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# What influences a bilingual child's simultaneous language acquisition? 

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To my parents, who had the foresight and the courage to embark on a journey to an unknown land with three toddlers. To my family, spread across the globe, for their love and support.

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### 1.1 Introduction

In today's international world, where higher rates of personal mobility can be observed, there is an increasing number of intercultural marriages and households (Wilczek-Watson, 2017). Consequently, there is an increasing number of children growing up in bilingual environments, some even inhabiting a country that provides them with a third language. Although there are already several theories surrounding the phenomenon of bilingualism, it is an academic field that is still relatively new, and, at times, this phenomenon is even taken for granted or regarded as happening effortlessly and naturally for bilingual individuals. A more personal motive that has incentivised this study is my own experience growing up with four languages (Spanish, English, French and German) from the age of eleven. Having profited from a very enriching, polyglot upbringing has led me to want to discover more about this area of knowledge and provide information for others.

Based on these motives, my dissertation will address the topic of bilingualism in children and teenagers (spanning an age range of 0-18 years old). Specifically, it aims to determine how a child's ability and willingness to learn and speak two or more languages is affected by factors found in the language itself, in the home environment, and in social contexts. The purpose of this dissertation is to provide more information regarding a topic that is becoming ever-more relevant and important in our society, with the hope of providing a better understanding on how bilingualism in children is affected by the factors mentioned above. It is a topic that I believe is not only of interest for bilingual families but would also bring value to society in general as well as to the field of research in sociolinguistics, amongst others.

My hope is that the conclusions drawn from my dissertation will aid parents in better understanding the possible linguistic scenarios that can occur when raising a child in a bilingual household. Indeed, it could also help all those involved in other social areas of a child's life, having gained more knowledge on the influences that a child's social environment can have on their language learning. Lastly, another endeavour I have with this dissertation is that bilingualism be regarded not as a naturally occurring phenomenon but instead as a complex process of trying and learning which may require patience but is, in my opinion, indisputably very worthwhile.

### 1.2 State of the issue and theoretical framework

### 1.2.1 Bilingualism: a definition

It is hard, if not nearly impossible, to settle on a single definition for bilingualism, and the main reason is that, just as each language is a living, developing entity, bilingualism remains "a dynamic, rapidly developing field" (Hyltenstam \& Obler, 1989:1). Nevertheless, numerous attempts have been made to define it: in 1933, Bloomfield stated that bilingualism "resulted from the addition of a perfectly learned foreign language to one's own, undiminished native tongue" (Bhatia \& Ritchie, 2004:8). Unfortunately, Bloomfield neglected to give a concrete definition of what he meant by "perfectly learned". Weinreich opted for a broader definition, declaring bilingualism as being "the alternate use of two languages" (Bhatia \& Ritchie, 2004:8), a definition which leaves room for us to question whether a person who, for whichever reason, does not make use of a second language for an uncertain period of time, thus becoming a temporarily dormant language, can still be referred to as a bilingual individual.

The dilemma of trying to define bilingualism is not at all surprising considering the myriad of different bilingual scenarios that can occur and the scope of the influence that languages have in shaping even how we perceive reality, as was once believed due to the Sapir-Whorf hypothesis (Al-Sheikh Hussein, 2012). Moreover, "the language of a given society reflects the needs of that society" (Tokuhama-Espinosa, 2001:71), thus we can say that languages form an integral part of our everyday lives and our interpersonal relationships. Nonetheless, the definition that I feel best defines the matter at hand whilst also reflecting its complexity is the following:
"Bilingualism refers to the phenomenon of competence and communication in two languages..." (Lam, 2001:93)

In my opinion, despite the research dedicated to its study and the extent of the literature that has been published, to this day, bilingualism remains a phenomenon which has the potential to evolve and the inevitability of it being experienced in a different way for each bilingual individual and household.

### 1.2.2 Bilingualism in young children: language acquisition

As touched upon previously, one of the complexities of bilingualism lies in the fact that there are endless possibilities to the types of bilingual scenarios and situations that can occur. These are influenced, among other factors, by the language combinations, the use of each language, the length of time that a family has spent living abroad as a way of exposing the child to a foreign language...etc. Thus, the way in which a child acquires a language can also happen in numerous ways. It is important to notice too that the degree of bilingualism is never static: a 'dormant' language can be reactivated at any point in a person's lifetime, even in adulthood, and simply because a certain language was more dominant throughout an adolescent's years does not mean that it will remain so throughout their entire life. As Harding-Esch and Riley put it: "dominance in childhood can in no way determine patterns of dominance as an adult" (Harding-Esch \& Riley, 2003:45).

Nevertheless, despite the numerous different scenarios, bilingualism, in terms of language acquisition, can be classified into two types: simultaneous and successive. In 1987, McLaughlin defined simultaneous bilingualism as those scenarios where a child is exposed to two languages between birth and the age of three, and successive bilingualism as those scenarios where a child is exposed to a second language after the age of three (Barnes, 2006).

Once a child starts learning and speaking in the two languages, what can occur is that the child will begin to mix the languages in their speech. Whilst this is something that can, understandably, cause initial concern in the parents, it is deemed a necessary, almost positive, stage of language acquisition. In other words, mixing is "a normal part of being a bilingual and interacting with other bilingual speakers" (Byers-Heinlein \& Lew-Williams, 2013:101). When helping a child learn two languages simultaneously, there are techniques that can be applied to aid the child to differentiate the two, such as the one-parent one-language technique (Ronjat, 1913), which can help the child distinguish the two languages, associating each language to a parent or person. Although this theory has been long disproved and is deemed "neither necessary nor sufficient for successful bilingual acquisition" (Byers-Heinlein, 2013:99), it is still used by parents as a way of ensuring equal exposure to each language, given that "relatively balanced exposure to the two languages is most likely to promote successful acquisition of both of the languages" (Byers-Heinlein, 2013:100).

When considering what can motivate, dissuade, aid, or prevent a child from learning a language, there are multiple factors that come into play beyond the strategies and actions that
can be done. To address these factors in a more narrowed and concise way, I chose to focus on the influence of three factors in particular: the complexity and prestige of each language, the parents' attitudes and actions regarding the languages, and the influence of social contexts the child may be exposed to (school, extracurricular activities etc.).

### 1.2.3 Influences of language characteristics on language acquisition: prestige and complexity

A factor that cannot be neglected is that of the prestige of the language. When a language is well reputed and regarded highly, a child may well be more motivated to learn that language, or at least there will be a greater interest from a second party for the child to learn said language. On the contrary, "a lower-status ethnic language is at risk not to be learned or to be later forgotten, especially when the ethnic language receives little attention in school" (Dixon \& Zhao \& Quiroz, 2012:544). This is due to the fact that "the prestige with which dialects are regarded in a particular community may influence the acquisition of a new dialect" (SurekClark, 2000:259), hence we should be aware of how we regard and behave towards languages and dialects in our communities and societies.

Another factor intrinsic to the language is the complexity of the language. We can assume that those languages that are found to be more complex to learn will result in a child obtaining less proficiency in those languages over others. It should be mentioned that learning any language is already challenging in itself but in the case of learning a language which is very different from our native language, the process will be even harder, as I will explain in more detail further on. Curiously, when a child is acquiring two languages simultaneously, the similarities in phonology between the two languages will result in the child taking longer to distinguish and separate the languages (Unsworth, 2013).

### 1.2.4 Influences of the home environment: parents' attitudes and actions

It should come as no surprise that a rather significant influence in the learning of a language for children is the attitudes with which the children and those who they model, such as their parents, regard a language. As Colin Baker puts it: "in the life of a language, attitudes to that language appear to be important in language restoration, preservation, decay or death" (Baker, 1992:9).

It is not only the attitudes towards the languages themselves but also the attitudes and replies with which the parents react to their child's use of language. When a child makes a mistake or indeed code-mixes when speaking, the way the parent reacts can have a significant influence. For example, if a parent reacts in a way that shows the child they have understood despite the code-mixing, the child will be encouraged to carry on code-mixing and thus foment a bilingual communication which, according to Lanza (1992), is effective when the child is 2 years old. Directly linked to attitudes are our actions, given that attitudes are defined as "a hypothetical construct used to explain the direction and persistence of human behaviour" (Baker, 1992:10). In other words, the way we look at languages will direct the way we act with each language, and therefore our attitudes and actions in regard to a language should be carefully considered when determining the way languages are dealt with in the home. The parents' linguistic choices and interaction strategies (deciding whether to speak to a child in two languages or in only one language) influence a child's use of language (De Houwer, 1999). Indeed, "parental language use is assumed to be the most influential factor on a young child's language choice and bilingual development before school age" (Mishina Mori, 2011:3123).

### 1.2.5 Influences of social contexts: school and social environment

Given that "language learning takes place only in a social milieu" (Hoff \& Shatz, 2009:88), we cannot disregard the importance and the influence that social contexts (i.e., school, extracurricular activity groups, neighbours...) can have on a child's ability and willingness to learn and speak two languages. Of course, this factor entails a much more complex structure than what I hope to delve into with the present study. Nonetheless, it is self-evident that a social group has a powerful role in a child's learning of a language. The group may provide very clear rules on symbolic meaning and do so repeatedly till the child learns the new vocabulary. Indeed, when talking to babies, mothers and caretakers tend to alter their speech and talk in 'motherese' (also known as 'parentese' (Dominey \& Dodane, 2004) or infant-directed talk), which has been deemed to aid in language acquisition (Kemler Nelson et al., 1989). This is one of the reasons why language acquisition seems to be easier at a younger age, given that children receive a greater language input than adults may do. The child's environment can also provide them with a social interaction which can regulate their communication and aid them in language learning (Verga \& Kotz, 2013).

However, at the same time, the social environment can also be a factor that impedes the retention or learning of a language, especially in the case of minority languages, to which the child is normally exposed to only in their home environment. This belief is supported by Nyikos, who states:

Because children's cognitive development and concomitant growth in new vocabulary typically occurs most intensively in school, the language of the school quickly dominates [...]. In this dynamic evolutionary linguistic flux, the norm is for the native language to be rapidly supplanted by the dominant language (Nyikos, 2014:21).

Parents who see this occurring should take care to consciously expose their child(ren) to the minority language as equally as they are exposed to the dominant language, perhaps doing more activities with the language at home or attending extracurricular activities in which they interact with others in the minority language.

### 1.3 Objectives and questions

The main goal of my dissertation was to determine what influences a bilingual child's willingness and ability to learn and speak two or more languages in order to better understand the process of language acquisition in bilingual children. To reach this goal, my objectives were to research into the different influential factors, focusing on three main areas:
a) intrinsic factors of a language such as perceived prestige and complexity;
b) factors that can be observed in the home environment of the child, such as the influence of the parents' interests and attitudes towards the languages, as well as the actions made to learn the languages;
c) external factors such as the different social contexts where each language is used, e.g., school, extracurricular activities.

These factors were chosen taking into consideration the areas that most influence a child from the ages of $0-18$, the social context gaining more influence as the child grows up, and the majority languages (languages spoken in their school and social spheres) having more impact than the minority languages (languages spoken at home or with relatives), as previously mentioned. The particular age range ( $0-18$ years old) was chosen for this study because it is in
this age range that an individual has a greater facility to acquire a language, as opposed to adulthood, according to the Critical Period Hypothesis, a hypothesis which states that "there is a limited developmental period during which it is possible to acquire a language [...] to normal, nativelike levels. Once this window of opportunity is passed, however, the ability to learn language declines" (Birdsong, 1999:1). It should be clarified that this theory does not deny the possibility of an adult learning a language and becoming proficient in it. It merely defends the idea that "there is an incremental decline in language learning abilities with age" (Byers-Heinlein K., 2013:102) and therefore, parents would be well advised to use this window of opportunity present at a young age, especially considering that "when a child is exposed to a language [...] he is making connections in his brain which can be retraced later in life to actually speak that language" (Tokuhama-Espinosa, 2001:18). Nevertheless, for those who are motivated to learn a language, learning can happen at any age (Gardner, R. C., \& Lambert, W. E., 1959).

Prior to conducting my study, I had already formed various initial hypotheses based on my own experience and on conversations with people who are also involved and experienced in this field. I believed that, in regard to the influence of language prestige, a language with a greater prestige, or a language that is deemed more 'useful' in comparison to others (whether it be because it is spoken worldwide or because it is a gateway to professional opportunities in a country which has a strong economy), would be acquired by children with greater ease since they would generally have a greater interest in learning and speaking it. A language that does not have prestige and instead is received with a negative attitude will mean a child might be less willing to learn and speak it. Of course, since language prestige is a very subjective concept, it is likely to vary across different cultures and countries. Indeed, the way we look at a particular language in one country may possibly not be at all similar to the way in which that same language is regarded in a different country. In my opinion, it would not be surprising to find that people in Germany, for example, would be very keen to learn English, as it is the lingua franca and thus may be regarded highly amongst Germans, whereas in England, people may not be as eager to learn German, given that the German language is considered as a 'cold' language (an opinion which, due to my family ties with Germany, I do not support) and also perhaps due to the influence of the history between the two countries.

Similar to the influence of language prestige, a language that is deemed as being 'complex' would mean a child would find it more difficult to achieve greater proficiency in said language and would therefore be less keen to learn the language. I realise that 'language complexity' is
also a rather subjective concept, and thus I would like to now clarify what I mean by it. From my viewpoint and understanding, the 'complexity' of a language is dependent on the following factors: firstly, a language can be objectively more or less complex, i.e., harder to learn, understand and speak, depending on its grammar. An example is the definite article: if we compare English with its one definite article, which has no gender, ('the'), with German, where there are three definite articles, one masculine, one feminine and one neutral ('der', 'die', and 'das'), or four if we include the plural although it is the same as the definite article for the singular feminine ('die'), we can see where people may begin to think one language is more complex than the other. Another example is the number of cases: German has four (nominative, accusative, dative and genitive) which may seem many at first but, in fact, pales in comparison with the 28 noun cases in Hungarian, or 17 noun cases, if you use Antal's formal criteria (Kiefer, 1987). Phonetics also plays a significant role in the learning and speaking of a language, especially in the case of Asian languages, such as Chinese or Korean. Given the subtle art of the intonations in these languages, they could be considered as 'complex' by a person who is more accustomed to the phonetics of European languages. A third influential factor is the number of similarities or disparities between languages (be it between two languages that are being acquired simultaneously or between a native, first language and a second language). Languages that belong to the same families will share similarities in vocabulary and grammar, as is the case between French and Spanish, which are both romance languages within the Indo-European language family (Tokuhama-Espinosa, 2001:83). These similarities will result in the second language seeming 'easier' to learn, since the new words and the sentence structures are not too different from the ones in the native/first language, or between the two languages that a child acquires simultaneously.

The influence of a child's home environment is rather considerable, especially in the first years. The different factors present in the home environment would range from the parents' attitudes towards a language (directly influencing the way in which the parents act with the language and therefore the amount and type of exposure to the language that a child receives) to the activities that the parents engage in with the child as a way of facilitating language learning and language retention. I hypothesised that, naturally, all these factors would influence a child's learning ability and willingness considerably, and that in a household where both languages are regarded as equally important, and both receive the same amount of attention, a child would want and be able to acquire both languages.

Finally, I believed that the social contexts (school, extracurricular activities, situations where the child and a parent find themselves in a monolingual situation) would be influential in a child's learning of the language, since they could provide them with the chance to learn and practice, acquiring also social cues and social skills. If the context facilitates and encourages the learning of a language, we can deduce that a child would be likely to learn and speak that language.

It should be clarified that this dissertation focused on families where both parents each have their own native language and have therefore chosen to raise their children in a bilingual environment. The case of immigrant children, who are forced to flee their country, sometimes without their parents, and have to, by means of pure necessity as opposed to by choice, acquire the language of their host country is a case that goes beyond the scope of what this dissertation aims to research in terms of the political and psychological aspects of these particular scenarios. By saying this, I do not wish to suggest that the research in this dissertation has no application or use in these scenarios. On the contrary, in the case of factors such as language prestige and the environments the children grow up in, this research could serve to show how important it is to be aware of the value given to each language and the language use in differing social contexts, and how these influences should be taken into consideration in the case of migrant children and refugees.

I would also like to point out that this research could be equally as useful for those families where the parents share the same native language but the family lives in a country where the language is different from that of the parents. This scenario results in the children growing up with two languages from birth, if they have been born in said 'foreign' country, or in growing up with two languages from a young age, in those cases where the family moved to the foreign country a few years after the children were born. Whilst the findings from my dissertation would be applicable, or at least useful, to these cases, I chose to not focus on these scenarios, as I preferred to narrow the studies to families where the parents do not share the same native language, and thus, regardless of the country they live in, the children are, so to say, 'predisposed' to becoming bilingual.

A final disclaimer that I would like to state is that this dissertation focuses on the social aspects of language learning and speaking and does not touch upon the neurological aspects of this ample field of study. A neurological, or indeed a psychological, standpoint, despite drawing
my interest and curiosity, is one that I believe requires more depth of study and is somewhat out of reach in terms of the focus of my career.

### 1.4 Methodology

In order to conduct the research for this dissertation, the methodology I used was divided into two parts. The first consisted of an observation of material relevant to the topic that had already been published. For this, I started by reading The Bilingual Family, a book written by Edith Harding-Esch and Philip Riley, which provided a very useful introduction to the topic and an understanding of some of the main theories regarding the subject. Once I had a solid foundation and had begun to form my initial hypotheses, I started looking into publications in scientific journals, focusing on the main theories touched upon in the book to explore them deeper. I also examined other theories that I discovered from other, prominent authors in the field. Later on, as a way of delving deeper into the field of my research, I read a second book, titled Raising Multilingual Children, written by Tracey Tokuhama-Espinosa. This second book allowed me to explore the process of language acquisition further, looking into factors such as the windows of opportunity, as well as the influence of language aptitude, motivation and even siblings. It also gave me an insight into topics beyond, yet still relevant to, my area of research, for example, how the multilingual brain functions and the effects of languages on the left and right brain hemispheres.

The second part of my methodology when conducting my research was in the form of a survey that served as my primary source of research. When designing the surveys, I decided to make two surveys, one in Spanish and a second one in English, with the aim of aiding the respondents when answering the questions. Both surveys, although in different languages, had the same questions, and the results from both were then combined for my analysis. The survey was aimed at parents with the profile of each having their own native language, thus resulting in a bilingual home and in the children being raised as bilinguals from birth. As I have already explained, although I had the chance to, I chose not to include the profile of monolingual parents living in a foreign country as part of the target audience for the survey since I wanted to examine solely those scenarios where the children receive different language inputs from each parent and are therefore predisposed to becoming bilingual from birth. Among the questions explored in this survey were the language combinations, the children's attitude towards each language, the
influence of personal interests on the learning of a language, the use that is given to each language etc. This primary research formed a vital role in determining whether my original hypotheses were correct or not by helping me gain an insight into the different multilingual scenarios that can and have occurred. It also was very useful in acquiring other interesting and added feedback from the parents who chose to include comments as well as providing answers.

### 1.5 Analysis and discussion

As part of my research, I conducted a survey in Spanish and a survey in English, both with the same questions, directed at parents who were raising or have raised their children bilingually. Combining both surveys, I obtained thirty-eight replies. The first few questions served to give me a profile for the children of the respondents (age, gender, language combination etc.). The ages of the children ranged from $\mathbf{0 - 1 8}$ years old, and some were over 19 years old ( $23.7 \%$ ).

What ages do your children have?

¿Qué edad tienen sus hijos? (Marque cuantas apliquen).
24 responses


In terms of gender, it was almost equal, as shown by the graphs below.

¿Qué géneros?
24 responses


The results obtained on the question regarding the language combinations were rather interesting. From a broader standpoint, it was no surprise that the most common languages selected were English, Spanish, French and German, but what I found particularly intriguing were the specific combinations, which varied across the individual replies.

¿Cuál es la combinación de idiomas con la que han crecido sus hijos? (Marque cuantas apliquen). 24 responses


When I looked at each of the replies individually, I found that several people ( $13.2 \%$ in total) answered that their children had a combination of three languages (English/Spanish/French or Spanish/English/German). There were three replies that had four languages in their combination: English, Spanish, French and German, however this only occurred in the cases of children aged over 19. The fact that this type of language combination constituted such a
small percentage of all respondents surprised me, perhaps due to my biased preconception of this combination being more common than it actually is.

In regard to the question about whether the children had spent time abroad, the answers ranged from summer vacations to living in various countries for extended periods of time (for example, Spain for twenty years; UK for eight years; Bangladesh for four years; Zimbabwe for four years; Brazil for four years; Japan for four months... the list continues). As well as the diversity of the countries the children have lived in, what intrigued me in regard to this question was seeing that 'only' $50 \%$ of all the respondents claimed that their children had spent time abroad, living in a 'foreign' country. Of course, this seems natural when you consider that having a parent for each language at home means it is not strictly necessary to travel to the country where that language is spoken in order to be exposed to the language. Besides, I cannot deny that uprooting an entire family and moving to another country, where the family has to adapt, is not an easy task, although, in my mind, bilingual families are the families best suited to do so and to succeed in it. We can also consider that perhaps some of the respondents were not too clear on what I was asking in the survey. Nonetheless, I found it intriguing that, despite growing up with several languages from birth, only half of the families have exploited the opportunity of furthering the children's proficiency in the languages by spending time abroad.

Other notable answers in the introduction of the survey were those relating to the age from which the children had been exposed to the languages. It was no surprise that the majority replied "from birth" or from a young age. In three out of the eight cases where the children grew up with more than two languages, however, the parents had chosen to take a more sequential approach, as opposed to a simultaneous language acquisition approach. For example, in the case of a DE/ES/EN/FR ${ }^{1}$ language combination, the children had been exposed to German and Spanish from birth, then to English from the age of three and finally to French from the age of five. There was also another notable reply which claimed the child had been exposed to the language "before they were born", which gives way to the very interesting topic of the influence of languages heard by the baby in the womb on language acquisition. Certain studies ${ }^{2}$ have been made on this topic and it seems that "the fetus can hear and remember language sounds even before birth" (May et al., 2011) and in the case of bilingual

[^0]children, "Byers-Heinlein, Burns and Werker (2010) [...] observe that newborn infants exposed to bilingual speech in utero demonstrated the ability to discriminate between the two languages spoken by the mother during pregnancy" (Unsworth, 2013:4).

A very common theory or occurrence in bilingual children is that of code-mixing, as touched upon previously in this dissertation, which takes place when the child is learning to separate both languages in the initial stages of language acquisition. This theory was supported by the replies in the survey, with the majority ( $86.8 \%$ ) stating that this had happened to their children.

Have your children ever mixed two languages together (e.g. used two languages in the same sentence)?

14 responses

¿Alguna vez han combinado sus hijos los dos idiomas (ej. han usado ambos idiomas en la misma frase)?
24 responses


One parent made a comment later on in the survey that is relevant to this question:
I found the code-switching phase quite interesting, when my son would express certain concepts (affection, hunger) in German, embedded in Spanish utterances. [He/She] clearly related certain concepts or situations to me/German and would just include
them. I also think [...] bilingual children develop two different sets of vocabulary, one in each language, and only at a later stage do they start acquiring synonyms in both languages. In fact, we took my son to do psychological testing on recommendation of his primary school teacher, who perceived a lack of vocabulary in Spanish, but the test results clearly showed an over average range of vocabulary - it just did not correspond $100 \%$ to what the teacher expected.

I would first like to clarify a slight difference in terminology, given that the respondent brought up the word "code-switching". Whilst the terms code-switching and code-mixing may well be used ambiguously, according to the material that I have read, there is a slight difference that I would like to point out. The term code-switching refers to the use of two languages in the same conversation, at times even in the same sentence. This is a very interesting phenomenon which happens often amongst bilingual individuals capable of communicating in both languages and who make a conscious choice to change the language they are speaking in. This occurs because the child may find they can express themselves, or indeed a certain concept, better in a particular language, as is the case of the above reply, or because they associate the language with a particular person or scenario. Code-mixing, as I understand it, refers specifically to the initial stages in a child's language acquisition, when they are learning to separate and distinguish the two languages and thus, they may mix two languages, sometimes within one word. Children who grow up with two languages will "initially treat their language systems as a single unit" (Tokuhama-Espinosa, 2001: 22), i.e., they will treat both languages as one single language and only later on will they begin to separate them, which explains why a bilingual child will use both languages when speaking.

The second part of the comment above, where the respondent talks about their child's range of vocabulary and the child having to undergo a test by recommendation of his teacher, who thought he had insufficient vocabulary, indicates a broader issue in regard to bilingual children. It shows how we are still unaware of what the process of simultaneous bilingualism in young children looks like (how it works, what the implications are...) and that we are also still very naïve in our way of approaching and encouraging it. Claiming that a child growing up with two different sets of vocabulary and codes has a lack of vocabulary in any language is, to my mind, hardly the way to help a child to speak a language.

The phenomenon of code-mixing is linked directly to that of children creating a language of their own. According to the replies, however, this second phenomenon is not as common as I expected. Both surveys combined, only 28.9 \% of respondents claimed that they had seen this happen, and it had occurred either when their children started speaking or between the ages of two to three years old. In one particular case, it happened between twins, but the parent claimed that this is normal for twins, whether they be bilingual or not. The majority of respondents claimed that it was not so much a language that their children created as odd words that their children made up. One parent claimed that their 6-year-old son "creates many words on a daily basis".

Have your children ever created a language of their own? If so, please specify at what age this occurred.
14 responses


Another theory I had was that language acquisition can be influenced by gender, since it is generally believed that girls are more skilled in languages than boys, especially at a young age. There was one case where a parent stated that their daughter had never mixed two languages in one word, but their son did so frequently. Nonetheless, the results from the surveys generally refuted this belief, with 94.7 \% replying that gender did not influence code-mixing nor creating a language or odd words.

Related to the two previous questions, do you think this is influenced by gender?
14 responses


En relación con las últimas dos preguntas, ¿opina que esto está relacionado con el género? 24 responses


In the case of the language prestige and complexity as an influential factor for language acquisition, prior to the survey I believed that the greater the language prestige, the greater the interest would be to acquire that language, and in turn, it would be easier for a child to acquire a language with greater prestige. However, the replies indicated that language prestige does not affect a child's willingness to speak a language, with the majority ( $68.4 \%$ ) disagreeing with my hypothesis.

Do you think that your children's attitude towards a language and willingness to speak it is affected by the prestige of the language?
14 responses

¿Cree que las actitudes de sus hijos hacia los idiomas y su disposición para hablarlos se ve afectada por el prestigio de dichos idiomas?
24 responses


Linked to the prestige of the language, I also believed that a language with less prestige would perhaps cause the child to feel embarrassed or ashamed to speak it, especially in contexts outside of the home or in front of someone who is not a member of their family. This belief was also refuted by the replies form the surveys, the majority ( $78.9 \%$ ) claiming their children had not felt nor shown shame or embarrassment about their native language in a social context outside the home environment. When contrasting the two surveys, though, it was interesting to see that there was a considerable difference between those who responded to the survey in English and those who responded to the survey in Spanish. Of the former, 35.7 \% claimed their children had felt ashamed or embarrassed but, in the latter, only $12.5 \%$ claimed the same. This points to an interesting contrast in the relationship that bilingual children have with their native
languages, and how it may be influenced by whether they grow up in households and countries that have a Spanish-speaking or an English-speaking culture.

Have your children ever shown/felt shame of their mother tongue in a social context outside of the home?
14 responses

¿Alguna vez sus hijos se han mostrado avergonzados por su lengua materna o paterna en un contexto social fuera del hogar?
24 responses


Although those who claimed their children felt ashamed of their language presented a minority, this minority cannot be neglected. It was no surprise to see that the children who did feel ashamed of their native languages did so at a young age, ranging between ages three to seven, or ages eight to twelve. One particular answer, however, was rather impacting: there was one parent who replied that at ages three to four, their son "would throw a tantrum when I spoke to him in German in public". Even more worrying is how "later at the Instituto, some of his classmates would call him 'the Nazi'". Although this response came from a parent whose child is now aged over nineteen years old, and therefore we can assume that this particular scenario happened a while ago, it is still very powerful and represents a harmful situation, raising the question of how the concept of bilingualism is regarded nowadays and what can be
done to avoid situations where people may be discriminated against for speaking a foreign language. This is particularly important in the case of children, especially considering the respondents claimed that those who felt ashamed or embarrassed of their native language felt it between the age range of three to twelve, as previously mentioned.

Prior to conducting the survey, I also believed that a more complex language would discourage a bilingual child from learning the language, hence they would choose to speak one language instead of another, even despite understanding it perfectly well. As previously mentioned, to my understanding, the complexity of a language, whilst it is a very subjective matter, can be determined and influenced by factors such as the grammar and phonology, as well as the level of similarity between two languages, depending on whether they belong to the same language family or not (see pages 7-8 for more detail). The replies to this question varied once again between the English and Spanish surveys, with the majority of the replies to the former stating Yes ( $71.4 \%$ ) and the latter opting for No ( $58.3 \%$ ). It therefore seems that in a household where English is a native language of one of the parents, the children are more reticent towards using a certain language in spite of being able to understand it and speak it, whereas in a Spanish household this does not seem to occur as often. This disparity between the two surveys raises an interesting question as to how the culture of each language and the approaches of the parents may have influenced the attitudes that children have towards a certain language and how they use them. Combining both surveys, however, we can determine that the majority ( $52.6 \%$ ) claimed their children chose not to speak a language despite understanding it perfectly well, proving the theory I had prior to conducting the survey.

Have your children ever chosen to not speak a language despite understanding it perfectly well and being able to speak it?
14 responses



The replies as to why the children choose to speak one language over another were somewhat less surprising: stubbornness, laziness, simply not wanting to, one language is more comfortable or is easier to speak, and so as to not offend or upset those around them who did not understand the language. There were more worrying replies which were on the lines of: not wanting to seem different or be seen as different to other children or stand out amongst their peers, due to shyness or insecurity or perception of a lack of competence in one language... I had a particular theory, perhaps rooted in my own bias derived from finding it easier to express myself in English than in Spanish, which led me to think that children will choose to speak in a certain language because they feel it is more adequate for what they are trying to say, or because it allows them to express themselves better. This theory, although supported by all the replies to the English survey, was refuted by 29.2 \% of the replies to the Spanish survey. I found this rather interesting and, having had the time and the resources available, I would have liked to explore this particular question in more detail, segmenting the individual cases and perhaps even interviewing the parents who replied to the survey in Spanish, in order to understand why they did not agree with this particular idea. It could perhaps be that living in a Spanish-speaking country, the children have grown up surrounded by the language and therefore have an extensive vocabulary with which to express themselves, and, thus, they have no trouble expressing themselves in Spanish. It is also interesting to see, nonetheless, that the majority of respondents ( $81.6 \%$ ) did claim that their children changed the language they spoke in because they found it more adequate for what they were trying to say or found it easier to express themselves. Looking at the answers individually, it is particularly intriguing to see that this occurred for children aged four to eight, but not in the case of most children aged zero to
three or over nineteen. It may well be that those aged over nineteen do not change languages to express themselves better because they are fluent in both languages and therefore can express themselves in either language without any problems. Those aged zero to three are likely to not yet have sufficient vocabulary or to not feel the need to find a way of expressing themselves better. Based on these results, we could also say that, in the case of those aged four to nineteen, changing between languages forms a part of language acquisition, and that, even at this young age, children perhaps realise that languages can be used as tools for communication, and sometimes making use of two provides them with a richer form of communication.
¿Alguna vez sus hijos han elegido hablar en un idioma en lugar de otro porque les pareció más fácil expresarse en ese idioma/les pareció más adecuado para lo que querian decir?
24 responses


Have your children ever chosen to speak in a certain language because they found it easier to express themselves or they thought the language ... more adequate for what they were trying to say? 14 responses


In order to investigate the influence of the home environment, I first asked what actions have been used at home to foster language learning. I was rather pleased to see that reading was one of the most popular actions ( $94.7 \%$ of the respondents claimed they used this activity), closely followed by watching cartoons and visiting relatives who speak the other language.

¿Qué se ha hecho en casa para que los hijos aprendan los idiomas?
24 responses


In regard to other approaches towards language learning in the home environment, my theory was that most parents would choose to adopt the one parent one language strategy so as to aid the children in separating the two languages. For this question, it was interesting to see how it varied between the English and Spanish surveys once again. In the former, the majority ( $64.3 \%$ ) opted for the choice of language depending on the context or situation and the
latter indicated that the majority ( $54.2 \%$ ) chose to adopt the one-parent one-language strategy. This difference in approaches from English and Spanish speaking parents and households is something I find quite intriguing, and it makes me wonder once again how each language and culture affects the decisions that the parents make in regard to the language use and language acquisition approaches. Given that the majority of English respondents claimed the language use depended on the context or situation, I would have liked to obtain more details in this respect, in other words, have inquired into which language in particular was used in which contexts or situations and why. It could be assumed that the reason why Englishspeaking parents avoided speaking only in English to their child is because perhaps the English language is already present in other areas of the child's life, for example in school, and therefore, in order for the child to receive equal exposure to and interaction with the two languages, both parents use both languages. In the Spanish survey, there were also $16.7 \%$ who claimed both parents would speak in both languages to their children, regardless of the context or situation. As well as asking myself why parents chose to do so, this raises the interesting question of whether this is in fact beneficial for the child's language learning or not. As is shown later on, one of the reasons that parents opted for the one-parent one-language strategy was so that the children had the opportunity to learn a language from a native speaker. It is possible that both parents speak both languages at native-speaking levels, however, in the case of parents who do not speak at a native level, I question whether the child would benefit from this or whether this would have a counterproductive effect on their learning. Indeed, as Tokuhama-Espinosa writes: "parents, caregivers, or even teachers who are not competent in a certain language and who expose children to grammatical and syntax errors will pass along this lack of language understanding to the children around them" (Tokuhama-Espinosa, 2001:56). Despite the difference in results from the surveys, when we combine the two, we can see that those who opt for the one-parent one-language strategy make up 47.4 \%, which I find rather surprising, having assumed, as previously mentioned, that the parents would want to adopt this strategy in order to aid their children in acquiring and separating the two languages.

Does each parent ever only speak to the children in their native language/do both parents speak in both languages to the children?
14 responses


Yes, each parent only speaks in their native language to the children.
No, both parents speak both languages to the children.
Varies depending on the context/ situation.
¿Cada padre habla en un solo idioma a los hijos o ambos padres hablan en ambos idiomas a los hijos?
24 responses


Sí, cada padre solo habla en su idioma a los hijos.
No, ambos padres hablan en ambos idiomas a los hijos.
Varía según el contexto / situación.

Nonetheless, those who did claim they opted for the strategy gave the following reasons for doing so: one parent was not able to speak the other language; it seemed the most natural/appropriate thing to do; as a matter of accuracy and helping avoid interferences; many replies said that the parents had read/had been told it was the best way for the child to learn and distinguish both languages; to help children identify each parent to a language and thus avoid confusion; so that the weaker language would not get lost (German/Spanish combination living in Spain, the mother chose to speak to the children in German)... Another reason mentioned, which I had not considered, was so that the child would listen to the language spoken by a native person, and one particular reason that I appreciated went as follows: "so that the language formed part of the affective relationship and of their identity". This comment shows that the parent is aware of, and gives attention to, the importance and the influence of languages, making a conscious effort to integrate them as part of their child's
upbringing so that they can, in turn, become a part of the child's identity and the relationships.

Those who chose both parents speaking both languages did so out of convenience, and those who felt the language choice was influenced by the context gave the example of switching to another language when someone else who does not understand the language is present. Another reason for changing was according to the use of language (when disciplining the children, one parent claimed they used German instead of English). Other notable answers to this question went as follows:

I speak Arabic only when I am alone with her. When I am around people I switch to Spanish, probably out of politeness. I regret having done so, when I learnt (from a bilingual family) that you should stick to your language (that of weaker exposure) no matter what in order for the kids to use it.

Another parent commented:
In general, each parent speaks in their language to the children, following a 'from the heart' language model. However, each parent will also speak to the children in the other parent's language in contexts where it is easier to communicate a specific idea, generally associated with the culture or with a concept that is difficult to translate or inexistent in the other language.

Akin to the comment further above, these two observations show how the parents are actively concerned with their child's bilingual upbringing and try to make sure they can acquire both languages, especially in an authentic "from the heart" manner. However, these comments also show that bilingual upbringings are an area where there is still a lot to learn ("I regret having done so, when I learnt...") and which is often subject to many influential variables ("...will also speak to the children in the others parent's language in contexts where it is easier to communicate a specific idea...").

It did not surprise me to see that in both the Spanish and the English surveys, the majority of parents ( $71.1 \%$ ) claimed that both they and their partner were capable of speaking each other's languages. However, it should not go unnoticed that there are still 28.6 \% (English) and 29.2 \% (Spanish) of cases where one parent cannot speak the other parent's language. It is interesting to see how, in spite of providing rather different results for other questions, for this particular question both surveys gave very similar results. I believe it would be very worthwhile
to analyse each of these cases individually in order to see the reasons for why these parents were not able to speak their partner's native language (something which would most likely be influenced by the age the parents had when they met and the language combination itself. Understandably, it would be more complicated for a couple who, for example, had met both aged around thirty and had a German/Chinese or Spanish/Arabic language combination, to learn each other's languages than it would be for a couple who had met aged twenty-one and had a Spanish/French or German/English language combination). Having had the time and the resources available, I believe it would also have been rather interesting to investigate into how a parent being unable to speak their partner's language influences the child's language learning in the home environment. Perhaps, in the case of a household where one parent cannot speak one of the languages, the child would have no other choice but to code-switch constantly and use both languages, and this could perhaps aid in their practice of both languages and thus in their bilingual language acquisition. Alternatively, it could perhaps also complicate communication between the parents and the child and therefore discourage the child from speaking one of the two languages.

Are both parents able to speak in each other's languages? 14 responses



A second theory I had based on the parents' influence on language learning is that the parents' interests, hobbies or occupations would be reflected in their children's vocabulary, e.g., an English-speaking parent who likes playing football with their children would mean the children acquire vocabulary in English relevant to the world of football. The replies showed yet another disparity between the two surveys, the survey in English supporting my hypothesis with 85.7 \% stating Yes, but the survey in Spanish refuted it, with 54.2 \% stating that they had not seen their interests and hobbies reflected in the vocabulary of their children. This could be explained by the fact that the Spanish-speaking parents, who perhaps are living in Spain, do not pay as much attention to this phenomenon because, since they are in the country where their native language is spoken, they do not find it unusual or do not notice that the child has vocabulary in the Spanish language, whether it be relevant to the parent's interests or not. Those who responded to the survey in English but might also be living in Spain, may notice that their child uses a certain set of words or certain vocabulary in English because they realise that their child has picked it up from them, being one of, presumably, few sources of English. Combining both surveys, however, we can see that around $60.5 \%$ of respondents claimed they had indeed seen an influence of their hobbies and interests on the vocabulary of their children. The examples that were given for these cases were as follows: father is an engineer and so the son (of three years) has an extensive technical vocabulary; the children have a great interest in literature and read and express themselves in five languages; vocabulary relevant to the kitchen; song titles and names of instruments in English; sports vocabulary; vocabulary relevant to vehicles learnt from their father; videogame vocabulary relevant to videogames the parents play; vocabulary relevant to nature and animals as an influence from their father, music culture,

IT... One particularly notable response to this question was that "the vocabulary learnt by the children depends on the use and the enthusiasm on the part of the parents", which I feel showcases very clearly the powerful influence that the parents' attitudes towards a language can have on the children's language learning.

Have you noticed your own personal interests and hobbies reflected in the vocabulary of your children?
14 responses

¿Ha notado sus propios intereses y aficiones reflejados en el vocabulario de sus hijos?
24 responses


A question in relation to the social factor that interested me was whether the children were exposed to a third language in their school and extracurricular contexts. The vast majority ( $92.1 \%$ ) of the replies stated that the language spoken at school and in extracurricular activities was one of the two languages spoken at home. Still, there were $12.5 \%$ of replies in the Spanish survey that indicated these contexts did give them the chance to practice a third language. Having had the time and the resources available, I would have liked to explore this matter in more detail, inquiring into these third languages, the reasons for why the parents chose to
expose their child to a third language and whether anything was done at home to aid the learning of this third language.

In terms of the language use at home, I believed that each language would be used separately for different purposes. This theory comes perhaps from my own upbringing, where English and French were used for schoolwork, whereas Spanish and, later on, German were used for speaking informally around the dinner table or with family members over the phone. However, the majority (a combined $71.1 \%$ ) stated that both languages were used in all scenarios, regardless of the activity being done. Having said this, we cannot neglect the fact that around 28.9 \% of respondents claimed they choose to assign a language to each different scenario or activity in the home, which shows how the parents made conscious efforts in their approaches to language acquisition for their children. It would be interesting to further explore into whether separating the languages in this way is beneficial for the child or not: on the one hand, it would help the child to separate the two languages in the initial stages but, on the other hand, assigning a language to each scenario could also perhaps result in the child acquiring more vocabulary in particular languages for given topics, for example, more academic vocabulary for the language used for schoolwork and more informal, everyday words in the language used around the dinner table.

At home, are each of the two languages used for different purposes/activities (e.g. one language when doing schoolwork and another when sat together eating)?
14 responses


Yes, we use languages interchangeably according to the activity (schoolwork, visiting family, having friends over etc.)
No, both languages are used in all scenarios, regardless of the activity being done.
¿En casa, se usa cada uno de los idiomas para cosas diferentes (ej. un idioma para el trabajo escolar y otro idioma para cuando todos están juntos cenando)?

Sí, cambiamos de idioma según la actividad que estemos haciendo.

- No, se usan ambos idiomas en cualquier momento, independientemente de lo que estemos haciendo.

Lastly, in relation to the influence of the social contexts on the language acquisition, I believed that in monolingual situations, the parents would feel the need to change to the language spoken by everyone present, as opposed to carrying on a conversation with their children in a language spoken and understood only between them. I am aware that this is something that will vary according to the specific situation and even perhaps the size of the room or the relation that the children have to the people present. It is a matter that I find very interesting, and I believe that these situations can not only help a child acquire the language, but also provide a learning moment in social interaction depending on the attitude and actions adopted by the parent. I was relieved to see that the majority (a combined $60.5 \%$ of respondents) claimed that they did indeed change the language they were speaking to one understood by all those present, and yet it was interesting to see a disparity once again between the surveys: the survey in English had 78.6 \% claiming they changed, whereas in the survey in Spanish there was a tie between the two answers. It is true that, as mentioned above, the choice taken in this regard may well vary according to a range of factors in each specific scenario (for example, one parent commented later on in the survey that the choice of language use in these situations depended on whether they were familiar with the person present or not), and yet I find the disparity between the surveys, especially in this question, to be very interesting and hinting, perhaps, at differences in the mentality and approach to languages between English-speaking and Spanishspeaking individuals. Perhaps, as stated before, those who answered to the survey in Spanish live in countries where Spanish is the native language and therefore, those parents do not need to 'change' to a language understood by all those present since they are already speaking the native language. We could maybe also state that, historically, there has always been a greater
diversity of languages present in England than there has been in Spain, and this may have influenced how the British behave towards other languages and people who do not speak their native language. This is clearly demonstrated by a parent's comment in the English survey: "now, I tend to carry on speaking in Arabic, and I only change the language if this would come across as rude".

Do you speak to your children in your native language in monolingual situations even though others won't understand you (e.g. in a lift with a n... you swap to the language that is undertood by all? 14 responses


We carry on speaking in the language only we understand as a family.
We change to the language that is understood by all those present.
¿Habla a sus hijos en su lengua materna o paterna en situaciones monolingües a pesar de que otros no les puedan entender (ej. en un ascensor ...) o cambian al idioma que todos puedan entender? 24 responses


One parent added a comment which I feel cannot go unnoticed. They said that "both children show a special interest in languages and cultures and that, when describing other children, they will usually include what language(s) they speak". Another comment I would also like to include is the following:

Over the years, they have shown an interest in learning other languages (French, Portuguese and German). They are open-minded and far-sighted, interested in and respectful of other cultures and their personalities have been influenced to a certain extent by their varied linguistic input.

For me, this comment summarises the key benefits of growing up as a bilingual child and exposing children to several languages and cultures. Through a multilingual upbringing, individuals are likely to not only grow more mindful of other languages and cultures and be interested in exploring them, but also each of these cultures will enrich their personality and add to the experiences they will have. From my personal standpoint and experiences, I can say that growing up with four languages from the age of eleven has brought me a myriad of advantages. Among many others, I have been able to meet diverse personalities and experience different lifestyles, each with their own ways of working, socialising, and leading daily life, which have made me capable of adapting to any culture and environment. I have been able to explore the richness of each language and appreciate the subtle nuances and melodies unique to each, which are too often lost in translation. I have seen beyond the stereotypes and prejudices and felt the warm embrace of a German home during Christmas. But perhaps best of all is the fact that, after living with these four languages and cultures for the past twelve years, each one has forged my own, interwoven identity: an identity that was born Spanish, grew up British, picked up French and German along the way, and finally became a merging of different worlds and a collection of memorable moments.

Ever since I saw it hung on a wall in the MFL department of my secondary school, I have never been able to forget a quote by Nelson Mandela. It reads: "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his own language, that goes to his heart". It would be difficult for me to tell you which is my "own language", but I believe that there is no greater benefit to learning a language that being able to speak to others in a way that reaches their heart.

### 1.6 Conclusions and suggestions

Given that the vast majority of parents denied that language prestige had an influence on their children's learning of the language, we can perhaps eliminate this as an influential factor in
language acquisition for bilingual children, at least in the context of my survey. However, considering that the majority did claim their children chose to speak in a particular language despite being spoken to in another language or in an attempt to better express themselves or because they thought the language to be better suited for what they wanted to say, we can determine that the complexity of the language has a certain influence on a child's speaking of the language and, consequently, their learning of said language.

From the research in the survey, we can also conclude that the parents' hobbies and interests do have an impact on the language learning of the children, helping them to acquire a more extensive vocabulary in the parents' areas of interest and expertise. It was also interesting to see how highly 'visiting relatives' ranked as one of the activities that parents did to aid the children in learning and practising a language. This should be taken into account, considering that those children who perhaps do not live as close to their relatives are likely to not have the chance to speak in that language and this will have an impact on their learning of the language. It is a factor that is especially significant when we consider that, according to a study made by Professor Patricia Kuhl, where American babies were exposed to Mandarin for a period of twelve sessions, it is only through human interaction that babies are able to start acquiring a language. In Kuhl's words "it takes a human being for babies to take their statistics" (Kuhl, n.d.).

In regard to other activities and efforts made by the parents at home, we can say that, according to my results, the one-parent one-language technique remains a popular strategy amongst a considerable number of bilingual households. It was also interesting to see that the majority of the reasons for opting for this strategy were based on facilitating language acquisition, for example, so that the weaker language would not be lost and so the children heard the language being spoken by a native person, amongst others. As well as this strategy, there were a significant number of parents among the respondents who also even decided to change the language according to the activity being done at home, as opposed to using all languages in all scenarios. Whether separating languages according to activities be either beneficial or detrimental to language learning in bilingual children is something that should be explored further, but the matter still remains that parents will go to considerable efforts at home to aid their children in acquiring two languages simultaneously. Having said this, something that surprised me was the number of parents who claimed to be unable to speak their partner's language. Ideally, I would have explored each individual case in more detail in order to understand the reasons for this, given that this is another factor that I believe should be taken
into consideration in the area of the influence of the child's home environment on their language acquisition.

In terms of the influences of the social contexts outside the home in which children are exposed to the languages, it was interesting to see how several respondents claimed these contexts provided their children with a third language, but the majority replied that the language spoken in school as well as extracurricular activities were one of the two languages at home. It would be interesting to research into scenarios where families, who have two languages at home, live in a country which offers the children a third language. Furthermore, whilst the majority of the parents claimed that their children had neither felt nor shown shame of their native language in social contexts outside of the home, I feel that some of the feedback provided, which refuted this idea, cannot be disregarded: the idea that some children changed the language they were speaking in for "fear of seeming or being perceived as different by others or by their peers" is something that clearly showcases the very powerful impact of the social environments on a bilingual child's willingness to speak a language and in turn the effect on their language acquisition. An environment that is not as accepting towards one of the two languages that the child speaks at home will most likely prevent the child from gaining practice in said language and, in extreme cases, may even lead the child to not want to speak the language at all, regardless of the context and the people they are surrounded by. The question of what language to speak in monolingual situations is also very influential given that, according to how the parent handles the situation, the child may gain a valuable lesson in social cues and respecting others, or they may instead be confused because of the language change and could be led to think that they should not speak a certain language outside of their home.

What surprised me the most from this survey and my research was seeing how it is still rare to have more than two languages in a language combination for children growing up in a bilingual household. It was only those parents with children over nineteen years old who replied that their children had four languages in their linguistic combination. This surprised me because I had the preconception that, in the past ten years, the concept of bilingualism, and indeed multilingualism, had evolved and more households would now have more languages, such as mine, where we had four languages at home from the ages of ten and eleven. With this in mind, I believe it would be interesting to conduct this research drawing answers from people of other nationalities and especially in countries where it is perhaps more common for the children to be exposed to more languages from a young age, for example countries such as Switzerland (with four official languages) and Belgium (with three official languages). I also
think it would be very worthwhile to extend the areas of research and the factors investigated to include socioeconomic and psychological factors as part of the factors influencing language acquisition in bilingual children, factors which go beyond the scope of my work, but which nonetheless remain pertinent to this topic. As previously mentioned, I would also have liked, had I had the time and the resources available, to conduct a more detailed research, perhaps interviewing some of the respondents of the survey directly with the aim of gaining more extensive feedback, especially from those families who provided anomalous cases, or which surprised me by providing information that I had not previously considered. For this research, it would also have been highly beneficial to have conducted research in the form of a focus group, given that this would have enabled me to explore each individual situation in more detail as well as commence a dialogue amongst parents of bilingual children, and this, undoubtedly, would have been a very interesting and instructive conversation.

### 1.7 References

Al-Sheikh Hussein, B. (2012). The Sapir-Whorf Hypothesis Today. Theory and Practice in Language Studies 2(3), 642-646. DOI: 10.4304/tpls.2.3.642-646.

Baker, C. (1992). Attitudes and language. Multilingual Matters Ltd.
Barnes, J. D. (2006). Early Trilingualism: A Focus on Questions. Multilingual Matters Ltd.
Bhatia, T. K. \& Ritchie, W. C. (Eds.). (2004). The Handbook of Bilingualism. Blackwell Publishing Ltd.

Birdsong, D. (Ed.). (1999). Second language acquisition and the critical period hypothesis. New Jersey, USA: Lawrence Erlbaum Associates, Inc. DOI: 10.4324/9781410601667.

Byers-Heinlein, K. \& Lew-Williams, C. (2013). Bilingualism in the Early years: What the Science Says. Learning Landscapes 7(1), 95-112. DOI: 10.36510/learnland.v7i1.632.

De Houwer, A. (1999). Environmental factors in early bilingual development: The role of parental beliefs and attitudes. In G. Extra, L. Verhoeven, A. Adrianus (Eds.). Bilingualism and Migration (ed. pp. 75-95). Berlin, Germany: Mouton de Gruyter. DOI: 10.1515/9783110807820.75.

Dixon, L. Q., Zhao J., Quiroz B. G., Shin, J. (2012). Home and community factors influencing bilingual children's ethnic language vocabulary development. International Journal of Bilingualism 16 (4), 541-565. DOI: 10.1177/1367006911429527.

Dominey, P. F. \& Dodane, C. (2004). Indeterminacy in language acquisition: the role of child directed speech and joint attention. Journal of Neurolinguistics 17, 121-145.

Gardner, R. C., \& Lambert, W. E. (1959). Motivational variables in second language acquisition. Canadian Journal of Psychology, 13(4), 266-272. DOI: 10.1037/h0083787.

Harding-Esch, E. \& Riley, P. (2003). The bilingual family - a handbook for parents. Cambridge University Press.

Hoff, E. \& Shatz, M. (Eds). (2009). Blackwell Handbook of Language Development (ed.). Blackwell Publishing Ltd.

Hyltenstam, K. \& Obler, L. K. (Eds.). (1989). Bilingualism across the lifespan. Aspects of acquisition, maturity and loss (ed.). Cambridge University Press.

Kemler Nelson, D. G., Hirsh-Pasek, K., Jusczyk, P. W., \& Cassidy, K. W. (1989). How the prosodic cues in motherese might assist language learning. Journal of Child Language, 16 (1), 55-68. DOI: 10.1017/S030500090001343X.

Kiefer, F. (1987). The Cases of Hungarian Nouns. Acta Linguistica Academiae Scientiarum Hungaricae. 37(1/4), 93-101.

Kuhl, P. (n.d.). The linguistic genius of babies. [TEDxRainier video]. Retrieved from https://www.ted.com/talks/patricia_kuhl_the_linguistic_genius_of_babies?language=en

Lam, A. (2001). Bilingualism. In R. Carter \& D. Nuna (Eds.). The Cambridge Guide to Teaching English to Speakers of Other Languages (pp. 93-99). Cambridge University Press. Lanza, E. (1992). Can bilingual two-year-olds code-switch?. Journal of Child Language 19 (3), 633-658. DOI: 10.1017/S0305000900011600.

May, L., Byers-Heinlein, K., Gervain, J., Werker, J. F. (2011). Language and the newborn brain: does prenatal language experience shape the neonate neural response to speech? Frontiers in Psychology, 2, 222. DOI: 10.3389/fpsyg.2011.00222.

Mishina-Mori, S. (2011). A longitudinal analysis of language choice in bilingual children: The role of parental input and interaction. Journal of Pragmatics 43(13), 3122-3138. DOI: 10.1016/j.pragma.2011.03.016.

Nyikos, M. (2014). Bilingualism and family: parental beliefs; child agency. Sustainable Multilingualism 5, 18-40. Kaunas, Lithuania: Vytautas Magnus University. DOI: 10.7220/2335-2027.5.1.

Ronjat, J. (1913). Le développement du langage observé chez un enfant bilingue. Paris, France: Librairie Ancienne H. Champion.

Surek-Clark, C. (2000). Dialect acquisition and prestige. Current Work in Linguistics 6(3),259-267.

Tokuhama-Espinosa, T. (2001). Raising Multilingual Children. London, UK: Bergin \& Garvey.

Unsworth, S. (2013). Current Issues in Multilingual First Language Acquisition. Annual Review of Applied Linguistics, 33, pp.21-50. Cambridge University Press. DOI: 10.1017/S0267190513000044.

Verga, L. \& Kotz, S. A. (2013). How relevant is social interaction in second language learning?. Frontiers in Human Neuroscience, Vol 7, pp550. DOI:
10.3389/fnhum.2013.00550.

Wilczek-Watson, M. (2017). Intercultural Intimate Relationships. The International Encyclopedia of Intercultural Communication. New Jersey, United States: John Wiley \& Sons Inc. DOI: 10.1002/9781118783665.ieicc0058.


[^0]:    ${ }^{1}$ Abbreviations according to the ISO 639-1 code, an international code of languages whereby languages are abbreviated using two letters. In this particular case, for example, DE/ES/EN/FR stands for German/Spanish/English/French. https://www.loc.gov/standards/iso639-2/php/code list.php ${ }^{2}$ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5611858/\#R1 https://www.sciencedaily.com/releases/2017/07/170718084600.htm

