing are connected to higher levels of English proficiency. Similarly, two or fewer languages show relations equivalent to lower English language proficiency. What was obtained within this study indicates; that a higher number of languages equates to higher levels of proficiency. Furthermore, the second RQ that seeks to explore any potential positive and/or negative contributing factors towards ELA is answered by utilising the data from table 2, the noteworthy survey cases (appendix E) and the three interviews. The conclusion is that no positive factors affecting ELA can be identified by performing a t-test to determine their statistical significance. However, English learning motivation (from their upbringing) within this study is the sole factor that came close to being a significant factor with a p-value of '0.1360'. Therefore, factors such as 'learning motivation (upbringing)', 'language confidence', 'English exposure & usage' and 'English ownership attitudes' do not reveal themselves as positive factors towards ELA and are considered negative factors within this study. Furthermore, factors such as language attitudes and identity remain unanswered on being positive and/or negative due to the limited input data.

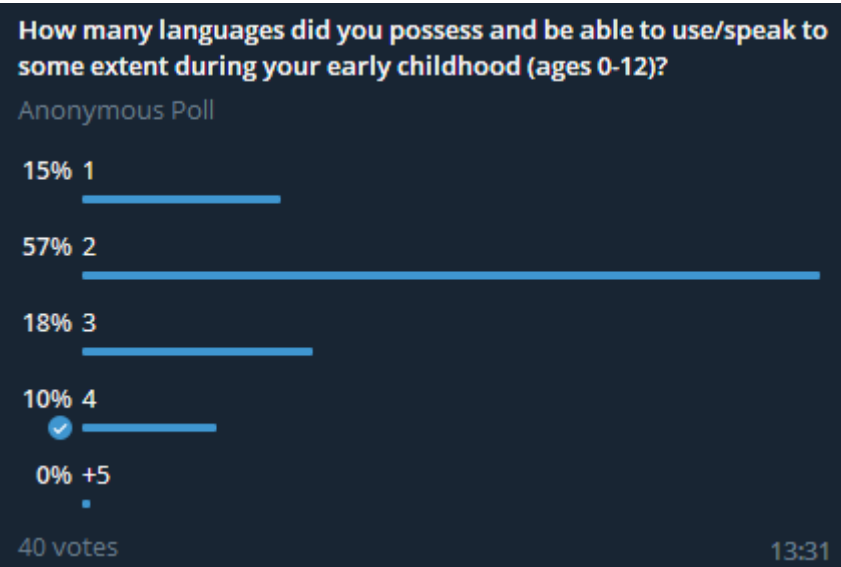
This study comes with its own limitations in relation to factors such as response rate, limited accessibility to resources and time constraints. In addition, this research has its flaws that can be argued as being non-decisive due to limitations, insufficient data, and potential flaws within the methodology. Any future research within this field of study could delve further into the topic of individuality and the many different attitudes learners may have towards English, its acquisition and development.

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# Appendix A



# Appendix B

10/12/22, 1:06 PM

Survey - Multilingual Upbringing & English Language Acquisition

## Survey - Multilingual Upbringing & English Language Acquisition

This is a survey conducted by Henry Kolari for Stockholm University in relation to his degree project (examensarbete). The research paper will be about if the quantity/amount of languages present affects their language development/learning during their upbringing (childhood at ages 0-12). Focus will be on the learning of the English language. All data will be made anonymous during the writing and publication of the research paper. Please answer honestly :)

Survey Length: 12-15 minutes.

If you have any questions, feel free to reach out to me at: [henry.kolari@hotmail.com](mailto:henry.kolari@hotmail.com)  
Thank you in advance for those participating!

**\*Required**

### 1. Terms & Conditions: ★

By agreeing to the terms & conditions you:

- Agree and consent that the data collected from this survey **will be made anonymous** and **can be used** for the writing of the research paper.

- Agree and consent that Henry Kolari, his colleagues and supervisors at Stockholm University **will be permitted** to gain access to your national exam grade for English 5. Access to the collected data **will be terminated** upon the completion of the research paper.

- Agree and consent that the data collected from this survey **will be erased** upon completing the writing of the research paper.

- Agree and consent that you **may be nominated and contacted** for a further private in-depth interview. **If you accept** to do and complete the interview, you **will receive** a cinema ticket.

*Mark only one oval.*

☐ I agree to the terms & conditions and wish to participate.

☐ I do not agree to the terms & conditions and wish not to participate.

<https://docs.google.com/forms/d/1kLn2Gf4emGvBYrCO8TS39t2N5WtH856YnVJuoR2Nb1U/edit>

1/10

The survey questions converted into printable PDF-format by Google Form. To fully open the survey: Right click => Object => Open

## Appendix C

Semi-constructed Interview Questions for Nominated Participants		Interviewees: Matilda (nr.20 – Grade C), (Viktor nr.36 - C), (Dennis nr.43 – Missing)
Aimed Interviewees:	Presented question:	Purpose & reason of question:
All interviewees	Could you introduce yourself and state what languages you possess?	A relaxing and calm introductory start that acts as a repetition. Also, a way to confirm their possessed languages.
	Which of the following languages were a part of your upbringing/childhood (ages 0-12)?	To confirm their inputted survey data and to remind them about the research topic.
	Are any of those languages related with your family and identity?	To confirm their inputted survey data.
	Could you tell me about your exposure and usage of English during your childhood (ages 0-12)? a) Was it primarily a school subject? b) Did you use it at home? c) Perhaps you used it for social media or to watch cartoons? d) Did you use it often?	To get more in-depth details about their English exposure and extramural English.
	Looking at your self-evaluation of English proficiency, could you elaborate on why you answered as you did? Confidence? Usage? <b>Speak/Read/Listen/Write</b> – (Rating 1-8): Matilda = 6/5/7/6 = Mean 6 Viktor = 5/5/5/6 = Mean 5.25 Dennis = 8/8/8/8 = Mean 8	To confirm their inputted survey data and to be given an elaborate explanation on how they evaluated themselves.
	Could you tell me little bit about your motivation about English and languages in general? Do you think it can affect your English proficiency? <b>Motivation English (age 0-12) / Motivation English (today)</b> – (rating 1-6) Matilda = 4/6 Viktor = 3/3 Dennis = 6/5	To confirm and see if they could elaborate on what motivates them and how they view the English language in general. Motivation can after all affect their performance, willingness and effort they put into projects and learning in general.
Matilda (nr.20)	You expressed in your survey that Swedish was difficult to learn as you moved to Sweden, but that things became easier as your family started to speak more Swedish at home... a) Could you please elaborate on what became easier? b) Would you say that exposure and the usage of Swedish at home was the key to further development (ages 0-12)?	To verify and determine if the growing exposure and usage of Swedish at home affected their Swedish acquisition and development.  To verify and see the situation of what language/s are spoken at home for the participant.

	c) Did you continue speaking Arabic at home or was it only Swedish? Maybe a mix? (ages 0-12)	
	<p>You state in your survey that possessing many languages can be confusing and makes a learner weaker at languages and leads to mixing...</p> <p>a) Arabic and Swedish caused confusion and mixing... How has English been (ages 0-12)?</p>	To verify and elaborate about their confusion and mixing. This question is more focused if English has been part of the confusion.
	<p>How would you describe your English language development journey during ages 0-12?</p> <p>a) Has it been confusing?</p> <p>b) Has it been difficult or easy?</p> <p>c) How would you compare it to Swedish?</p>	<p>To verify and elaborate on their English trajectory.</p> <p>To compare English and Swedish trajectory and development.</p>
Viktor (nr.36)	<p>Could you tell me about your mentioned quote of “English was considered the ‘kids time’”?</p> <p>a) Do you mean it was a language you used with your friends during school or free time?</p> <p>b) Or was it considered a language you just learned at early school life (elementary)?</p>	To elaborate further on his comments on the survey about English being ‘kids time’. What does it mean? Tied to exposure and extramural English?
	<p>You moved to Sweden in 2018...</p> <p>a) Around how old were you then?</p> <p>b) How has your acquisition/learning of Swedish been when moving here? Has It been tough, easy?</p> <p>c) Did you need any help with learning Swedish? If not, would you have needed it?</p> <p>d) Do you think your English helped you with your school life in Sweden?</p>	<p>To confirm at what age they moved to Sweden and to see if their acquisition of Swedish was difficult.</p> <p>To see if they needed and/or received any help with learning Swedish at a foreign country.</p> <p>Furthermore, to observe if their English might have helped with integrating into the Swedish school system.</p>
	<p>You mentioned in the survey that “it would be harder to ‘master’ a language if you are being ‘bombed’ with other words in the other languages” and that you mixed words when speaking Swedish.</p> <p>a) Could you please elaborate?</p>	The purpose is to obtain another point of view and if they see multiple languages in both positive and negative ways. Perspectives matter.
	Too many languages may cause confusion, but do you think there may be anything positive for being exposed to many languages?	
Dennis (nr.43)	I was unable to find your national English 5 exam grade, if you remember what you got, would you mind sharing it?	This is to complete the data that I was unable to collect. It will reserve a purpose during the results and analysis section.
	<p>You have in possession a lot of languages according to the survey (Russian, Swedish, English, Ukrainian, Laki and later, French).</p> <p>a) Have you ever thought or felt that it is challenging with so many languages?</p> <p>b) Are any of the languages easier than others?</p>	<p>Verify that the participant possesses all those languages and checking their proficiency.</p> <p>To see if the quantity of languages have been overwhelming in some way.</p>



	<p>You mentioned in your survey that you had dyslexia...</p> <ul style="list-style-type: none"> <li>a) Do you think that it has affected your English language development? (specifically at the ages 0-12)</li> <li>b) Do you think it has affected any other languages (such as French) or perhaps other subjects such as mathematics, biology or sociology (samhällskunskap)?</li> </ul>	<p>To determine if dyslexia has affected his English acquisition and other subjects. This can provide an interesting point-of-view that can be discussed further within the degree project.</p>
	<p>You mentioned in your survey that you believe that if you “more likely to learn however, you only learn if you can interact directly”...</p> <ul style="list-style-type: none"> <li>a) Do you mean that it is important to use and be exposed to English (or any other language) to further develop it?</li> <li>b) Do you think the same applies to preserve and keep your language?</li> </ul>	<p>To see how the participant views on the concept of exposure leading to development. And to see if they determine exposure to be vital to also preserve a user’s language.</p>
	<p>Just to doublecheck...</p> <ul style="list-style-type: none"> <li>a) Did you write your survey with your phone?</li> <li>b) Did you have enough time, or did you rush through it?</li> <li>c) Do you remember your National Exam 5 Grades and would you be willing to share it?</li> </ul>	<p>To verify if his grammatical errors in his survey were indeed grammatical errors based on English proficiency or that they just wrote it fast without spell-checking.</p> <p>To complete the data that I was unable to collect. It will reserve a purpose during the results and analysis section.</p>

# Appendix D

Henry Kolari – [henry.kolari@hotmail.com](mailto:henry.kolari@hotmail.com)

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## Multilingual Upbringing – Factors affecting ELA

### Who I am

My name is Henry Kolari, a student at Stockholm University studying the Upper Secondary School Teacher Programme within the subjects of English and Geography. I am currently performing a research project with primary data directed towards upper secondary school pupils.

### What the project is about

I am currently conducting research on the topic of multilingualism and upbringing. What I am seeking to determine is if quantity of languages present during learner's upbringing (childhood) affects the acquisition (development) of the English language. This project will be acknowledging other languages too, however, it is primarily focused on the English language. An additional research goal is to determine if there are other factors that may affect English language acquisition (development) by observing and analysing the participants' other languages.

### What participation involves

The participation will be in the form of a semi-structured interview. The interview will take about 20-30 minutes. With your consent, I will audio record and transcribe the interview. In the unlikely event that sensitive issues should come up in the interview or for any other reason, you can ask to stop the recording.

Your participation is voluntary, and you can withdraw from participating at any time.

### What will happen to the data

The data will be used within the research paper as case studies to determine whether the quantity of languages present during upbringing (childhood) may affect a learner's English language acquisition (development). Additionally, the data can be used to reinforce and/or create arguments about topics and factors that may affect language acquisition and English language acquisition.

All names, collected data and more will remain anonymous so not to reveal your or anyone else's identity. Pseudonyms (fake names) will be used when mentioning any real names.

The information you provide will be handled with care. The recordings will be kept in a safe space and will be deleted after the conclusion of the project in line with GDPR.

### Contact details

For any further questions, please don't hesitate to email me at: [henry.kolari@hotmail.com](mailto:henry.kolari@hotmail.com)

Supervisor: Josep Soler Carbonell - [josep.soler@english.su.se](mailto:josep.soler@english.su.se)

## Appendix E

Noteworthy Survey Cases (excluding the 3 interviewees)			
Participant Number & Class:	English National Exam Grade	Self-evaluated English Proficiency (converted mean)	Noteworthy Upbringing Observations:
3 – A	1 (E)	4.705	Possessed three languages: Italian (family), Swedish (family) and English (exposure). Italian was confusing, since it was only used by their mother. It became stressful as he was unable to stop thinking about his ‘Italian education’ and dropped out of learning it through the school subject ‘Modersmål’.
5 – A	3 (C)	4.847	Possessed five languages: Kurdish (family), Arabic (family), Swedish (lives in Sweden), English (exposure) and Turkish (lived in Turkey for a year). Participant considered themselves to be quick learner and became quickly fluent with four of the languages. They had no real difficulties with learning so many languages but acknowledges the potential struggles. He states that a learner should learn as many languages as possible, but it should not be continued if they fall under pressure and face learning difficulties.
9 – A	3 (C)	4.42	Possessed two languages: Swedish (family) and English (family & exposure). The participant started to speak English at an early age (age 5) since they were exposed to it since birth. Exposure for English came through extramural activities, but also through his parents. He wanted to get better and that led to his parents speaking more English with him at home.
39 – B	1 (E)	3.707	Possessed two languages: Mongolian (family) and English (exposure & English club). The participant got to learn later Chinese, Swedish, Japanese and a bit of Spanish. She learned English through an English club that was held four days a week in Mongolia. She also states that “I think the multiple languages could be beneficial for their language development during their childhood. Because their brain is still growing and they are child so it is quite easy to learn new things.”.
48 – C	3 (D)	2.71	Possessed three languages: Dari (family), Hindi (exposure) and Pashto (exposure). The participant

			did not consider herself to be exposed to English within the ages 0-12. Although, occasionally, she would be exposed to it, but she never actively acknowledged or learnt it during that span.
52 - C	Missing	3.56	Possessed one language: Arabic (family). The participant had a monolingual upbringing and was not exposed to English until after the ages 0-12. She states that there were language learning difficulties with writing and reading (did not state which language/s). She further explains how she never received any help with those difficulties and had to both endure and learn herself.

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