## Bilingual Families: <br> Parental Motivation in Children's Minority Language Acquisition



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#### Abstract

This article reports on a study that addresses the following question: To what extent does the motivation of the parents affect the minority language acquisition of their children, and do other aspects such as beliefs on bilingualism and the child's intelligence and personality play a role? Data through qualitative interviews and a quantitative survey were collected from four families with nine children who spoke at least 2 languages on a frequent basis at home. The results show that the children in these families all had high levels of proficiency in their majority language, but had various levels of proficiency in their minority language. The differences in the level of proficiency in the minority language mostly correlated with the level of motivation the parent showed, except in one case where a parent with a high level of motivation had a reversed effect on the child. Parental beliefs and attitudes on the minority language also showed a considerable effect on the level of proficiency of the children, along with the child's personality. The One Parent, One Language approach appears to be the most effective approach to teach children their minority language.


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## Chapter 1, Introduction

Cross-linguistic romantic couples have been on the increase in recent decades. A high number of people cross borders for different reasons, such as lower airline fares, opportunities to participate in an exchange programme, and open borders. These aspects make it easier for people to settle in another country with someone from a different cultural and linguistic background (Hua, 2013, p. 60). When these intercultural couples decide to start a family, the question arises in which language the children will be brought up. Often the language of the country of residence will become the dominant language (Jisa, 2000, p. 1363). This is the language to which the child is most often exposed, for example at school and with friends. Acquiring their dominant language is often not a challenge for the children; however, a second first language might not come as natural.

While many factors can influence the development of a minority language, the only environment over which a parent has control is the home (Nyikos, 2014, p. 19). The parent is responsible for the amount of exposure to a minority language within the home. Their task is to make sure the child becomes familiar with the minority language and maintains that language. García (2003) agrees: "It is clear that the family unit and the home domain will remain important in language maintenance efforts and research" (p. 24). The role of the home environment in language acquisition and language growth is one that has been studied far too little, even though the importance of these surroundings is so great. Nyikos (2014) states that strategies and planning on the part of the parents is not enough for a child to acquire and maintain their minority language. These strategies should be "coupled with parental investment in the relationship they have built with their children, as well as the ease, frequency and quality of communication they have established and nurtured over the years" (p. 19).

This BA thesis aims to explore a number of factors that might influence a child's acquisition of a second language, and focusses mainly on parental motivation. Previous
research on raising bilingual children did not fully disclose the role and effect of parental motivation on the matter. A possible explanation for the lack of data on the matter might be because they choose to research more obvious factors in relation to bilingualism, such as the child's environment (De Houwer, 1999), language maintenance (García, 2003), language disorders (Genesee, 2004) and language mixing (Jisa, 2000; Mishina 1999). This paper will shed a light on the niche of parental motivation in raising bilingual children. Aside from motivation, this study will also focus on the effect of the child's personality and intelligence as a factor in the language acquisition, along with the parental beliefs and attitudes towards bilingualism.

The contents of this thesis consist of a theoretical framework in which past research on childhood bilingualism will be brought to light, followed by the niche in this past research in which this study will take place. The theoretical framework will be concluded with this study's research question and hypotheses. This is followed by a methodology and an interpretation and an analysis of the qualitative and quantitative interviews results. In this section, the results will be compared to each other to find patterns within and between the families. This study concludes with a discussion of the results where suggestions for future studies will be proposed and ends with a conclusion in which the research question will be answered. These are accompanied by an appendix, which contains the transcribed interviews and the results of the qualitative interviews.

## Chapter 2, Theoretical Background

Previous research on child bilingualism has provided a large body of evidence which supports the claim that simultaneous acquisition of two or more languages can be qualified as a case of multiple "first language" (L1) acquisition (Meisel, 2007, p. 495). According to Tucker (1998), there are probably as many bilingual children in the world as there are monolingual children (p. 3). Many of these simultaneous bilingual children are proficient in both languages when they reach the age of three but shift dominance sharply towards the majority language, which is typically the language of schooling and the language of the country of residence (Genesee, Paradis \& Crago, 2004, p. 3). Additionally, they state that most of these children may not end up being bilingual adolescents and adults, as these children are the offspring of so-called "linguistically mixed marriages" (p. 3) in which each parent speaks his or her native language to the child. However, one language is not frequently used outside the homeenvironment. This kind of situation is labelled as "family bilingualism" (p. 3-4), which is where the focus of this study lies.

A criterium for the participants of this study was that the children had to be under the age of 13 , before the onset of puberty (see Methodology, p. 11). This criterium was put in place as the Critical Period Hypothesis (Lenneberg 1967) suggests that there was a particular critical period during which young children might easily develop a language. The hypothesis has been criticised since its early existence, and more recent studies confirm that the original viewpoint of the Critical Period Hypothesis has been too strict (Baker, 2014; DeKeyser, 2000; Krashen, 1973; Long, 1990). However, the criterium for the age of the participants is still used for this study. Even though aforementioned previous studies have shown that a language can be successfully acquired after puberty, the fact is still that after puberty, the brain slows down the process of second language acquisition (SLA) significantly (Baker, 2014). Baker adds that advances are possible later in life if they have not occurred earlier. He adds that a second language can be successfully acquired from birth or in retirement years (p. 127). Even
though Baker rejects the Critical Period Hypothesis, he admits that there are often "advantageous periods" (p. 128). He states that developing an L2 while in pre-school and primary school is advantageous for a child, as it creates an early foundation for SLA and many more years ahead for that language to mature.

### 2.1 Parental beliefs and attitudes towards bilingualism

De Houwer (1999) has extensively researched the influence of the parental beliefs and attitudes on bilingualism and their attitudes towards minority languages on the acquisition of a child's minority language. She points out that in childhood bilingualism (both simultaneous and sequential), parental beliefs and attitudes "impact the child language use, but the child's language behaviour and attitudes also influence the parental stances and language decisions" (De Houwer, 1999, p. 9). This verifies that she believes the child and the parent influence each other and thus, the influence does not always come from the parent. She additionally explains that "negative [parental] attitudes to a particular language will keep some bilingual speakers from using that language with their offspring" (p. 8). Burton (1994) acknowledges this and notes that in a study she conducted, she found that bilingual women may quite deliberately decide not to use one of their languages with their children. She believes that this is because they often associate the language with a way of life that they do not wish to maintain. On the other hand, positive parental attitudes towards a language can also motivate parents to actively use that language within their household. However, it is not only the parental attitudes towards a language that influence the development of the minority language in their children: the parental attitude to bilingualism in general plays a large part too, de Houwer claims (p. 8). A negative attitude of the parents towards early simultaneous bilingualism may cause the parents to initially limit their child's exposure to only one language (De Houwer, 1999, p. 9). Baker (2014) argues that "children tend to reflect parents'
attitudes, behaviour, expectations and beliefs. A positive parent tends to breed a successful child" (p.30). These findings confirm that a positive parental attitude towards the minority language is crucial for a child to successfully acquire their minority language, the same way that negative parental attitudes hinder the language acquisition of their offspring. This leads to this study's first subquestion: Are the beliefs and attitudes towards bilingualism of the parents of any significance for the acquisition of a child's minority language?

### 2.2 The influence of the child's intelligence and personality

Just as some children learn to walk earlier than others, bilingual children develop at different speeds in their bilingual development. Baker (2014) states that the speed of language acquisition is only partly due to the child's ability: "There is generally little relationship between how quickly someone learns to speak one or two languages and eventual school success" (p. 29-30). He explains that the child's intelligence is not a large factor in their minority language acquisition, moreover, other factors such as "adequate encouragement, practice and a stimulating environment for language growth" (p.30) influence the language acquisition of young children more than intelligence. He concludes with the claim that most children "find the acquisition of two languages relatively straightforward, painless and effortless" (p. 30) and are thus "designed" (p. 31) to acquire two languages, without any interference from their level of intelligence.

In addition, Baker clarifies that a child's personality does not influence the rate of development of a child's minority language. He acknowledges that personality differences between bilinguals and monolinguals exist, but claims that "they will be due to other factors than language" (p. 84). Many researchers contradict this view, claiming that different personality variables proved the influence on language learning processes, such as shyness
(Hamayan et al., 1977), discomfort and risk-taking (Ely, 1986), and extraversion and introversion (Dörnyei, 2005).

The literature mentioned above implies that a child's level of intelligence should have no significant effect on the minority language acquisition of the child. In addition, researchers disagree on the level of influence of personality traits on minority language acquisition. To verify or contradict the findings of previous studies, the following subquestion will be answered in this study: Are the intelligence and personality of the child of any importance in the acquisition of a child's minority language?

### 2.3 Parental motivation in different teaching methods

Little research has been conducted on the influence of parental motivation on a child's acquisition of a minority language. However, different approaches are used by parents to teach their children their minority language, and within this study, some have proven to be more successful than others. Some of these teaching methods require more parental motivation than others. The One Parent, One Language (OPOL) method is one approach in which the parents should be invested for it to be successful (Baker, 2014, p. 13). One parent speaks one language to the child; the other parent speaks the other language. Baker supports this approach, naming a few advantages such as: "learning two languages from birth; reducing fears of language mixing in children; and each parent being a good role model of language for the child" (p. 13). In addition, he argues that "such children not only learn to speak two languages but also retain, at least, an understanding of both of their languages for life" (p. 13). This is obviously only true for children who are successfully bilingually raised. However, the POL-approach requires a high level of motivation from both parents, as they need to be very consistent in speaking only their designated language to the child.

Another effective approach to raising bilingual children is the Minority Language at Home (MLaH) approach. Parents who use this approach only speak their minority language at home, and rely on the environment (school and friends) to teach their children the dominant language, which in most cases is the language of the country of residence. This approach requires significantly less motivation from the parents, as the child's minority language is in these cases often the majority language of the parents. This approach does not require both the parents to be native speakers of the designated language. A disadvantage that comes with this approach is that the children often do not speak the country's majority language before they start school. However, children at that age often have no difficulty at picking up an additional language from their environment (Malavé, 1997, p. 18).

To conclude, previous studies on bilingual children often neglect to include the influence of parental motivation in their children's minority language acquisition. Therefore, this study's research question is as follows: To which extent does the motivation of the parents affect the minority language acquisition of their children, and do other aspects such as beliefs on bilingualism and the child's intelligence and personality play a role?

### 2.4 Hypotheses

This study hypothesises that the main factor in the proficiency of the children in their minority language is indeed the motivation of the parents, as they are solely responsible for the amount of exposure to the minority language within the home environment. In addition, another hypothesis which reflects on the subquestions, is that other aspects such as the child's personality and the child's level of intelligence are of importance too, however, they will be of less significance than the parental motivation.

## Chapter 3, Methodology

### 3.1 Sample

Four bilingual families with varying backgrounds, dominant languages and countries of residence participated in this study. The participants selected were required to have two or more children under the age of 13 to fall under the Critical Age Hypothesis. An exception has been made in the case of the oldest child of the Norwegian family (Mats, age 17) for participation, however, in the interview the parents were asked to only mention any problems or developmental issues that happened before the age of 13. Any problems that occurred after, have been discarded to obtain authentic results. The majority language refers to the dominant language of the children, which is in all cases the language of the country of residence. Table 1 shows a condensed overview of the main characteristics of the four participating families. The elaborate version of the families' characteristics can be found in appendix A (p. 32)

## Table 1

Characteristics of the four participating families

|  | Family 1 | Family 2 | Family 3 | Family 4 |
| :---: | :---: | :---: | :---: | :---: |
| Date of interview | 22 May 2017 | 23 May 2017 | 26 May 2017 | 28 May 2017 |
| Type of interview | Face-to-face | Face-to-face | Skype | Skype |
| Language of the interview | Dutch | Dutch | English | English |
| Children and their age | Mats (17) <br> Oscar (13) <br> Hedda (8) | Liam (8) <br> Neil (6) | $\begin{aligned} & \text { María (4) } \\ & \text { Ángela (3) } \end{aligned}$ | $\begin{aligned} & \text { Julia (8) } \\ & \text { Marco (4) } \end{aligned}$ |
| Country of residence | Norway | The Netherlands | Spain | Italy |
| Languages spoken at home | Dutch and Norwegian | Dutch and English | Dutch and Spanish | Italian and English |

### 3.2 Instruments

To measure the level of proficiency in both the majority and minority languages of the children, the parents were asked to assess their children's level of proficiency. This method of assessment might pose a problem for the validity of the results, as the parents might have a prejudiced view on the progress of their offspring. Thal, Jackson-Maldonado \& Acosta (2000) and Dale, Bates, Reznick \& Morisset (1989) all conducted research on whether parent report is a valid method of assessing their child's language acquisition. Both studies found results which provided strong evidence of the validity of parental assessment of their children. With the use of qualitative interviews and quantitative surveys was in this study to optimise the results. By attempting to create a conversation with the participants rather than making it feel like an interview, guideline questions were developed. These questions had the purpose of making sure that no aspects were left out or forgotten, and to keep the tone of the interview light and conversation-like. For this reason, a few interviews were conducted in Dutch, as that is the native language of the interviewees. The interviews were later translated in the transcript (appendix A, p. 32) The method of a qualitative interview was chosen to gain more insight into the problems and advantages that come with raising bilingual children, in addition to giving the participants undivided attention. These qualitative interviews create the opportunity to ask the participants to elaborate on certain questions and to steer the interview in a certain direction if needed. Additionally, a quantitative survey was conducted at the end of each qualitative interview to gather more specific results so comparison within the family and between the families would be easier. The survey was created to support the data which was gathered through the qualitative interviews. The questions were developed and prepared beforehand and the interviews were conducted face-to-face and through Skype. For each interview, a recording device was used so that the interviews could be transcribed afterwards.

The questionnaire (appendix A, p. 32) consists of the following: (a) the family's country of residence, (b) the languages spoken at home by the mother, the father and each child, (c) the family members' ages and citizenships, and (d) the child's personality and level of intelligence (as assessed by the parents). These questions were then followed by open questions that were tied to the research question: (a) what methods of teaching the minority language they use, (b) their goal for their children's level of proficiency, (c) rating their own level of motivation in bringing up their children bilingually, and (d) if their children have different levels of proficiency in their majority/minority language. In addition, the parents' (a) beliefs on bilingualism, (b) attitudes towards the dominant and minority language, and (c) thoughts on the influence of the child's personality and intelligence on language acquisition were questioned. The survey conducted at the end of the interview (appendix B, p. 49) consisted of thirteen questions, using a Likert-scale, and were filled in for each child individually. The questions in the survey can be categorised into four constructs, testing: (a) the child's level of proficiency in their dominant language (2 questions), (b) the child's level of proficiency in their minority language (5 questions), (c) parental motivation (4 questions), and (d) the child's motivation (2 questions). For each child, an average was taken for each category to create an uncluttered overview. These averages were put in table 2 (see results, p . 14)

### 3.3 Data analysis

The results are organized according to the research questions and subquestions. To ensure the family's privacy, the families will be referred to as Family 1 (F1) to Family 4 (F4). When quoting the parents, they will be referred to as Dad Family 1 (DF1) to Dad Family 4 (DF4) or Mom Family 1 (MF1) to Mom Family 4 (MF4).

## Chapter 4, Results

The found results can be categorised into four subsections which are tied to the subquestions and research question. In the following subsections, I will address (a) the beliefs and attitudes towards bilingualism and the minority language, (b) the child's personality and level of intelligence, (c) parental motivation and (d) teaching method. The results of the quantitative survey were mainly used to support the results from the qualitative interviews, and the averages from the four groups of questions can be found in table 2 . Only the averages will be used in the analysis of the results.

## Table 2

Averages from the four categories taken from the quantitative survey
$\begin{array}{llll}\text { Family } 1 & \text { Family } 2 & \text { Family } 3 & \text { Family } 4\end{array}$

| Average 1 <br> proficiency majority language | Mats - 7 <br> Oscar-7 <br> Hedda - 7 | $\begin{aligned} & \text { Liam - } 7 \\ & \text { Neil - } 7 \end{aligned}$ | $\begin{aligned} & \text { María - } 7 \\ & \text { Ángela - } 7 \end{aligned}$ | $\begin{aligned} & \text { Julia - } 7 \\ & \text { Marco - } 7 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average 2 <br> proficiency minority <br> language | Mats - 5 <br> Oscar - 5 <br> Hedda - 1.5 | $\begin{aligned} & \text { Liam-6 } \\ & \text { Neil - } 6 \end{aligned}$ | $\begin{aligned} & \text { María - } 6.8 \\ & \text { Ángela - } 6.8 \end{aligned}$ | $\begin{aligned} & \text { Julia - } 6 \\ & \text { Marco - } 7 \end{aligned}$ |
| Average 3 <br> parental motivation | Mats - 5 <br> Oscar - 5 <br> Hedda - 3 | $\begin{aligned} & \text { Liam }-5.5 \\ & \text { Neil }-5 \end{aligned}$ | $\begin{aligned} & \text { María - } 5.8 \\ & \text { Ángela - } 6.5 \end{aligned}$ | Julia - 7 <br> Marco - 7 |
| Average 4 child's motivation | Mats - 5 <br> Oscar - 5 <br> Hedda - 4.5 | $\begin{aligned} & \text { Liam - } 5 \\ & \text { Neil - } 5 \end{aligned}$ | $\begin{aligned} & \text { María - } 4 \\ & \text { Ángela - } 4 \end{aligned}$ | Julia - 2 <br> Marco - 5.5 |

### 4.1 Level of proficiency in both the children's languages

The children have varying levels of proficiency in their minority language, when in their majority language, all children have a high level of proficiency. Table 2 shows that all children score 7 (out of 7 ) on their level of proficiency in their majority language. Most children score a five or higher on their level of proficiency in their minority language, which
indicates that they are all able to communicate in their minority language, except for Hedda, who scores an average of 1.5 on level of proficiency in her minority language. To find an explanation for these numbers and the varying levels of proficiency of the children, the results of the qualitative interviews will be put next to the quantitative results and compared.

### 4.2 Beliefs and attitudes towards bilingualism and the minority language

The results from the qualitative interviews showed that there was a general positive attitude towards bilingualism from all the parents. F1, F2 and F3 mention that they believe that having a positive attitude towards bilingualism is a solid base for bringing up the children bilingually. DF3 states that: "You have to believe in your own approach and believe that the outcome is going to be good. If you don't think your children can do it, then it's all up to your children to come up with that motivation. You have to set the right example" (appendix A, p. 43). All four of the families also answered positively on the question of whether they thought it was important for their children to be brought up bilingual, albeit for different reasons. MF1 explains that "I very much believe that it is important that my children are bilingual. Not per se for their future, but mostly to keep in contact with their family and their heritage at a later age. [...] I would not want them to forget their Dutch, and drift away from their Dutch family" (appendix A, p. 34). Although most families confirm that keeping in contact with their families abroad is a large motivation for bringing up the children bilingually, other reasons have been named too. Both F2 and F4 want to give their children an advantage in the future by raising "international citizens" (DF4 (appendix A, p. 47)). DF2 adds that they made a well-considered choice to raise the children in English in addition to Dutch, thereby considering the children's future in this choice: "It can be a huge benefit to them in their later lives, school-wise, career-wise. We want them to know no boundaries, and especially with English being a world language which is spoken all over the world, it seems very beneficial"
(appendix A, p. 38). Thus, all families agree that a positive attitude towards bilingualism is a solid basis for starting a bilingual family, however, each family has a different motive for raising their children bilingually.

When addressing the attitude towards the children's majority and minority languages, the results show that the parents have a more positive attitude towards the children's majority language than their attitude towards the minority language. MF3 describes how she already studied Spanish in school before meeting DF3: "I'm a travel agent so I learned it in school, and when I met [DF3] on an exchange to Sevilla, it was so easy to become fluent in it" (appendix A, p. 43). MF1 recognises the ease to become fluent in the language of the country she moved to: "I love the Norwegian language; it's easy and not very complex. I liked learning it when I just moved here. I would say I'm nearly native now. I also love Norway and I could see myself living here for the rest of my life" (appendix A, p. 35). These positive sounds support the notion that when the parents are enthusiastic about the majority language, the children detect this and may develop a preference for their majority language, which might obstruct the acquisition of their minority language. In addition to this, another remarkable finding was that two parents (DF1 and DF3) did not speak their children's minority language at all. Both parents failed to put in a great deal of effort to learn this minority language. DF1 realises this might also be a demotivational factor for his children: "When they see that dad can't speak their target language, or might not put in enough effort to learn to do so, they might think: 'Why should $I$ learn it then?'" (appendix A, p. 35). This seems to have been the case for DF1's youngest daughter Hedda, who shows little motivation to learn her minority language.

Thus, the results from this subsection indicate that the parental attitudes towards the children's minority language is of significance for the children's level of proficiency. The parents who are not native speakers of their children's majority language have a very positive
attitude towards that language, which seems to have encouraged the children in developing their majority language. However, the parents who do not speak their children's minority language (DF1 and DF3) realise that their attitude towards the minority language has a negative influence on their children's language acquisition of the minority language.

### 4.3 Child's personality and intelligence

There was no correlation found between the child's personality and their level of proficiency. Of the nine children, four were characterised as 'introverted' by their parents. Two of those (Hedda and Julia) scored surprisingly low on a few categories. Hedda scored low on parental motivation ( $\mu=3$ ) and proficiency minority language ( $\mu=1.5$ ). Both categories are interrelated in this case, as MF1 indicated that she lacked in motivation when it came to exposing Hedda to her minority language. However, since Hedda has been categorised as an 'introvert' and her personality traits as "shy and quiet" (appendix A, p. 32), it might explain why she is not very eager to practice her minority language outside the home environment. Baker (2014) states that introverted children, in contrast to extroverted children, need to feel safe before they start speaking to people outside their comfort zone. Speaking a minority language outside of their comfort zone could delay this process even more. Extroverted children are often more confident about their minority language and are less afraid to make mistakes (p. 83).

Julia, on the other hand, scored high on parental motivation ( $\mu=7$ ) and proficiency minority language $(\mu=6)$, but scored quite low on child's motivation $(\mu=2)$. An explanation for this might be that she only started struggling with her minority language when she started school at age 6 and learned how to read and write in her dominant language. Even though DF4 is very motivated to educate her in English, it does not affect Julia's motivation to keep developing her English. DF4 describes Julia as "a perfectionist" (appendix A, p. 45) which
could be an explanation for the fact that she abandoned her minority language so she could focus solely on being perfect in her dominant language. In the case of Julia, being an introverted person did not have a noticeable effect on her level of proficiency, as it is unrelated to showing perfectionistic behaviour. However, her perfectionism is considered a personality trait, which proves that her personality has affected her level of proficiency.

The parents are unanimous with regards to the effect of the child's intelligence on the minority language's acquisition. They all share the belief that the child's intelligence does not affect the language acquisition. MF1 states that it was her own lack of motivation which caused the low level of proficiency in her youngest child: "All three of my children are quite intelligent in their own way, and would all be able to learn their minority language if it wasn't for my own motivation" (appendix A, p. 35). DF3 seconds this: "I do not think that intelligence plays a role when it comes to language acquisition, as all children are able to learn a first language" (appendix 1, p. 40). In the case of Julia, who struggles at school with reading and writing in her dominant language, her father claims that this is not due to her bilingual upbringing, and has a possible explanation: "I believe that Julia just does not really have that knack [feel] for languages really, [...] she excels in other subjects in school. She is just more of a bèta-girl" (appendix A, p. 47).

The results in this subsection show that in two cases, the child's personality has influenced their minority language acquisition, however, two different personality traits (introversion and perfectionism) were the cause of this. Furthermore, all parents agree that their child's intelligence does not have an effect on their child's proficiency in their minority language, which is in line with the literature portrayed in the theoretical background.

### 4.4 Parental motivation

All parents share the belief that motivation is a significant factor in the children's minority language acquisition, although this revealed itself in different ways for each family. MF1 is the only parent in the household of F1 who speaks the minority language, which means that all pressure is put on her to expose her children to said language. She claims that external factors were the main reason for the decline in motivation from her side: "I was more motivated with my first child than I was with my second and third child. The motivation decreased and this was mostly due to a new job and less spare time. The fact that we visit my family less because of obligatory things such as work and school does not help the case" (appendix A, p. 32). F2 also recognises a change in their motivation over the years, except in their situation, they experienced an increase in their motivation: "We thought it would be easier, and things would work out if we just spoke English to them from time to time. It took more than that, and we figured that out a little late. [...] but we're making up for it now and it's not too late yet. We're all feeling very motivated at this point" (appendix A, p. 38). F3 has gone through a similar experience where their motivation dropped for a period of time: "I had a period where I had a lot on my mind with my work situation and Ángela had just been born. Sometimes I just could not bring myself to speak Dutch, because Spanish was just easier at the time [...] but [DF3] pushed me and motivated me, saying that the children would benefit enormously and would thank me in the future, so that's what kept me going" (appendix A, p. 43). This increase of motivation after the lowest point in their situation is very similar to the situation of F2. However, it is not always the lack of motivation that influences the language acquisition of the child. In the case of F4, a plenitude of motivation from the parents might push a child right over the edge, resulting in the child dropping their minority language altogether: "If it were up to me I would be teaching Julia reading and writing in English right now as well [along with Italian], but we agreed with the school that her focus should be on her
reading and writing skills in Italian for now, and I'm having a really hard time not teaching her" ((DF4) appendix A, p. 47). The results from the quantitative survey confirm these findings, as they show that Julia scores high on proficiency minority language ( $\mu=6$ ), but surprisingly low on child's motivation $(\mu=2)$ (table 2, p. 14), which indicates that she has not lost her vocabulary in her minority language, she is just refusing to speak it and is not motivated to develop her minority language further.

The situation of Julia in F4 is in stark contrast to the motivational issues that plague the other three families. The first three families demonstrate that a lack of motivation has noticeable influence on their children's language acquisition, where the level of proficiency of the children stagnated or faltered when the parental motivation was at a low level. Meanwhile, the situation in F4 indicates that a profusion of motivation can influence the level of the child's proficiency negatively. When a large amount of pressure is put on a child to speak their minority language, it might cause a child to shut out that language completely if they are insecure about their minority language, as has happened in Julia's case. However, it should be kept in mind that this is probably a temporary reaction to an abundance of input and that the situation will correct itself in the future.

All parents agree that their own motivation (or lack of) in exposing their children to their minority language plays a large role in the level of proficiency of their children. F1, F2 and F3 point out that at one point in the bilingual upbringing, there was a lack of motivation which influenced the development of the minority language of their children. The results from F4 show contradictory results in comparison to the other three families; DF4 has shown a great amount of motivation and enthusiasm which is most likely the reason that she has stopped speaking her minority language.

### 4.5 Teaching method

Another factor which might influence the proficiency of the children are the teaching methods to which the children are exposed. Two families (F3 and F4) used the One Parent, One Language (OPOL) approach. These children score the highest on the level of proficiency in both the dominant and the minority language in the qualitative survey (table 2, p. 14). This is at least until they attend school at the age of 6 , which is where Julia stopped making progress in her minority language. This approach seems to be very effective, and this is possibly due to the fact that the children are daily and constantly exposed to their minority language within the home environment. However, this approach also puts a lot of pressure on the parent who is solely responsible for exposing the children to their minority language within the home environment. This might cause strain between the parents if the partner is not supportive enough.

F1 did not have a specific system to expose the children to their minority language, but the two oldest children often travelled to their family in the Netherlands. MF1 states that they used to travel to the Netherlands at least six times a year, where they were fully emerged in the Dutch language. This caused the two oldest children to pick up their minority language quite quickly. Within the home environment, the minority language was rarely spoken. The youngest child of the F1 is now rarely exposed to the language, which has had a dramatic effect on the development of her minority language. At age 9 , she is a passive bilingual who is not able to speak her minority language. With newfound motivation, MF1 has taken it upon herself to reinvest in her youngest child's language acquisition, and ordered teaching material online to increase the amount of exposure in her daughter's minority language.

F2 experienced similar problems as F1 in terms of decreasing motivation, but intervened shortly after they noticed a change of development in the minority language of their children. They chose to resolve this issue by introducing "English hour" (appendix A, p.
37), where both parents would only speak the children's minority language to them, and correct them when needed. This does not always come easily, as they have encountered motivational problems which include speaking Dutch while disciplining them and skipping "English hour" when they have dinner outside of the home. However, in the long run they have found that it improves their children's minority language and both the parents state that their motivation and the children's motivation have increased: "We're all feeling very motivated at this point" (appendix A, p. 38).

Thus, the OPOL-method requires a large amount of dedication and motivation from the parents, it also seems to have the best effect on the children's level of proficiency in their minority language. The two families who use other methods of teaching, seem to lose their motivation more quickly than the families who use the OPOL-approach, who seem more successful. These findings can be linked back to parental motivation and the research question, as the parental motivation in this study is evidently influenced by the method of teaching that the parents use.

## Chapter 5, Discussion

The findings from the qualitative interviews along with the findings from the quantitative interviews confirm what most studies have found regarding minority language acquisition in bilingual children. Children who grow up with two languages almost always learn to speak the majority language on a native level (De Houwer, 1999, p. 13; Nyikos, 2014, p. 20). The findings from the quantitative survey support these results where all the children have an average of 7 on proficiency majority language (table 2, p. 14). However, it is the minority language that is at risk of not being spoken. The novelty of this study is that it focusses on the influence of parental motivation on whether children speak the minority language, along with parental beliefs and attitudes, and the influence of the child's intelligence and personality. Both the survey and the interviews showed that parental motivation is an important factor, but it is not the only factor. In F1, F2, and F3, the results showed that parental motivation influenced the level of proficiency in the minority language of the child; however, a surprising result was that the family who scored highest on parental motivation, F4, has a child who now refuses to speak her minority language, even though she used to have a high level of proficiency. A possible explanation for this result might be the fact that Julia has been labelled "a perfectionist" by her father. This caused her to drop her minority language in order to focus on her majority language before developing her minority language. Baker (2014) claims that bilingualism is rarely a cause of learning difficulties. He explains that "the only possibility of bilingualism connecting with the speed of learning to read is when a negative attitude to language [...] has occurred" (p. 114). It seems that Julia has developed a negative attitude towards her minority language and has thus dropped it completely. The reason for this negative attitude could be caused by her father, who has a passion for languages that Julia does not share. Another possible explanation for her behaviour could be the attitudes towards bilingualism from her teacher and other people within the community. Since Julia only
abandoned her minority language when she started school at age 6 , it is well possible that her teacher and/or classmates have influenced her attitude towards her own minority language. However, this study has not focused on external attitudes towards the minority languages, so that remains unclear. It might be interesting for future research to study the influence of attitudes towards minority languages outside the home environment.

Julia's case is an exception within the results of this study, as other examples have shown that the level of parental motivation correlates with the level of proficiency in the minority language, as is the case with Hedda, the youngest child of F1. Her parents believe she is a passive bilingual who refuses to speak her minority language. Baker (2014) provides two possible explanations for this, the first being that she is simply able to express herself better in her majority language. The second is the fact that she simply has not had enough practice and exposure to her minority language (p. 74). Not speaking the minority language is not necessarily only about lack of practice. Other dimensions such as personality, motivation and attitudes towards a certain language can have a great impact on the development of the minority language. Nevertheless, the results from this study show that the parents unanimously agree that the child's intelligence is not an important factor, if a factor at all, in the acquisition of their children's minority language. These parental beliefs are supported by the results found in this study, where the children with a lower level of proficiency in their minority language do not seem to be less intelligent than their siblings or the children from other families. However, it must be kept in mind that this study only has a small number of participants, and the results with a larger group of subjects might show that intelligence could have a considerable effect on the minority language development of the child. However, there was no previous literature found which indicates that intelligence does influence the acquisition of a second first language.

A more elaborate future study on the subject of parental motivation in minority language acquisition would be interesting and could be used as a guide for their parents. Since the timeframe and scope of this study were restricted, a follow-up study would be interesting. A follow-up study with an unrestricted timeframe has the possibility to have at least 100 families participating, and the quantitative survey be more elaborate; consisting of at least 10 questions for each construct, so that the survey has a minimum of 40 questions. These number of results would be sufficient for analysing them in a statistical analysis programme such as SPSS, for example.

A final problem that was encountered, was developed while writing the theoretical background. In addition to the fact that almost no studies existed on the influence of parental motivation, most of the studies that were found on surrounding topics such as childhood bilingualism, the influence of personality on second language acquisition, and validity of parental assessment were not written in the last decade. This hindered the intention to provide a more modern take on the matter of the upbringing of bilingual children.

## Chapter 6, Conclusion

The bilingual children in this study have a $100 \%$ success rate of acquiring the majority language, when only 7 out of 9 children have successfully acquired their minority language. This means that these 7 children are able to express themselves in their minority language at the time of the interviews. The findings from the interviews have shown that the other two children struggle considerably with their minority language, albeit for different reasons.

The influence of parental attitudes towards bilingualism and the minority language has proven to be of great significance, as the results showed that the basis of a bilingual upbringing is that the parents need to believe in a positive outcome and set an achievable goal for themselves and their children. The parental attitudes towards the minority language are of importance too, as the results showed that a positive attitude from the parent towards the minority language might enhance the acquisition of the designated language. Additionally, a negative or indifferent attitude from the parents who do not speak the minority language might obstruct the children in acquiring the minority language.

The influence of the child's personality did not prove noteworthy for 8 of 9 of the cases. It only manifests in Julia, who shows perfectionistic behaviour towards acquiring two languages at the same time. When she showed signs of struggling with writing and reading in her majority language, she dropped her minority language completely to focus on her majority language again. Since being a perfectionist is a part of Julia's personality, this proves the hypothesis that the child's personality influences the acquisition of her minority language. In the results, there was no evidence found that personality traits such as introversion play an important role in the acquisition. In addition, there was no evidence found in the survey that the child's intelligence is of importance in acquiring a second language next to their first one. This is in accordance with the results found in the qualitative interviews with the parents.

An additional, but not surprising link was found in the proficiency of the minority language of the children, which is the influence of the teaching methods that the parents employ. The results showed that the OPOL-approach provided the most exposure within the home environment, and thus the best results in the proficiency of the children. F2 exposes their children only one hour a day to their minority language, which is usually during dinnertime. This results in an above average proficiency in the minority language, but it comes with additional motivational problems from the parents.

Taking the personality, intelligence, teaching methods, beliefs and attitudes into consideration, the results showed that some aspects have a larger influence on acquisition than others. However, these results also showed that the largest factor is indeed the parental motivation. Even though only 2 out of 9 participating children showed signs of struggling with their minority language, both cases were mainly influenced by the motivation of their parents. However, they manifest themselves in a contradictory way. In the case of Hedda, she has had insufficient exposure to her minority language, which was caused by motivational problems from the mom. Julia, on the contrary, has had an abundance of exposure by her father, who was overly motivated. Both now refuse to speak their minority language, even though the results from the survey show that Julia has a high level of proficiency in her minority language ( $\mu=6$ ), where Hedda has a very low level of proficiency ( $\mu=1.5$ ) (see table 2, p. 14). These findings indicate that Hedda is possibly unable to speak her minority language, where Julia makes the conscious decision not to use her minority language.

These results confirm the hypothesis that other factors indeed play a role in the minority language acquisition of children, but the main factors are parental motivation and the teaching methods which are used within a family. Every teaching method needs a different level of devotion and motivation from the parents. However, it should be added that it is not only the lack of motivation that influences the children's production of their minority
language; an abundance of exposure and motivation from the parents' side can be just as ineffective.

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## Appendix A - Qualitative Interviews

Family 1

## Parental information:

Family name: [DF1 and MF1]
Age: $45 / 50$
Occupation: receptionist at a hotel / pilot
Highest level of education: HBO / University
Country of residence: Norway
Mother languages: Dutch / Norwegian
Level of proficiency in both languages: mom: fluent in Norwegian, Dutch and English / dad:
fluent in English and Norwegian
What is the majority language in your household? Norwegian
What other languages do you speak on a regular basis? English / Dutch on vacations
What languages do you speak with your children, and in what context? We always speak
Norwegian with the children when we are at home, and Dutch when we are visiting MF1's relatives in the Netherlands
Time of residence in the current country? Mom: 20 years / dad: all his life
In which of the three categories of De Houwer's (2007) research do you place your household?
category 2

## Information about the children: Mats

Age: 17
Grade in school: Videregående skole, Grade 2
Native language: Norwegian
Minority language: Dutch
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language? Only speaks Dutch with his Dutch relatives
The child's personality: Can be shy, thoughtful, outgoing with friends, very caring towards others, likes being alone.
Introverted/extroverted: introverted
Intelligence level: Very smart, gets very high grades in school, wants to go to university after high school, very beta oriented

## Information about the children: Oscar

Age: 13
Grade in school: Undomsskole, Grade 8.
Native language: Norwegian
Minority language: Dutch
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language? Only speaks Dutch with his Dutch relatives
The child's personality: outgoing, loud, impulsive, very social and friendly, very active,

## outdoorsy

Introverted/extroverted: extroverted
Intelligence level: Gets high grades in school, would do better in school is he was less impulsive and more motivated

## Information about the children: Hedda

Age: 8
Grade in school: Barneskole, grade 4
Native language: Norwegian
Minority language: Dutch
Active/passive bilinguals: Passive bilingual
When do your children speak their native language and when their minority language? Does not speak Dutch at all, but understands when Dutch is being spoken to her.
The child's personality: Shy, quiet, friendly, caring, thoughtful
Introverted/extroverted: introverted
Intelligence: quite smart, gets good grades, scores above average.

## Open questions:

Why have you chosen a bilingual upbringing?
MF1: I was born in the Netherlands, but when I was 25, I moved to Norway to live together with my Norwegian boyfriend, DF1. I soon started learning Norwegian to get a job in Norway. Since Norwegian is not a difficult language to learn with English and Dutch as a basis, I became fluent quite soon.
DF1: When we got our first child, Mats, it was not a difficult choice for us to bring him up in Norwegian, since I don't speak Dutch and MF1 does speak Norwegian. Also, since we lived in Norway and planned to keep living there, it would only seem natural to bring them up in Norwegian.
MF1: As I kept in contact with my family a lot, it would seem of great importance that Mats would also learn Dutch so he could communicate with my parents, brother and sisters.

How have you and your partner agreed on the shared language?
^^ answered in previous question
How do you teach your children their minority language? $\rightarrow$ has this changed MF1: With Mats, I often sang Dutch songs to him and read to him from Dutch children books so he would become familiar with the sounds of the Dutch language. Since I had a very flexible job at a pancake restaurant then, I visited my parents with him very often, at least 6 times a year. They would also come over a lot. I would speak Dutch to him as well. The same went for the second child, Oscar. He also had a cousin the same age in the Netherlands, which he would play with a lot when we came to visit. This certainly helped too. Oscar was a bit later with speaking Dutch to his family members, I believe he was around 6 when he would start speaking Dutch. Mats was around 4. Hedda, the last child, is almost 9 now, and still refuses to speak Dutch to her family members. This might be due to insecurities, or the fact that we visited our family a lot less, since the oldest boys were in school and we couldn't take time off as often as I used to with Mats and Oscar. So recently I started teaching Hedda

Dutch with Dutch schoolbooks that I ordered. We practice Dutch 2 times a week now, for about 1 or 2 hours. So, you could say that the methods of teaching my children their minority language has changed over the years.

What level would you like to see your children at in their minority languages? $\rightarrow$ has this changed
MF1: I would love for all of them to be native speakers, obviously. But I realise now that it is not going to happen. The oldest one speaks Dutch at the highest level, but uses a lot of Norwegian sentence structures, or idioms that he translated directly. My family understands him when he speaks Dutch though, so no one corrects him anymore. Oscar would have trouble speaking with a native Dutch speaker, but my family understands him too, so there is no need to improve his Dutch. I would like for Hedda to be at a higher level then she is right now. I believe she understands it all, but is too insecure to speak it. I aimed for native speaker level when I first started my bilingual family, but now I would be okay with them speaking Dutch at a level where my family understands them, and for them to be able to communicate.

Do you think it is important that your child is bilingual? Please elaborate. $\rightarrow$ has this changed MF1: I very much believe that it is important that my children are bilingual. Not per se for their future, but mostly to keep in contact with their family and their heritage at a later level. Now they are still very much in contact with their family because of my and our vacations, but what happens when they get older and don't join us on family vacations to the Netherlands anymore? I would not want them to forget Dutch, and drift away from their Dutch family. I still believe this is important.

How would you rate your own motivation towards bringing up your children bilingually?
MF1: I was more motivated with my first child then I was with my second and third child. The motivation decreased, but this was also due to a new job, and less free time. The fact that we visit my family less because of obligatory things such as work and school did not help the case too. But if I was more motivated to take time to teach my children proper Dutch, they would've been better Dutch speakers. My motivation returned when I realised my youngest was still not speaking Dutch at the age of 7 , so therefore I ordered schoolbooks online and took it to myself to make up for lost time.

Do your children have different level of proficiency in their minority language? If yes, why do you think this is?
MF1: Yes, they do, and I believe it has do with my motivation and lack of time with the last two children.
$\rightarrow$ Do you think the intelligence/personality of the children plays a role in this?
no I don't. All three of the children are quite intelligent in their own way, and would all be able to learn their minority language if it wasn't for my own motivation.
$\rightarrow$ Do you think your own beliefs/attitudes play a role in this?
On a certain level I do, If I didn't believe in bilingualism, there would be no ground for me to bring up my children bilingually. I do believe that it is possible to bring up your children bilingually, if you put in the work and time.
$\rightarrow$ Do you think your own motivation plays a role in this?
elaborated on this before.

What is your thought on bilingualism in general?
I researched a lot on bilingualism when I was pregnant with Mats, and even though there are obstacles, I believe that it could not be a bad thing to bring up your children bilingually. I know that it is good for their cognitive functions.

What is your thought on the native language of your household?
I do love Norwegian as a language, it's easy and not very complex, and I liked learning it when I just moved here. I would say I'm nearly native now. I also Love Norway and I would see myself living here for the rest of my life.

What is your thought on the minority language of your household?
MF1: I like Dutch as a language too, even though it's a bit harsher, and more complicated for a 22 learner.
DF1: It's quite a difficult language to learn, I agree. I've been trying to pick up some Dutch over the last 20 years but I never really managed. I usually speak English when I communicate with MF1's family.

Have there been any problems in the past because of your bilingual household? If yes, what were they and how have they been resolved. If not, do you expect there to be any in the future?
MF1: The biggest problem would be that my family lives in the south, and speaks a dialect. We never speak proper Dutch when we are together, because it feels unnatural. I only speak proper Dutch when I am in other parts of the country or conversate with friends who do not live in the south. Thus, my two oldest children speak the dialect too when they converse with me or my family. This means that a native Dutch speaker would not be able to communicate with my children because they speak the dialect. However, since I'm teaching Hedda out of schoolbooks, she will only be speaking proper Dutch with my family, and might not understand them when they speak the dialect amongst each other. This problem will obviously not be solved over time.
I am also scared that they will forget their Dutch language when they move out and stop seeing their Dutch family as often.
$\rightarrow$ child's ability
I don't believe the child's intelligence plays a major role in the acquisition, but I do think that the child's motivation plays a role. When a child wants to be able to communicate with their family members, or feels left out whenever they are on a family vacation, it might help the L2 acquisition.
$\rightarrow$ opinions of relatives/friends/school/outsiders
The school of the children encouraged us to bring up the children bilingually, and the never noticed any problem with the level of their native Norwegian.
$\rightarrow$ motivation related problems from both child and parent
answered
How has your child developed in both languages over childhood? $\rightarrow$ Has there been a difference in the development between the children, if yes, please elaborate.
Mats started speaking Dutch at the age of 4, and has developed quite steadily since then. He has stagnated on the same level since he was 12/13. Even though Oscar started speaking

Dutch at a later age, he has developed quite steadily too, and has stagnated since the age of 10 too. Hedda is a different case, it's only been 2 years since I believe that she does understand Dutch, but can't or won't speak it. Before that age, I did not even believe that she understood what we were saying.

Have there been any other issues with your children that were due to their bilingualism?

Family 2

## Parental information:

Family name: [DF2 and MF2]
Age: 32 / 39
Occupation: Primary school teacher / works at a bank
Highest level of education: $\mathrm{HBO} / \mathrm{WO}$
Country of residence: The Netherlands
Mother languages: English and Dutch
Level of proficiency in both languages: Both fluent in Dutch and English
What is the majority language in your household? Dutch
What other languages do you speak on a regular basis? English
What languages do you speak with your children, and in what context? Dutch at home and English in the 'English hour'
Time of residence in the current country? Dad was born here, mom has lived here for 12 years.

In which of the three categories of De Houwer's (2007) research do you place your household?
category 2

## Information about the children: Liam

Age: 8
Grade in school: groep 5
Native language: Dutch
Minority language: English
Active/passive bilinguals: active / he can speak English but he prefers not to
When do your children speak their native language and when their minority language?
Sometimes with mom, mom's family and during English Hour
The child's personality: outgoing, very social, has a lot of friends, diagnosed with ADHD, quite loud
Introverted/extroverted: extroverted
Intelligence level: gets average grades, often isn't challenged enough in school

## Information about the children: Neil

Age: 6
Grade in school: groep 3
Native language: Dutch
Minority language: English
Active/passive bilinguals: overall passive, but utters a few words sometimes
When do your children speak their native language and when their minority language?
Sometimes with mom, mom's family and during English Hour
The child's personality: a bit shyer than Liam, sometimes overshadowed by his older brother. Friendly, kind and caring. Loves doing sports and being outside
Introverted/extroverted: introverted

## Open questions:

Why have you chosen for a bilingual upbringing?
We like our children to be fluent in both languages that we grew up in. It's also a matter of communication with MF2's family. We don't want them to grow apart because of the language. We also believe that being bilingual will be good for their general development, and that it will benefit them later in school and in life. We want to raise 'international' children.

How have you and your partner agreed on the shared language?
It was not really a choice since we live here in the Netherlands, so you can't really bring up your children only in English. We did actively choose to bring up our children in English as well, and we started with good intentions but we soon fell into a routine where we just spoke Dutch, and when we would speak English to them, it would feel a bit forced.

How do you teach your children their minority language? $\rightarrow$ has this changed At first, we just talked to them in English, sang some English nursery rhymes and lullabies. We haven't used actual teaching methods like grammar books and such. They will get enough of that in school one day. After we realised that we started speaking less and less to them in English, I decided half a year ago that we would have an English Hour each day, usually around dinnertime. The children like it. Before this idea, we wouldn't really correct them, and they would often speak Dutch back when we talked to them in English, but since the introduction of the English Hour they must speak English to us and we correct them, and they repeat sentences after us. For them it's more of a game. It seems to work quite well so far.

What level would you like to see your children at in their minority languages? $\rightarrow$ has this changed
We have always wanted them to be native speakers, or to be on that level, that's why we started early, when they started speaking. We still want them to speak English at a native level, but we think it will take some more time than we originally planned. We would think that at age 8, Liam would be more fluent than he is now. Perhaps that is our own fault, as we only brought in English Hour half a year ago.

Do you think it is important that your child is bilingual? Please elaborate. $\rightarrow$ has this changed It's very important, not only for us, with parents from different countries, but also for families with two Dutch parents. Everyone can be brought up bilingual, if the parents speak two languages of course. It can be a huge benefit to them in their later lives, school wise, career wise. We want them to know no boundaries and especially with English being a world language that people all over the world speak, it seems very beneficial.

How would you rate your own motivation towards bringing up your children bilingually? Like we said before, we thought it would all be easier, and things would work out if we just spoke English to them from time to time. It took more than that, and we figured that out a little late. So, we do believe that we lacked in motivation at their earlier lives, but we're making up for it now and it's not too late yet. We're all feeling very motivated at this point.

Do your children have different level of proficiency in their minority language? If yes, why do you think this is?

No, not really. They both show the same avoidance behaviour, like talking back in Dutch, and sometimes using English words in their Dutch sentences, but there is not really a difference. Of course, because Neil is 2 years younger, his vocabulary is somewhat smaller, but it's comparable to Liam's vocabulary at that age.
$\rightarrow$ Do you think the intelligence/personality of the children plays a role in this?
I don't believe that intelligence has anything to do with it, since children all children can pick up their first language, so why not a second one, if you start early enough? The personality, I believe, does not affect the acquisition, but it might affect the speech part. A more outgoing child might be more comfortable speaking a different language than an introverted one, who might be a bit more insecure about his speech production.
$\rightarrow$ Do you think your own beliefs/attitudes play a role in this?
In a certain way, yes. If I didn't belief in bilingualism, it wouldn't have worked, right? You should believe in your own ability and your children's ability.
$\rightarrow$ Do you think your own motivation plays a role in this?
As it has proven to be true for us, yes, I do. You should put constant effort and time into your children's bilingualism, otherwise it will falter. They won't pick it up themselves at that age. You should push them, and make it fun for them to learn another language.

What is your thought on bilingualism in general?
I believe every child should be brought up bilingually. I think that English should be taught from age 6 on in school, so the children grow up with it and it will become a second first language for all the children. I don't think it has ever hurt anyone to be brought up bilingually. I might be wrong though.

What is your thought on the native language of your household?
I love speaking Dutch, even though I still have an accent, I'm quite fluent in Dutch. It's not the prettiest language, or the easiest language to learn, but it's certainly a challenge, and I happen to like challenges.

What is your thought on the minority language of your household?
We both love English, as it's a beautiful language, with a beautiful heritage. I love how universal it is.

Have there been any problems in the past because of your bilingual household? If yes, what were they and how have they been resolved. If not, do you expect there to be any in the future?
There haven't been any problem, so far, as I recall. Their teachers have said on a few occasions that they both use a few English words when they speak with friends or the teacher, but not so much that they weren't understandable anymore for anyone. I don't expect this to be a problem in the future, as both their vocabularies in both languages will only expand from now on so hopefully they will know the words in both languages and won't have to switch mid-sentence.
$\rightarrow$ child's ability
$\rightarrow$ opinions of relatives/friends/school/outsiders
So far, everyone has been supportive, even the school who only correct them when they throw in an English word, instead of getting mad at them. My English family loves that they speak both languages at this age.
$\rightarrow$ motivation related problems from both child and parent
Like we said, the motivation from our side used to be a problem, but we took a different approach which worked for us. The children are motivated enough to join English hour since they see it as a little game and there is no pressure from the outside whatsoever.

How has your child developed in both languages over childhood? $\rightarrow$ Has there been a difference in the development between the children, if yes, please elaborate.
I'd say they both developed quite similarly so far, and quite evenly. They both don't have a problem with speaking out loud, or have insecurities about it.

Have there been any other issues with your children that were due to their bilingualism?

Family 3

## Parental information:

Family name: [DF3 and MF3]
Age: 27/28
Occupation: travel agent / has his own plumbing business
Highest level of education: $\mathrm{HBO} / \mathrm{HBO}$ (the Spanish equivalent)
Country of residence: Spain
Mother languages: Dutch / Spanish
Level of proficiency in both languages: mom: native speaker of Dutch, fluent Spanish and
English speaker. Dad: native speaker of Spanish, fluent in English.
What is the majority language in your household? Spanish/Dutch
What other languages do you speak on a regular basis? Spanish and Dutch
What languages do you speak with your children, and in what context? We use the One
Parent, One Language approach, which means that dad speaks Spanish with the children all the time, and I speak Dutch.
Time of residence in the current country? Mom: 6 years. Dad: all his life.

In which of the three categories of De Houwer's (2007) research do you place your household?
category 3

## Information about the children: María

Age: 4
Grade in school: day-care, school only starts at age 6 in Spain
Native language: Spanish and Dutch
Minority language: Dutch because it's not the language of the country, but she speaks them both equally well.
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language? Speaks Spanish with dad, Dutch with mum.
The child's personality: Inventive, curious, happy and bubbly, can have huge temper tantrums, outgoing.
Introverted/extroverted: extroverted
Intelligence level: quite smart, learned to talk quite early for a bilingual child.

## Information about the children: Ángela

Age: 3
Grade in school: Day-care
Native language: Spanish and Dutch
Minority language: Dutch
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language?
Spanish with dad, Dutch with mum
The child's personality: chatterbox, outgoing, funny, loves to laugh,
Intelligence level: picked up the languages quite easily

## Open questions:

Why have you chosen a bilingual upbringing?
Since we live in Spain, it was obvious that we should raise them in Spanish, but we didn't want them to grow up without speaking Dutch, which is a big part of their heritage.
Especially since Dutch is a difficult language to learn when you're older, we thought it'd be best to teach them Dutch from the start and give them that advantage.

How have you and your partner agreed on the shared language?
$\wedge \wedge$ see the above

How do you teach your children their minority language? $\rightarrow$ has this changed We use the One Parent, One Language (OPOL) approach, which means that DF3 speaks Spanish with the girls, and I speak Dutch. We have tried this approach since María was born and we thought it worked so well that we continued it with Ángela. In the beginning when María had just turned two, I was a bit lacking in speaking Dutch to her, as sometimes my habit would take over and I would speak to her in Spanish as well, especially when DF3 was in the room, because he does not really understand Dutch. But then we noticed that María would speak Spanish to me as well, which is against the system. Therefore, with Ángela we have been extra careful and committed and it works great now, the children speak both languages quite fluently with both of us, and they know when to address whom in what language.

What level would you like to see your children at in their minority languages? $\rightarrow$ has this changed
Both native speakers would be ideal, of course. At this point, María speaks Spanish a bit better than she speaks Dutch, but we think that's due to my lacking a bit when she was two. She also speaks Spanish at day-care, so overall, she speaks Spanish more often than Dutch. Ángela on the other hand, speaks both languages with the same proficiency. Of course, her vocab isn't as large yet as Maria's, but that's due to their age difference.

Do you think it is important that your child is bilingual? Please elaborate. $\rightarrow$ has this changed DF3: Yes, it's very important to both of us that the children speak both languages. They're half Dutch, so they should be able to speak the language. As a family, we skype once a week with MF3's parents in the Netherlands, so we want them to be able to communicate with them as well in their native language, even though MF3's parents speak English with me. It's a bit of a mess, but we make it work eventually, and we hope that the children pick up on some English as well while we're skyping, but we're not actively going to teach them English. The level of importance hasn't changed, it might have even increased over the years when we see how well the girls adapt to both languages and to see how it benefits them already.

How would you rate your own motivation towards bringing up your children bilingually? MF3: I'd say we are quite motivated. I had a period where I had a lot on my mind with my work situation and Ángela just being born, where I sometimes just could not bring myself to speak Dutch, because Spanish was just easier at the time and Maria was in her 'Spanish Only' phase and I just couldn't deal with correcting her all the time, but DF3 pushed me and motivated me, saying that the children would benefit enormously and would thank me in the
future, so that's what kept me going. And now I'm so happy that I pushed through because it's so rewarding to see the girls chatter away in Dutch to me and then switch to Spanish when they speak to each other and their dad.

Do your children have different level of proficiency in their minority language? If yes, why do you think this is?
MF3: It's still a bit hard to say at this age how their level of proficiency is going to work out, but at this point, I am aware that María has a slight preference for Spanish, and her Spanish vocabulary is also a bit larger, which is understandable because of the amount of time speaking in Spanish compared to Dutch. Ángela is equally proficient in both languages now. $\rightarrow$ Do you think the intelligence/personality of the children plays a role in this?
I do not think that intelligence plays a role when it comes to language acquisition as all children are able to learn a language. Personality might play a role when a child is insecure or shy. Luckily that is not the case with my girls.
$\rightarrow$ Do you think your own beliefs/attitudes play a role in this?
Yes. You should believe in your own approach and believe that the outcome is going to be good. If you don't think your children can do it, then it's all up to your children to come up with that motivation. You should set the right example.
$\rightarrow$ Do you think your own motivation plays a role in this?
Certainly. Like I said before,

What is your thought on bilingualism in general?
I love that my children are growing up bilingual. I believe it's a giant advantage, even though Dutch is not a major language in the world, it still gives them other advantages in life such as a wider vocab, learning a third languages later on with more ease and a wider range to communicate with people over the world.

What is your thought on the native language of your household?
MF3: Spanish is a lovely and easy language to learn, I'm a travel agent so I learned it in school, and when I met DF3 on an exchange to Sevilla, it was so easy to become fluent in it.

What is your thought on the minority language of your household?
DF3: I don't speak Dutch, even though I understand it quite well, so I can't really have an opinion about it. It's not really a pretty language to listen to, with all the harsh sounds, but I'm happy that my girls are keeping that part of their heritage.

Have there been any problems in the past because of your bilingual household? If yes, what were they and how have they been resolved. If not, do you expect there to be any in the future?
Apart from the small motivational problem about 2 years ago, there haven't been any problems yet. Both girls were a bit older than children who are only taught one language when they started speaking, but that's normal in bilingual families. Maria was 26 months when she started chatting away, and Ángela was 28 months when she started speaking full coherent sentences.
The only problem I see in the foreseeable future, is the fact that the children are not learning any writing or reading in Dutch, because I only speak Dutch to them. In school, they will learn how to write and read in Spanish, but if I want them to be able to do it in Dutch as well,

I should take on that job myself. That will certainly take an extra level of motivation on my part, and from the children as well. But we'll tackle that bridge when we come to it. At this point I would love to teach them Dutch, but it depends on the circumstances and family situation as well.
$\rightarrow$ child's ability
Like I said before, it's not the child's intelligence that plays a role here.
$\rightarrow$ opinions of relatives/friends/school/outsiders
The day-care that the girls are going to right now know of our bilingual upbringing, and they support it, but obviously they can't really help us since they don't speak Dutch. My parents (MF3) are supportive too, obviously, as they have a chance to communicate with their granddaughters as well.
$\rightarrow$ motivation related problems from both child and parent
answered
How has your child developed in both languages over childhood? $\rightarrow$ Has there been a difference in the development between the children, if yes, please elaborate.
Like I said before, they started speaking at a later age that children that only speak one language, but once you overcome that, there were no problems anymore and both the girls are chatterboxes in both languages now. Maria is a bit behind on her Dutch now but I'm putting some extra time in to correct her and help her with phrases, so we're certainly catching up on that.

Have there been any other issues with your children that were due to their bilingualism?

Family 4

## Parental information:

Family name: DF4 and MF4
Age: 29/29
Occupation: Stay at home mum / high school English teacher
Highest level of education: higher education / university
Country of residence: Italy
Mother languages: Italian and English
Level of proficiency in both languages: both native speakers of Italian, dad was raised
bilingually in England so is also native in English
What is the majority language in your household? Italian/English
What other languages do you speak on a regular basis? ^^
What languages do you speak with your children, and in what context? Mum speaks Italian with them and Dad speaks English to them
Time of residence in the current country? Mum: lived there all her life. Dad: was born in Italy, moved to England when he was 2 and lived there until he was 16, then he moved back to Italy.

In which of the three categories of De Houwer's (2007) research do you place your household?
category 3

## Information about the children: Julia

Age: 8
Grade in school: Primary school, grade 2
Native language: Italian and English
Minority language: English
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language? Italian with mum and family members, English with dad.
The child's personality: Kind, a bit shy, takes her time to get to know people, bit anxious, a perfectionist, optimistic
Introverted/extroverted: introverted
Intelligence level: has a bit of trouble with spelling and is a bit behind on reading compared to her classmates

## Information about the children: Marco

Age: 4
Grade in school: Pre-school education
Native language: Italian, English
Minority language: English
Active/passive bilinguals: Active bilingual
When do your children speak their native language and when their minority language? Italian with mum and family members, English with dad.

The child's personality: lively, outgoing, friendly, stubborn
introverted/extroverted: extroverted
Intelligence level: picked up the languages quite easily, quicker than his older sister.

## Open questions:

Why have you chosen a bilingual upbringing?
DF4: I was born in Italy but when I was 2, my parents moved to England because my dad got offered a job there. I was raised bilingually. My parents only spoke Italian with me but through school and friends I acquired the English language and became a native speaker. When we moved back, I was 16. I studied English literature and eventually became a high school teacher in English. Since English is a big part of my past and my everyday life, I think it's important to raise my children bilingually. Since I have been brought up bilingually, I know the struggles and the advantages that come with it and I'll be able to use that in the upbringing of my children. Especially since the school system in Italy is insufficient in English as a second language in my opinion, I believe that you can't start soon enough speaking another language. Which is why I have taken it on myself to teach them.

How have you and your partner agreed on the shared language?
$\wedge \wedge$ see the above
How do you teach your children their minority language? $\rightarrow$ has this changed We use the OPOL approach. I speak English with the children (except when I'm angry with them) and MF4 speaks Italian with them, just like the rest of the family and the school. With Julia, we started this approach from the beginning and she picked it up quite easily, but when she started school at age 6, she refused to speak English to me. She got over that and is speaking English again now. She is also having a bit of trouble with Italian writing and reading in school, we don't want to push her too hard. She speaks both languages just fine, but the reading and writing bit gets a bit hard for her. My plan was to teach her to write and read in English at the same time as she was learning to read in Italian, but that has proven to be too ambitious so we're just focussing on writing/reading Italian for now and only speaking English. Marco hasn't started primary school yet, but we feel like he is quicker to pick up on the languages and we will try the same approach as with Julia. But so far, we're only speaking English to them.

What level would you like to see your children at in their minority languages? $\rightarrow$ has this changed
Native speakers would be ideal, but in Julia's case it might be a bit unrealistic as we notice a bit of an Italian accent already in her English speech and how she uses Italian word order when she speaks English. I believe that with some extra tutoring when she's ready, it should be okay. She still has a huge advantage compared to the other kids in her class when it comes to English. We do have high expectations for Marco as he seems more of a natural in languages, but that might still change as he is four years younger than Julia. We would eventually settle for the children to just be proficient in both languages.

Do you think it is important that your child is bilingual? Please elaborate. $\rightarrow$ has this changed Certainly. Especially in a country such as Italy, where the people are known for their bad

English. This is due to the failing school system in my opinion. We want to raise our children to be international citizens, and not be bound to Italy because their English is so bad that they can go nowhere and not be understood. I myself find it a huge advantage to be bilingual and I wish my children can have the same opportunities as I did.

How would you rate your own motivation towards bringing up your children bilingually? DF4: I'm really motivated, as I believe it's terribly important that the children are bilingual (see above). MF4 also speaks English on a high level, but she has a very pronounced accent and I do not want the children to pick up on that. If it were up to me I would be teaching Julia reading and writing in English right now as well, but we agreed with the school that the focus should be on her reading and writing skills in Italian, and I'm having a really hard time not teaching her. I also love playing English games with them and reading them English books before bed.

Do your children have different level of proficiency in their minority language? If yes, why do you think this is?
DF4: Julia is better in Italian than in English, that is for certain. I pains me a bit but I know that there is still a good chance that it will still work out eventually. This probably should do with the fact that she's feeling a bit overwhelmed with both languages right now, especially now she started reading/writing. Marco is equally proficient in both languages and knows when to speak what languages. I believe that personality wise, he is more like me and he copies my enthusiasm for the English language, where Julia is more like her mother and a bit more reserved and insecure.
$\rightarrow$ Do you think the intelligence/personality of the children plays a role in this?
I'm not sure. I believe that Julia just does not really have that knack for languages really, so it's a bit hard on her, but she is not a dumb girl, as she excels in other subjects in school. She might just be more of a beta-girl. Marco started speaking quite early for a bilingual child, around 21-22 months he used coherent sentences. I think he has more feel for it and is more of an alpha-guy.
$\rightarrow$ Do you think your own beliefs/attitudes play a role in this?
The fact that I was brought up bilingually has given me a different perspective overall bilingual upbringing, an insiders opinion you might say. MF4 often tells me that I'm pushing our children too hard, especially Julia, and we have a difference of opinion on the importance of bilingualism. We have different beliefs I guess, and maybe Julia feels that too. So, I think beliefs might affect a child's language acquisition.
$\rightarrow$ Do you think your own motivation plays a role in this?
Certainly. If you're not motivated, nothing is going to happen. A child needs constant exposure.

What is your thought on bilingualism in general?
I love it and I believe that more families should consider raising their children bilingually. It might cause a few struggles along the road with the upbringing, but it will be worth it in the end. I turned out okay too.

What is your thought on the native language of your household?
DF4: I think Italian is great and beautiful language, but it can't really compare to the subtlety and beauty of the English language. I would prefer English to Italian.
[MF4 walks in after putting Julia to bed]
MF4: I believe that English is a beautiful language, but Italian is the language of their ancestors and their country, so that language should be put first in my opinion.

What is your thought on the minority language of your household?
answered above
Have there been any problems in the past because of your bilingual household? If yes, what were they and how have they been resolved. If not, do you expect there to be any in the future?
DF4: MF4 and I fight quite often about the intensity of my teaching methods, but we came to an agreement now as to let Julia focus on Italian for now. Our family was on MF4's side as well, so I had to take a step back. Especially when Julia's teacher told us she was behind on her Italian compared to the rest of her classmates. That worried us. But there seem to be no problems with Marco yet, so that is positive. We will see if he encounters the same problems when he starts school in 1,5 years, but that is a problem we'll tackle then. In the end, we should always put the children's happiness first.
$\rightarrow$ child's ability
I believe this is certainly a factor to consider in teaching a child a second language. It proves that some children just have a knack for languages, and some don't. And you should take each child's case and provide a fitted plan for them to learn a language on their own level and pace.
$\rightarrow$ opinions of relatives/friends/school/outsiders
Julia's school did not really agree on the bilingual upbringing, as the teacher saw her struggling with Italian. I'm not sure yet if that's because we raised her bilingually, or that she would have those problems too if she were raised in only Italian. The rest of the family were supportive of bilingualism at first, but believe now that we should focus on Italian for now. $\rightarrow$ motivation related problems from both child and parent

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answered
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How has your child developed in both languages over childhood? $\rightarrow$ Has there been a difference in the development between the children, if yes, please elaborate.
Marco has developed quite steadily until now actually, except for the delay in starting to speak. Julia's proficiency has somewhat decreased, or at least stagnated since she started school at age.

Have there been any other issues with your children that were due to their bilingualism?
Appendix B - Results and Averages Quantitative Interview
Likert-scale: (fill in for each child individually) Mats

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does nothave trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not havetrouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group 2 = 5
8. I am motivated to teach my child their minority language.
fully disagree ..... 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language.
fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language.
fully disagree 1234567 fully agree
Average group $3=5$
12. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
13. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=5$

## Likert-scale: (fill in for each child individually) Oscar

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=5$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=5$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=5$

## Likert-scale: (fill in for each child individually) Hedda

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=1.5$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=3$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=4.5$

## Likert-scale: (fill in for each child individually) Liam

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=6$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=5.5$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=5$

## Likert-scale: (fill in for each child individually) Neil

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=6$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=5$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=5$

## Likert-scale: (fill in for each child individually) María

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=6.8$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=5.8$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=4$

## Likert-scale: (fill in for each child individually) Ángela

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=6.8$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=6.5$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=4$

## Likert-scale: (fill in for each child individually) Julia

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=6$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=7$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=2$

## Likert-scale: (fill in for each child individually) Marco

1. My child speaks the dominant language at a native level.
fully disagree 1234567 fully agree
2. My child can express his/herself in his/her native language.
fully disagree 1234567 fully agree
Average group $1=7$
3. When my child speaks with native speakers of their minority language, he/she does not have trouble understanding them.
fully disagree 1234567 fully agree
4. My child speaks the minority language at a native level.
fully disagree 1234567 fully agree
5. My child can express his/herself in his/her minority language.
fully disagree 1234567 fully agree
6. When my child speaks with native speakers of their minority language, they do not have trouble understanding him/her.
fully disagree 1234567 fully agree
7. I believe that my child will lose their minority language over time.
fully disagree 1234567 fully agree
Average group $2=7$
8. I am motivated to teach my child their minority language.
fully disagree 1234567 fully agree
9. I believe I have done everything in my power to teach my child their minority language. fully disagree 1234567 fully agree
10. I could have done more to teach my child their minority language.
fully disagree 1234567 fully agree
11. I believe it is important for my child's future that he/she speaks their minority language. fully disagree 1234567 fully agree

Average group $3=7$
4. My child is motivated to learn their minority language.
fully disagree 1234567 fully agree
4. My child thinks that it is important to speak their minority language.
fully disagree 1234567 fully agree
Average group $4=5.5$

## Table 3

Overview of the averages scored for each child on each category

|  | Undseth | Bootsma | Gómez | Salvatori |
| :---: | :---: | :---: | :---: | :---: |
| Average 1 <br> proficiency dominant <br> language | $\begin{aligned} & \text { Mats -7 } \\ & \text { Oscar -7 } \\ & \text { Hedda - } 7 \end{aligned}$ | $\begin{aligned} & \text { Liam - } 7 \\ & \text { Neil - } 7 \end{aligned}$ | $\begin{aligned} & \text { María - } 7 \\ & \text { Ángela - } 7 \end{aligned}$ | $\begin{aligned} & \text { Julia - } 7 \\ & \text { Marco - } 7 \end{aligned}$ |
| Average 2 <br> proficiency minority language | Mats - 5 <br> Oscar-5 <br> Hedda - 1.5 | $\begin{aligned} & \text { Liam-6 } \\ & \text { Neil - } 6 \end{aligned}$ | $\begin{aligned} & \text { María - } 6.8 \\ & \text { Ángela - } 6.8 \end{aligned}$ | $\begin{aligned} & \text { Julia - } 6 \\ & \text { Marco - } 7 \end{aligned}$ |
| Average 3 parental motivation | Mats - 5 <br> Oscar - 5 <br> Hedda - 3 | $\begin{aligned} & \text { Liam - } 5.5 \\ & \text { Neil }-5 \end{aligned}$ | $\begin{aligned} & \text { María - } 5.8 \\ & \text { Ángela - } 6.5 \end{aligned}$ | Julia - 7 $\text { Marco - } 7$ |
| Average 4 <br> child's motivation | Mats - 5 <br> Oscar - 5 <br> Hedda - 4.5 | $\begin{aligned} & \text { Liam - } 5 \\ & \text { Neil - } 5 \end{aligned}$ | $\begin{aligned} & \text { María - } 4 \\ & \text { Ángela - } 4 \end{aligned}$ | Julia - 2 <br> Marco - 5.5 |

