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Family Language Policies of Non-Native Bilingual

Parents raising Bilingual First Language Acquisition

children in monolingual contexts.

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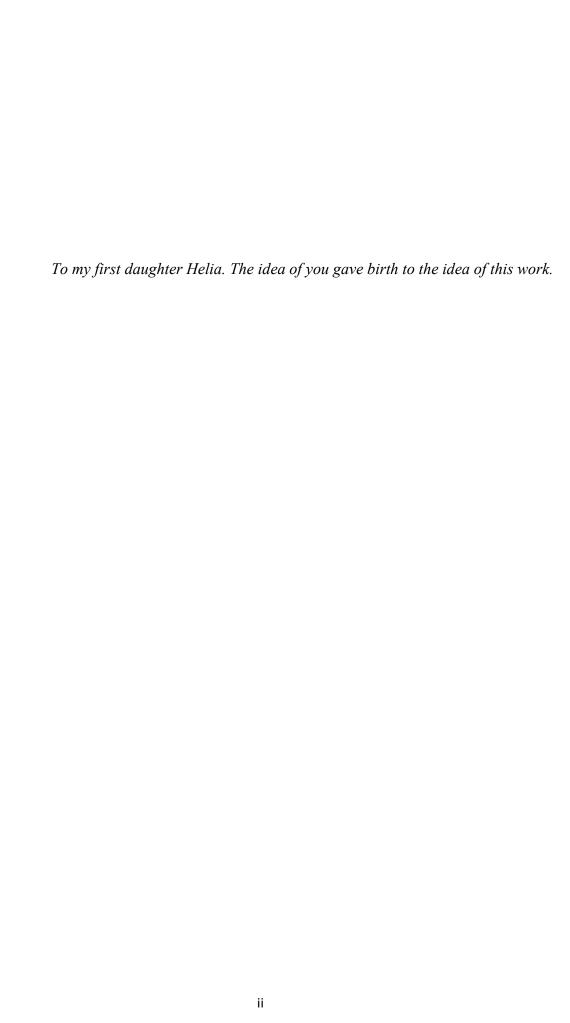
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ABSTRACT

Non-Native Bilingual Parenting (NNBP) is an emergent type of bilingual family setting where some parents decide to raise their children bilingually in their second language despite living in monolingual communities where their native language is spoken. However, research into family bilingualism has not yet given it much attention. The present survey study aimed to fill this gap in the literature by exploring the Family Language Policy (FLP) of NNBP families and the key factors that affect and shape their attitudes and linguistic practices. That is, the parents' competence in the target language and the children's growing competence in it. Data was collected by means of a parental self-report questionnaire and processed using IBM SPSS statistics software. Descriptive statistics revealed that One Parent One Language (OPOL) was the most common interaction strategy and that most parents used majority language with each other. Besides, the most frequent language socialization practices for this group were identified as well as their common ideologies. Most notably, low reported rates of code-mixing, a very strong impact belief, moderate concern about their non-native model, and the absence of negative opinions towards code-mixing. High degrees of continuity in language choice were also reported. Non-parametric tests found that the parents' level of competence in the target language affected some of their attitudes and practices, but the children's competence did not. The findings from this family based survey helped gain better insights into NNBP and Non-Native Bilingual First Language Acquisition (NNBFLA) children's linguistic environments.

KEYWORDS

Childhood bilingualism, non-native speakers, language planning, language ideologies, language socialization.

RESUMEN

La crianza bilingüe no nativa (NNBP en inglés) es un tipo emergente de familia según el cual algunos padres deciden criar a sus hijos de forma bilingüe en su segundo idioma a pesar de vivir en lugares donde se utiliza su primera lengua. Sin embargo, los estudios en bilingüismo familiar aún no le han prestado mucha atención a este modelo. Este estudio, basado en una encuesta, pretendía cubrir ese vacío en la literatura al explorar la política lingüística familiar (FLP en inglés) de las familias bilingües no nativas y los elementos clave que afectaban y daban forma a sus actitudes y prácticas lingüísticas. A saber, su competencia y la creciente competencia de sus hijos en la lengua meta. Los datos se recabaron a través de un cuestionario y se procesaron usando el programa estadístico IBM SPSS. Las estadísticas descriptivas revelaron que la estrategia lingüística más común fue Una Persona Una Lengua (OPOL en inglés) y que la mayoría de los padres usaban la lengua mayoritaria entre ellos. Además, se identificaron las prácticas de socialización lingüística más comunes en este grupo y las ideologías compartidas por ellos. Destacaron las bajas tasas de mezcla de código referidas por los padres, la fuerte convicción de que pueden influir en la adquisición de la lengua de sus hijos (impact belief en inglés), la preocupación moderada por su modelo no nativo y la ausencia de opiniones negativas sobre la mezcla de códigos. También encontramos altos niveles de consistencia en el uso de la lengua. Los resultados de las pruebas no paramétricas mostraron que el nivel de competencia de los padres en la lengua meta influía en algunas de sus actitudes y prácticas, pero la competencia de los niños no tenía efectos en ellas. Los resultados de esta encuesta familiar han servido para profundizar en la crianza bilingüe no nativa y en los entornos lingüísticos de los niños que adquieren simultáneamente dos primeras lenguas, siendo una de ellas no nativa (NNBFLA en inglés).

PALABRAS CLAVE

Bilingüismo infantil, hablantes no nativos, planificación lingüística, ideología lingüística, socialización lingüística.

TABLE OF CONTENTS

ACKNO	OWLEDGEMENTS	iii
ABSTR	ACT	iv
RESUM	MEN	V
LIST O	F ACRONYMS	ix
LIST O	F TABLES	X
LIST O	F FIGURES	xii
1. CF	HAPTER 1. INTRODUCTION	1
2. CH	HAPTER 2. LITERATURE REVIEW	4
2.1.	Family Language Policy	4
2.2.	Bilingual First Language Acquisition	5
2.3.	Input patterns	<i>6</i>
2.4.	Parental Discourse Strategies	11
2.5.	Parental attitudes and beliefs	14
2.6.	Consistency in FLP	15
2.7.	Non-Native Bilingual Parenting	17
2.8.	Conclusion	21
3. CH	HAPTER 3. OBJECTIVES AND RESEARCH QUESTIONS	23
3.1.	Objectives	23
3.2.	Research questions	23
4. CF	HAPTER 4. METHODS	25
4.1.	Participants	25
4.2.	Instrument	26
4.3.	Procedures	28
4.4.	Variables in the study	30
4.5.	Data analysis	35
<i>5</i> CI	IADTED & DATA ANALYCIC	27

5.1. Description of the final simple
5.1.1. Summary
5.2. RESEARCH QUESTION 1. What is the FLP of NNB parents?
5.2.1. RESEARCH QUESTION 1.a. What type of input do NNBFLA children
receive?40
5.2.1.1. Summary
5.2.2. RESEARCH QUESTION 1.b. What language socialization practices do NNE
parents use to raise their NNBFLA children?
5.2.2.1. Summary
5.2.3. RESEARCH QUESTION 1.c. What are the attitudes and beliefs of NNE
parents towards bilingualism and their impact belief?
5.2.3.1. Summary
5.3. RESEARCH QUESTION 2. Are NNB parents consistent in their implementation
of FLP?
5.3.1. Summary
5.4. RESEARCH QUESTION 3. How does the parents' communicative competence in
the non-native language influence NNB parents' FLP?
5.4.1. Type of input
5.4.2. Attitudes
5.4.3. Practices
5.4.4. Summary
5.5. RESEARCH QUESTION 4. How is the FLP of NNB parents shaped by their child-
rearing experience? 65
5.5.1. Attitudes
5.5.2. Practices
5.5.3. Summary
6. CHAPTER 6. DISCUSSION
6.2 The sample

6.3.	FLP of NNB parents	71
6.3	.1. Type of input for NNBFLA children	71
6.3	.2. NNBFLA children's language socialization	75
6.3	.3. Attitudes and beliefs	76
6.4.	Consistency	78
6.5.	Influence of the level of parental competence in the non-native lang	guage on FLP
		80
6.6.	Influence of parent-child interactions on NNBP families' FLP	81
6.7.	Limitations	82
7. CH	IAPTER 7. CONCLUSION	84
REFER	ENCES	90
APPEN	DIX	95
LIST O	F TABLES	96
LIST O	F FIGURES	100
APPI	ENDIX 1. QUESTIONNAIRES	101
EN	GLISH VERSION	101
SP	ANISH VERSION	107
SE	S QUESTIONNAIRE	113
APPE	ENDIX 2. DESCRIPTION OF THE FINAL SAMPLE	118
APPE	ENDIX 3. TYPE OF INPUT	121
APPI	ENDIX 4. LANGUAGE SOCIALIZATION PRACTICES	125
APPI	ENDIX 5. ATTITUDES AND BELIEFS	129
APPE	ENDIX 6. CONSISTENCY	133
APPI	ENDIX 7. COMPETENCE IN THE SECOND LANGUAGE	136
APPE	ENDIX 8. COMPARISONS BETWEEN SPEAKING VS.	PRE-VERBAL
CHIL	DREN	148

LIST OF ACRONYMS

In alphabetical order by the acronym.

BFLA Bilingual First Language Acquisition

CEFRL Common European Framework of Reference for Languages

CG1 Primary Caregiver 1

CG2 Primary Caregiver 2

ESLA Early Second Language Acquisition

FLP Family Language Policy

ISCED International Standard Classification of Education

ISCO International Standard Classification of Occupations

L2 Second language

MLAH Minority Language At Home

NNBFLA Non-Native Bilingual First Language Acquisition

NNBP Non-Native Bilingual Parenting

OPOL One Parent One Language

PDS Parental Discourse Strategies

SES Socio Economic Status

LIST OF TABLES

List of tables as they appear in the main text.

Table 1. Comparison of existing NNBP case studies.	18
Table 2. Correlation between variables included in the analysis and items in questionnaire.	the 30
Table 3. Patterns of exposure in the sample. Input pattern and language used in the pair.	arent 42
Table 4. Possible relative frequency combinations.	43
Table 5. Current amount of input by input pattern: MIXED.	44
Table 6. Current amount of input by input pattern: Mm+M and Mm+m.	44
Table 7 . Parental discourse strategies. Equivalences between the choices in the questions and classification of PDS.	naire 48
Table 8. Summary of correlations between parental ideologies.	53
Table 9. Spearman's rank-order correlation for variables WORRY2, FLP2 and IB2.	54
Table 10. Summary of correlations between consistency and parental ideologies.	57
Table 11 . Spearman's Rank-Order correlation for variables WORRY2, FLP2, IB2 CONSIST3.	and 58
Table 12 . Chi square test for independence for variables L2CG1 (2 levels) and IN PATTERN (recode OPOL vs. not OPOL).	PUT 61
Table 13. Effect size statistics for variables L2CG1 and INPUT PATTERN: OPOL vs OPOL.	s. not 62
Table 14. Chi square test for independence for variables INPUT4 (recode "All contexts	'' vs.
"Limited use") and CG1L2 (recode two levels).	62
Table 15. Effect size statistics for variables INPUT4 (recode "All contexts" vs. "Lin	nited
use") and CG1L2 (recode two levels).	63

Table 16. Spearman's Rank-Order correlation for variables WORRY1, WORRY2	and
CG1L2.	64
Table 17. Spearman's Rank-Order correlation for variables MIX1 and CG1L2.	64
Table 18. Results of Mann-Whitney test for IB1, IB2, FLP2, WORRY1 and WOR	RY2
across categories of CHILDSPEAKING.	66

LIST OF FIGURES

List of figures as they appear in the main text.

Figure 1 . Most common types of families in the sample.	37
Figure 2. Country of residence of participant families.	38
Figure 3. Native language of the parent-pair.	38
Figure 4. Non-native language used with the child.	39
Figure 5. CG1's level of L2.	39
Figure 6. CG2's level of L2.	39
Figure 7. Current input pattern.	41
Figure 8. Languages used between caregivers.	42
Figure 9. Contexts of exposure to the minority language.	45
Figure 10. Supplementing strategies.	45
Figure 11. Frequencies of families who are in touch with others practicing NNBP.	46
Figure 12. I encourage my child to use the non-native language in response to non-native	ative
language utterances.	47
Figure 13. Reported parental mixing in conversations with child.	48
Figure 14. Parental discourse strategies. Summary of frequencies.	50
Figure 15. Parental discourse strategies. DS3.	50
Figure 16. Parental impact belief.	52
Figure 17. Parental degree of planning for FLP.	52
Figure 18. Parental attention to the child-directed input.	52
Figure 19. Parental worries about non-native model: pronunciation.	53
Figure 20. Parental worries about non-native model: mistakes.	53
Figure 21. Parental attitudes towards child mixing in conversation.	55

Figure 22. Parental attitudes towards child mixing in a sentence.	55
Figure 23. Consistency in languages used between caregivers.	56
Figure 24. Consistency in the language used with the child since birth.	57
Figure 25. Consistency in FLP.	57
Figure 26. Distribution of CG1's level of L2 by input pattern: OPOL.	60
Figure 27. Distribution of CG1's level of L2 by input pattern: MINORITY LANGUAGE	E. 60
Figure 28 . Distribution of CG1's level of L2 by input pattern: MIXED.	60
Figure 29 . Distribution of CG1's level of L2 by input pattern: Mm+M.	61
Figure 30 . Distribution of CG1's level of L2 by input pattern: Mm+m.	61
Figure 31 . Parental attitudes towards child mixing in conversation. Parents of speak children.	king 66
Figure 32. Parental attitudes towards child mixing in conversation. Parents of children	who
do not speak yet.	67
Figure 33. Parental attitudes towards child mixing in a sentence. Parents of speal	·
children.	67
Figure 34. Parental attitudes towards child mixing in a sentence. Parents of children who	o do
not speak yet.	67

1. CHAPTER 1. INTRODUCTION

There are many ways in which children can become bilingual, but the family as the *primary socialization unit* (De Houwer, 2009) is perhaps the most important context for children to be exposed to two languages from birth. Children can hear two languages spoken to them if they live in bilingual communities where their parents are themselves bilingual. Alternatively, couples with different native languages may wish to pass on their language of origin to their children regardless of whether it is used in the wider community. In addition to these quite common situations, an emergent type of childhood bilingualism is that in which parents with a knowledge of a second language decide to raise their children bilingually in this language despite living in monolingual communities where their mother tongue is spoken. We will use the term Non-Native Bilingual Parenting (NNBP) to refer to this type of additive childhood bilingualism in this study.

Within the field of childhood bilingualism, an important distinction is made between children who become bilingual by hearing two languages concurrently (Bilingual First Language Acquisition or BFLA¹) and when an additional language is introduced later (Early Second Language Acquisition or ESLA). The primary focus here will be on parents who raise their children bilingually in their second language from birth. In this study, I will use the acronym NNBFLA (Non-Native Bilingual First Language Acquisition) to refer to the children who become bilingual this way. While I propose this acronym for the sake of clarity involving the type of childhood bilingualism which is the target of this study, there is not any empirical data to address the question of whether there are differences between the linguistic development of these children and other BFLA children.

Regardless of when the additional language is introduced, the parents have a decision to make regarding how the children in the family will be exposed to these languages. Family Language Policy (FLP), which is the broad area of research with which this Master's thesis connects primarily, studies the attitudes, the implicit and explicit practices, and the decisions that parents make to manage languages within the family (King, Fogle & Logan-Terry, 2008).

Research into FLP has normally focused on language maintenance in minority language households and on children being raised bilingually in each of the native languages of the

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¹ De Houwer (1990) proposed and generalized the use of this term originally found in Meisel (1989) rather than the less specific *simultaneous acquisition*.

parents (One Parent One Language or OPOL). Some studies have also looked into BFLA children in contexts where the non-native language is the language spoken by the community (Snow *et al.* 1989 in Snow, 1990) or in cases where the minority language is the native language of one of the parents or primary caregivers (Caldas, 2006; Deuchar & Quay, 2000), but there are not yet many examples of studies combining both circumstances: families who share their native language with the wider community but decide to raise their children bilingually in their non-native language.

There are even fewer examples of large-scale survey studies (but see Lozano-Martínez, 2019) which can answer questions about common practices among these families. Conversely, there are multiple accounts from families on the Internet; YouTube and other social media (Piller, 2001), and a growing number of parent-guides with encouragement and advice targeting this demographic (Jernigan, 2015; Sampedro, 2015).

Today, NNBP is an increasingly common phenomenon. In the course of this project families from many different countries in Europe and America participated in the data gathering process. Particularly in Spain, there are more and more families embarking on this type of parenting and committing to bring up their children bilingually in their second language — most often, English. This is not surprising, since bilingualism has been a priority for the Spanish public education system for years now. Additionally, English, as a global language of prestige, is regarded by parents as a great asset for their children's future. Nevertheless, English is not the only language chosen by NNBP families as an additional language.

Considering this situation, the overall aim of this survey study is to explore the attitudes and beliefs, practices, and language management efforts that NNBP families implement to raise NNBFLA children; the consistency with which the FLP is implemented in each case; and how some key factors affect and shape the parents' overall FLP. Most notably, the parents' competence in the target language and the children's growing competence in it. As a result of this, it will also be possible to create a profile for the typical NNBP family, about which not much is known yet.

I chose to do research in this field because I decided to raise my own children NNBFLA — but I lacked the information that other experiences like mine could offer to make the best decisions regarding my family's non-native bilingual journey. As mentioned, although there is considerable research into FLP and BFLA, there is not much academic literature that focuses explicitly on NNBP.

The idea for this study stemmed from De Houwer's (2007) family-based survey, since FLP has been studied from multiple perspectives but not from the point of view of NNB parents and I wanted to know whether quantitative data could be used to support the generalizability of the findings from individual case studies.

In this study, data was gathered by means of a parental self-report questionnaire which was distributed online through social media platforms and processed using IBM SPSS statistics software.

This research hopes to contribute to the conversation about BFLA and FLP by looking into the language practices for language socialization of an emergent type of bilingual family: the NNBP family. It is my belief that the understanding of how NNB parents attempt to raise NNBFLA children in monolingual contexts is key to compare the strategies and practices that these families implement with those approaches that have been found to help other types of bilingual families succeed in their quest for childhood bilingualism. By doing so, I try to acknowledge the lack of research in general, and statistical comparative work in particular exploring NNBP; to help these parents make better decisions when raising their children bilingually; and to help this type of additive bilingualism be seen and validated.

To offer an insightful analysis of the results of this study, Chapter 2 will present a review of the relevant literature including FLP, BFLA, Parental Discourse Strategies (PDS) and input patterns, parental beliefs and attitudes, consistency in FLP, and the limited research into NNBP. Chapter 3 will introduce the objectives and questions of this research in light of the review of the literature. Chapter 4 will describe the methodological framework of this research: the target population and the instrument that was designed to obtain the data will be overviewed. The steps involved in the data collection process will be covered as well as the basic aspects of the analyses that were conducted. Chapter 5 will present the data analyses performed. This will be done in different sections according to the research questions. The result will be discussed in Chapter 6 together with their evaluation in reference to the relevant literature and the limitations of the present study. Finally, a conclusion will be drawn in Chapter 7. All relevant tables and figures as well as a copy of the original questionnaire in English and Spanish are presented in the Appendix.

2. CHAPTER 2. LITERATURE REVIEW

With the objective of this study in mind: the exploration of the FLP of NNBP families in monolingual contexts raising NNBFLA (Non-Native Bilingual First Language Acquisition) children, there are some key areas of scholarship that need to be described so that the results of the parental questionnaire can be interpreted. Therefore, this chapter presents a brief overview of the previous research in the fields of *FLP*, *BFLA*, *Parental Discourse Strategies* (PDS) and *input patterns* as they pertain to this study. In addition, since FLP is based on *parental beliefs and attitudes* (De Houwer, 1999; King, Fogle & Logan-Terry, 2008), a review on the research in this area is also pertinent. Then the issue of *consistency* will be briefly discussed as it has been found to play a role in successful FLP for BFLA (De Houwer & Bornstein, 2016; Döpke, 1992; Juan-Garau & Pérez-Vidal, 2001; King, Fogle & Logan-Terry, 2008; Lanza, 1997). Finally, I will review the research on NNBP (Non-Native Bilingual Parenting) including the few existing case studies.

2.1. Family Language Policy

Family Language Policy is a burgeoning research field which refers to the exploration of the choices that families make regarding their use of languages in the household and beyond. It was defined by King, Fogle and Logan-Terry as the "explicit and overt planning in relation to language use within the home among family members" (2008: 907). Hence, FLP includes the study of parental ideologies about languages and bilingualism; language practices; and language management —what parents think, do, and what their goals are in terms of their children's linguistic behavior— (King, Fogle & Logan-Terry, 2008).

Regarding beliefs or ideologies, FLP involves the study of parents' ideas about languages, interactions, language learning and bilingualism, and how these are formed (King, Fogle & Logan-Terry, 2008). Beliefs and ideologies, in turn, inform language practices and management (ibid.). These components of FLP look at factors such as child-caretaker interactions (Lanza, 1997), input patterns (De Houwer, 2007) and supplementing strategies such as bilingual schools (Caldas, 2006), native paid caretakers (King, Logan-Terry, 2008), media (Saunders, 1988) or heritage language classes (Kouritzin, 2000).

In the past few years, FLP has been the focus of increasing attention with a growing number of publications being released every year (for a complete overview of the development of the field see Lanza & Lomeu Gomes, 2020). In its early phases FLP focused on heritage languages, language maintenance and shift; and tried to "draw direct causal links across

ideologies, practices, and outcomes" (King, 2016: 728). More recent research has caused a reevaluation of the field towards meaning-making by describing household experiences regarding bi- and multilingualism in different contexts (ibid.). Additionally, children's own agency in the development of FLP has been described in terms of how the dynamics of parent-child interactions shape FLP in different ways (Fogle & King, 2013). Studies have, therefore, focused on the different components of FLP and examined different outcomes, in a range of target languages and contexts, and using a variety of methods (Hollebeke, Struys, & Agirdag, 2020). As a result, the field of FLP has been broadened to include research into implicit and covert practices, literacy (Lanza & Lomeu Gomes, 2020) and a "more diverse range of family types, languages and contexts" (King, 2016).

Even though more research is needed to answer specific questions about how each of the components of FLP influences children's linguistic —and other types of— outcomes (see Hollebeke, Struys, & Agirdag, 2020), there is "consistent and strong evidence" that FLP plays a crucial role in childhood bilingualism (ibid.). Besides, having regard to FLP is important because "lack of attention to language planning in the home may lead to language shift" (King, Fogle & Logan-Terry, 2008: 916) —or, in the context pertaining to this paper, passive bilingualism or monolingualism—.

While bilinguals —both adults and children— can acquire their languages in a variety of contexts and by a variety of means, the family is the *primary socialization unit* (De Houwer, 2009), and hence FLP is of utmost importance especially for BFLA. An overview of the literature on BFLA will be discussed in the next section.

2.2. Bilingual First Language Acquisition

Among bilinguals research has repeatedly claimed that age is a key factor in terms of language acquisition. A critical period for various aspects of language acquisition has often been argued to advocate for earlier exposures to language and to explain differences in language attainment between children, teenagers, and adults (Lightbown & Spada, 2013; Pearson, 2008; Romaine, 1995). In the area of childhood bilingualism, even though it is difficult to mark exact boundaries between simultaneous and sequential childhood bilinguals—learning two languages concurrently (BFLA) or introducing an additional language after the other has been established (ESLA)—, data seems to indicate that there are differences in the linguistic outcomes of children depending on when exposure to the second/other language started (De Houwer, 2011; Romaine, 1995). In this sense, a precise description of

childhood bilingualism and, specifically, the distinction between BFLA and ESLA are of consequence.

There are different propositions in terms of when the cutoff point between BFLA and ESLA should be and what criteria should be used to establish this boundary. McLaughlin (1978 in De Houwer, 1990), for example, argues for a cutoff point at 3 years of age. De Houwer, on the other hand, considers this age criterion arbitrary and defines BFLA as "the development of language in young children who hear two languages spoken to them from birth" (2009:2).

The latter interpretation is useful in two ways. First, because it is important to have a clear and principled definition of the target population in any research. In fact, a criticism that can be made of many studies is that they do not explicitly state when each of the languages is presented to the child(ren) (Lanza, 1997). Second, because it appears that language development for BFLA might resemble monolingual development more strongly than that of ESLA (De Houwer, 2011; Romaine, 1995).

Finally, I will limit my research here to children who are exposed to only two languages because although "the process of acquisition of three languages from birth may be very similar to what happens when a child is learning just two [...], [i]t is too early to make any generalizations based on the few existing studies so far" (De Houwer, 2009: 2).

Reports on BFLA children go back more than a century. Ronjat's (1913) landmark case study of his son's bilingual journey in French and German by means of implementing the OPOL strategy was the first of the many publications about childhood bilingualism that would follow (see for example Caldas, 2006; De Houwer, 1990; Deuchar & Quay, 2000; Döpke, 1992; Lanza, 1997; Leopold, 1978; Saunders, 1988) each of them expanding on the contexts, languages, and the types of input provided to the target children. In the next section, a review of the research into parental input patters is presented.

2.3. Input patterns

Input has not always been a primary focus in BFLA research (Lanza & Lomeu Gomes, 2020). In fact, as Pearson reviews (Pearson *et al.*, 1997), some linguists posited that input quantity did not affect language acquisition —as long as input was not reduced to zero—other than acting as a trigger for linguistic development (at least as far as syntax was concerned). However, Hart and Risley's (2003) influential work with monolingual children

revealed that parental amount of input had a direct impact on children's output in terms of vocabulary acquisition.

For bilinguals, Pearson and her colleagues (1997) found evidence of the same link between quantity of input and amount of vocabulary in children. In addition, De Houwer (2007) proved empirically the relevance of parental input patterns in children's bilingual language use. Both findings have been corroborated by subsequent studies (De Houwer & Bornstein, 2016; Marchman *et al.*, 2016). Finally, the quality of the interactions between bilingual children and caregivers has also been explored by research to explain differences in childhood bilingual development (Döpke, 1992; King & Logan-Terry, 2008; Lanza, 1997). Because of the scope of the present study, I will limit the discussion here to input quantity in terms of frequency and parental input patterns.

As for the quantity of input, research has looked into absolute and relative frequencies of said variable—the total number of words vs. the proportion of words in each language which a child hears in a set amount of time—. Pearson *et al.* (1997) found that at least 20% of exposure was necessary to acquire active bilingualism, but that with even less input children still learned vocabulary in a similar proportion to the amount of exposure. On the other hand, some argue that absolute amount of input is a better predictor of children's bilingual development than relative frequency (De Houwer, 2011; Marchman *et al.*, 2016).

More research is needed to unequivocally answer questions regarding the relationship between absolute and relative frequency of input and BFLA children's proficiency. In any case, absolute amount of input was not targeted in this investigation since the goal of the study was to describe FLP and not children's competence as a result of it.

One of the main factors that can affect the overall and relative amount of input that a BFLA child hears is the type of input patterns to which they are exposed. Most publications on infant bilingualism include a section discussing the possible types of families depending on parental input patterns (Döpke, 1992; Harding & Riley, 1999; Pearson, 2008; Romaine, 1995; Saunders, 1988). Classifications normally vary according to the languages of the parents, the community, and the strategy implemented. Sometimes other factors are taken into account; for instance, whether the parents have some degree of competence in each

other's languages, whether exposure to the other language is simultaneous or delayed or which languages are used between the parent pair².

The most commonly reported input pattern is OPOL, which was used by Ronjat (1913) in a groundbreaking account of his son's bilingual journey in French and German. The classic OPOL approach involves each of the parents addressing the child in their own first language in a context where the wider community is monolingual in the language of one of the parents. In Ronjat's case, the language used between the parents was the minority language. Other case studies reporting OPOL families vary on this aspect. For instance, Leopold (1978) writes that he maintained language separation in interactions with his wife, and Saunders (1988), that he and his wife used the majority language with each other. In fact, the language that the parents use to address each other in front of the child is relevant because it completely modifies children's linguistic environment (De Houwer, 2009; Döpke, 1992), but few classifications take it into account.

As an example of how varied the OPOL strategy can be, Döpke (1992: 12-13) acknowledges four variables to describe the possible patterns for its implementation: the native language of the parents, the language of the community, the language that the parents use with the child, and the language that the parents use with each other (a: the parents speak the language of the wider community to one another, b: the parents speak the minority language to one another, c: each parent speaks the language they speak with the child when addressing each other). Thus, resulting in twelve possible combinations:

- 1) The parents have different native tongues, and the language spoken in the wider community is the same as that of one of the parents. Each parent speaks his/her own language to the child.
- 2) The parents have different native tongues, neither of which is spoken in the wider community. Each parent speaks his/her own language to the child.
- 3) Both parents are native speakers of the language spoken by the wider community. One parent chooses to speak a language other than his/her native language to the child.
- 4) Both parents are native speakers of the same minority language. One of the parents chooses to speak the language of the wider community to the child.

8

² Typologies that report delayed exposure will not be discussed here since they address ESLA rather than BFLA.

Other than OPOL, different classifications identify at least two other scenarios conducive to the simultaneous acquisition of two languages from birth³ (Harding & Riley, 1999; Romaine, 1995; Saunders, 1988):

1. Parents: different native languages.

Community: same as one parent's native language.

Strategy: the parents speak the minority language at home.

2. Parents: same native language.

Community: different from both parents' native language.

Strategy: the parents speak the minority language at home.

In addition, Harding and Riley (1999), Romaine (1995) and Döpke (1992) make a special category for non-native parents using OPOL. This situation, where one of the languages is neither the native language of the parents nor the language of the community, has often been called *artificial bilingualism* (Kielhöfer & Jonekeit, 1983 in Saunders, 1988) and — strongly— discouraged (ibid.; Snow *et al.* 1989 in Snow, 1990; A. De Houwer, personal communication, November, 13, 2020). However, there are other input patterns where one of the parents also addresses the child in a language not native to them and which are not frowned upon but are actually encouraged by professionals (Döpke, 1992; Saunders, 1988). For instance, scenario #1 above, where only the minority language is used in the home by both parents (thus one parent is using a language that is not native to them), or Döpke's pattern 4, where the non-native language used by one of the parents is the language of the community. These cases, however, are unlike Saunders's and the target context of this study in that the non-native language is supported by native speakers in the family or the community.

Romaine (1995), who based her classification on Harding and Riley's (1999), adds an extra category which had not been recognized by them, that where the parents and the community are bilingual and frequently code-switch and mix languages. De Houwer (2006) warns, however, that for input to be considered bilingual, two distinct codes must be used separately, and this is not the case when utterances usually contain elements of both.

9

³ The strategies conductive to tri-/multilingualism are not included.

On the other hand, De Houwer's classification of patterns of exposure (2007) revolves exclusively around two variables; the strategy that parents implement and the language of the wider community (in her case, Dutch). She recorded five possible input patterns among the families that completed the questionnaire for her survey of language use in Flanders: (1) both parents using the minority language, (2) both parents using both languages, (3) one parent using the minority language and the other using majority language, (4) one parent using both the majority and the minority language and the other using only the minority language, and (5) one parent using both the majority and the minority language and the other using only the majority language. For this study, we have presented parents with patterns of language exposure following this classification because it encompasses all the logically possible combinations of language choice. However, I have used the terms *native* and *non-native language* in the questionnaire instead of majority and minority language in accordance with the design of the study.

Aside from academic works, many publications aimed at parents thinking about raising bilingual children also discuss the possible strategies that families might want to adopt. The most often cited strategies are OPOL, Minority Language At Home (MLAH) and approaches that alternate the use of languages by domains including variations by day, time, place, topic, or person (Baker, 2014; Crisfield, 2020; Jernigan, 2015; Pearson, 2008). These classifications, however, mix criteria when addressing the strategies because OPOL refers to the language that the parents use with the child, but not the context; while MLAH highlights the contextual criterion over language choice for interactions.

Even though OPOL is the strategy most often reported about (see for example De Houwer, 1990; Döpke, 1992; Lanza, 1997; Leopold, 1978; Saunders, 1988), it seems to be the least frequent among families (De Houwer, 2007; Yamamoto, 2001 in De Houwer, 2007). Besides, it seems that OPOL is "neither a necessary nor a sufficient condition" for active bilingualism (De Houwer, 2007:420) since a little over a third of OPOL-reared children in her survey did not actively speak the minority language (ibid.). A similar conclusion in terms of the success of OPOL can be drawn from Döpke's own case studies (1992).

Data from De Houwer's Flanders survey (2007) revealed that the most successful strategies were those in which both parents spoke the minority language at home, or one parent additionally spoke the majority language. Examples from the former can be found in Caldas (2006) or Deuchar and Quay (2000), both resulting in active bilingual children. Accounts from cases like the latter, however, are difficult to find in the literature. An example is case

study 15 by Harding and Riley (1999): a Moroccan-Algerian family raising their three children bilingually in Arabic and French in France. Although they started out as a MLAH family, the mother began to use French alongside with Arabic after the children started school. Harding and Riley report that the three children were active bilinguals as well.

The fact that some OPOL-reared children do not actually speak the minority language means that when they are addressed in that language, they are allowed to answer in the majority language (De Houwer, 2007). This aspect of the language socialization of bilingual children regarding the negotiation of languages within the family will be discussed in the following section.

2.4. Parental Discourse Strategies

Input patterns are one element in the linguistic environment of bilingual children, but as we have seen in the previous section, not all children reared under the same conditions regarding input in two languages achieve the same levels of bilingualism. Therefore, what happens at the level of interaction must also be explored; specifically, the way that parents socialize their children into using their languages in different contexts (Lanza, 1997).

A correlation between parents' pretense of not understanding when children used the "wrong" language (in a context where the other language was expected) and children's own language use had already been noticed by Taeschner (1983 in Döpke, 1992) and Saunders (1988) in the study of their own children. They both wrote about their children's switching to minority language when they pretended not to understand their majority language utterances and credited their children's active command of the minority language to this strategy (Döpke, 1992). This correlation was explored in more detail by Döpke (1992), who analyzed the *insisting strategies* used by the parents in her study to encourage the use of minority language; by Lanza (1997); and more recently by Juan-Garau and Pérez-Vidal (2001); King and Logan-Terry (2008); and Nakamura (2018).

Elizabeth Lanza (1997) examined this issue by looking at the relationship between children's language choice and their use of mixed utterances with the parents' own mixing and their tolerance to children's mixing. She categorizes parents' possible response types into five PDS in the form of a continuum.

The study of PDS describes how an interlocutor negotiates with the child a context where it is appropriate to mix languages or where languages must be separated (Lanza, 1997). Thus,

creating a need for the child to speak the minority language. As a result, children's mixing is seen as a function of their language socialization context; understanding context as a dynamic space that must be constantly renegotiated (ibid.).

Lanza (1997: 262-268) defines and gives examples of each PDS from data in her case study.

- 1. Minimal Grasp Strategy: a request for repetition or clarification using a question in the expected language or a signal of non-comprehension.
- 2. Expressed Guess Strategy: a request for reformulation using a recast of the child's utterance in the expected language in the form of a yes/no question.
- 3. Repetition Strategy: a repetition of the child's meaning using the expected language in a non-question form.
- 4. Move On Strategy: a continuation of the conversation in the expected language.
- 5. Code Switching: a continuation of the conversation in the other language. It can be intra-sentential: incorporating the other language word into the expected language utterance; or inter-sentential: changing languages in the interlocutor's turn of speech.

According to this scale, monolingual discourse strategies like the Minimal Grasp Strategy (what? Hmm? What does mama say?) and the Expressed Guess Strategy (Did you mean X?) feign the role of a monolingual and thus "force children to monitor their language for both the forms they use and the way they use these forms" (Lanza, 1997:262). Bilingual discourse strategies, however, allow the use of both languages within a conversation. This latter type of conversations result in more mixing and less active use of the minority language because they do not create the need for it.

Further evidence of this correlation can be seen in Juan-Garau and Pérez-Vidal's (2001) case, where the minority language speaking parent was able to modify his interactions with the child by adding more monolingual PDS to redirect the child's linguistic output into using less mixing of majority language in minority language utterances. Additionally, King and Logan-Terry (2008) conclude that the tendency of Child A in their study to use more English (majority language) with his mother might have been due to the mother's more extensive use of Code Switching. Both inter- and intra-sentential (what they call Expansion/Incorporation Strategy). By the same token, Nakamura (2018) showed that low frequency of use of monolingual PDS may favor the development of receptive bilingualism rather than active command of both languages.

Clarification requests like the Minimal Grasp Strategy and the Expressed Guess Strategy are multifunctional. They are used in interactions with monolingual children as turn-fillers, markers of acknowledgement, a sign of surprise, or to monitor language and signal a genuine misunderstanding (Lanza, 1997). Bilingual children must learn to interpret them as cues for language switch as well as real questions. However, when children are used to conversations where both languages are allowed, they might fail to interpret these as a cue for language choice and repair their utterances otherwise or not at all (Döpke, 1992; Lanza, 1997; Nakamura, 2018). Juan-Garau and Pérez Vidal's case study (2001) is a clear example of this pattern. Andreu, the target child, does not start repairing his mixed utterances with his father until he becomes used to the monolingual context that his father starts to consistently negotiate at around age three.

There are other possible answers to children's mixing that vary in the degree of explicitness with which they compel the child to respond. For instance, a direct command to translate — "You are supposed to say that in German" (Döpke, 1992: 67)—, or to repeat an utterance— "Can you say pump gas?" (Lanza, 1997: 240)—. The argument stands, though, that these strategies can be interpreted as more monolingual or more bilingual and, therefore, socialize the child into using one language or the other in the course of a conversation. For this study, an additional strategy has been incorporated to Lanza's original model. It is the Request for Translation Strategy (Döpke, 1992), which prompts the child to translate into the target language an utterance in the other language. De Houwer (2009) suggests that this strategy can be classified together with the Minimal Grasp Strategy. Here, however, it has been added as a new monolingual PDS in line with Döpke's model of insisting strategies, where Request for Translation is "a more explicit display of not-understanding" (1992:67).

Finally, Lanza (1997) warns that not only conversations with bilingual speakers can create a bilingual context in interaction, because sometimes monolinguals respond to a child's mixed utterance. However, "it is the strategy of the minority language speaking parent that is important for establishing/maintaining bilingualism in cases in which the bilingualism is not societal and in which the child has limited access to the minority language" (p. 317).

As we saw in the first section, PDS are part of FLP and stem from and are a result of parents' beliefs and attitudes towards languages and language choice (De Houwer, 2009). For instance, if parents believe that they can influence their children's language acquisition, they may take steps to increase their exposure to language. Similarly, if they have negative

opinions towards mixing, they might try to avoid this practice naturally in their speech.

Parental attitudes and beliefs will be discussed in the next section.

2.5. Parental attitudes and beliefs

The attitudes and beliefs of the parents are principal factors to look at when studying parenting decisions in general and specifically when studying language choice.

In the case of BFLA, De Houwer (1999) argues that there is a direct link between parental beliefs and attitudes on the one hand, and parental linguistic choices and interaction strategies on the other. As a result, parental beliefs and attitudes might help explain the wide variety of FLP that can be seen across families raising bilingual children. Some of the areas that De Houwer (ibid.) mentions to mostly influence parental linguistic behavior are: how parents think languages are learned; what parents think about their role in their child's acquisition process —impact belief —, about bilingualism and the specific languages involved; what parents think about child bilingualism, or about the patterns of language use they are implementing.

The notion of *impact belief* (De Houwer, 1999) deserves special attention because it might be the most direct connection between parental beliefs and attitudes and parents' linguistic behavior with their children. De Houwer defines impact belief as "the belief that how and how frequently a child is talked to has an effect on children's language development' (2009:362) and explains that when parents see themselves as active agents in their children's language learning they —either consciously or unconsciously— take steps to encourage language development. These may take the form of increased amount of input, use of monolingual discourse strategies, active teaching of literacy or other language management practices such as trips to the home country or heritage language classes. However, this concept has not yet been operationalized and there are no scales available to measure it, so each researcher makes statements about impact belief according to their own subjective criteria.

The influence of parental attitudes on private linguistic practices has also been explored among the so-called "elite bilinguals⁴". In Nakamura's research (2019) a strong impact belief emerged from parents' efforts to maintain minority language (English) due to a positive attitude towards the usefulness of English-Japanese additive bilingualism.

14

⁴ Elite bilingualism is understood here as bilingualism by choice (Baker & Wright, 2017) in the line of NNBP.

Additionally, Piller (2001) analyzed the ideologies that informed bilingual parenting decisions and how these were formed. She concluded that the goal of balanced bilingualism seen as an investment for children, the importance of consistency, and the relevance of starting young were common denominators for these parents.

In the context of NNBP, there are also some attempts to investigate parental ideologies. Lozano-Martínez (2019) examined parents' perceptions of the myths and challenges specific to this kind of bilingual rearing in connection to parents' level of spoken English. She concluded that, while some aspects of the ideologies related to NNBP are dependent on the level of L2, others are shared by all parents regardless of their linguistic competence in their non-native language.

As we have seen, another expression of parents' impact belief is the consistency with which they implement their chosen input pattern, PDS, and FLP. Consistency has repeatedly been found to play a key role in successful childhood bilingualism, therefore, in the next section, I will discuss the issue of continuity in language practices.

2.6. Consistency in FLP

Lack of consistency in FLP has often been argued to explain why some BFLA children fail to speak the minority language or become less balanced bilinguals (De Houwer & Bornstein, 2016; Döpke, 1992; Juan-Garau & Pérez-Vidal, 2001; King, Fogle & Logan-Terry, 2008; Lanza, 1997).

In a monolingual context, regardless of the great individual variety in the amount or type of exposure to the language that children receive (Hart & Risley, 2003), all normally developing children will acquire the language of their environment. In the context of BFLA, however, language presentation is of utmost importance because variation in this might result in a dramatic decrease in exposure to one language or the complete absence of it. Moreover, as we saw earlier, consistency in bilingual children's language socialization strategies also determines their overall language development (Lanza, 1997).

A common occurrence in the BFLA literature is the account of parents changing input strategies at some point during their children's lives —either because parents fear that one language is receiving less attention than necessary or due to other external or personal circumstances. One simply needs to read the descriptions of family language dynamics in published case studies (see e.g., Caldas, 2006; Döpke, 1992; Lanza, 1997; Liu & Lin, 2019)

to realize how much change there is in the input to which children are exposed throughout the years. Döpke (1992), Lanza (1997), Harding and Riley (1999), Pearson (2008), etc., all refer to some of the parents in their case studies adjusting their input to their children throughout the data collection process. Siri's parents, for instance, (Lanza, 1997) modified their MLAH approach to adopt OPOL after she was 10 months old following the advice of a relative. Similarly, both of Trudy's parents in Döpke (1992) addressed her in the minority language (German) until age two, when the father, who had limited knowledge of German, could not keep up using his non-native language in interactions with her. From then on, the family progressively shifted to a OPOL approach. Moreover, Caldas (2006) writes about his and his wife's move from OPOL to MLAH to accommodate their linguistic goals of productive bilingualism and biliteracy.

Survey data shows the same results. Barron-Hauwaert (2004 in Pearson, 2008) reports that 20% of OPOL families were found to switch parental input strategies. De Houwer and Bornstein's (2016) study exhibits a similar proportion (25%) of mothers who declared moving from a strict OPOL to a laxer One Parent/Two Languages approach. Simultaneously, Barron-Hauwaert's survey reported 20% of passive bilinguals in the sample (2004 in Pearson, 2008). Siri (Lanza, 1997) and the Caldas' children (Caldas, 2006) developed a more balanced bilingualism, but Trudy (Döpke, 1992) —together with three other of the six children in Döpke's case study— did not become active bilinguals. In addition, while De Houwer and Bornstein (2016) did not target children's production as a result of maternal language choice, they do conclude that although continuity in maternal language choice was not the only factor at play, "without it, children likely have even less chance to develop into active bilinguals" (p. 690).

The absence of continuity regarding the negotiation of context through PDS has also been explored thoroughly. Lanza (1997) argues that lack of consistency in negotiating a monolingual context by Tomas' parents might explain his development of a less balanced bilingualism than Siri, whose minority language speaking mother was consistent in her use of monolingual discourse strategies with her. This goes in the same line as Goodz (1989), who found that parents claiming to enforce a strict language-parent separation in the home modelled linguistically mixed utterances to their children; and Pan (1995 in King, Fogle & Logan-Terry, 2008), who had similar observations about Chinese families living in the USA. For the same reason, in the discussion of their findings about mixing and PDS, Juan-Garau and Pérez-Vidal (2001) posit that consistency regarding parents' language choice and

parental discourse strategies might have been the key in the development of a more balanced bilingualism in their target child.

We only have information about continuity of language choice of a NNB parent in one of these instances: Keith's case (Döpke, 1992), who was one of the most consistent parents in the sample. In order to gain a better understanding of the peculiarities of this kind of bilingual rearing, I will present a review of research about NNBP in the next section.

2.7. Non-Native Bilingual Parenting

As it has already been discussed, BFLA is a burgeoning field of research with a growing number of publications being released every year. In spite of the fact that OPOL is not the most common FLP (De Houwer, 2007), most research still deals with families where each parent uses their native language with the child (see above). However, some publications are now starting to explore the FLP of "more diverse range of family types, languages and contexts" (King, 2016: 727). One of these is the case of parents with a knowledge of a second language who make the decision to raise their children bilingually in their second language in a monolingual majority language context. In the literature this type of additive bilingualism has been called *artificial* (Kielhöfer & Jonekeit, 1983 in Saunders, 1988); *elective* (Valdés, 2003 in Baker & Wright, 2017); *elite* (Piller, 2001); or *non-native* bilingualism (Jernigan, 2015), which is the term used in this study.

Although the concept of the native speaker has traditionally been idealized rather than clearly defined (Chacón Beltrán, 2000) and "the usefulness of the distinction between native and non-native speakers has become increasingly problematic in recent research" (Piller, 2001: 64), this variable is key for this investigation. Not only because there is not much information regarding these families' bilingual journey, but also because non-native parents face struggles exclusive to them: negative opinions from the wider community regarding non-native bilingualism (Liu & Lin, 2019), the emotional struggle of raising one's children in a non-native language (Kouritzin, 2000), or the parents' self-doubt regarding their abilities in the second language (Lozano-Martínez, 2019).

If parents are looked at individually, there are some examples in the BFLA literature of families providing non-native input to their children (see e.g., Caldas, 2006; Deuchar & Quay, 2000; Kouritzin, 2000). However, in all of these, one of the parents in the parent pair is a native speaker of the minority language. On the other hand, there are very few instances of BFLA children receiving exclusively non-native input. In fact, for his first book in 1982

Saunders, the best-know published case of NNBP, could only find three examples of families like his (Dimitrijevic, 1965; Past, 1976; Stephens, 1952 in Saunders, 1982). He could only add three more in the sequel of his first publication six years later (Brennan, 1987; Corsetti & Taeschner, 1986; Facey, 1986 in Saunders, 1988).

To date, there are few more examples of academic research looking into NNBP either in the form of self-reflection accounts by parent-authors and case studies (Keith in Döpke, 1992; García Armayor, 2019; King & Logan-Terry, 2008; Liu & Lin, 2019; case studies 6-8 in Pearson, 2008; Saunders, 1988) or survey based (Lozano-Martínez, 2019).

In **Table 1** below I present a comparison of the NNBP case studies available based on the community context, the languages involved, the method of exposure, the language used in parent-parent interactions and other relevant information for the classification.

Table 1. Comparison of existing NNBP case studies.

Case	Context	Languages involved	Method used	Language between parent pair	Other relevant information
Saunders (1988)	Monolingual English (Australia)	Australian English & German	OPOL	Majority language	
Döpke (1992)	Keith: Monolingual English (Australia)	Australian English & German	OPOL	Majority language	The other parent does not understand much minority language
Pearson (2008)	Case 6: Monolingual English (US)	American Sign Language (ASL) & Spanish	OPOL	Doesn't say (OPOL?)	(Spanish) native speaker housekeeper
	Case 7: Monolingual English (US)	English & Spanish	MLAH	Minority language	(Spanish) native speaker au pair
	Case 8: Monolingual English (US)	English & Spanish	OPOL	Majority language	
King & Logan- Terry (2008)	Monolingual English (Washington DC)	Family A: American English & Spanish	OPOL/MLAH	Majority language mother- father/ Minority language	full-time native speaker nanny

					mother- nanny	
García Armayor (2019)	Monolingual Spain	Spanish British English	&	OPOL	Majority language	
Liu & Lin (2019)	Monolingual China	Chinese English	&	OPOL	Minority language	In-home Chinese grandparents

By far, the best-known, most often cited, and longest NNBP case study documented is still Saunders' (1982, 1988). Between his two volumes, Saunders gives an account of thirteen years of family bilingualism involving his three children. He combines detailed information about his NNBP with more theoretical discussions about linguistics, including reviews of previous work pertaining family bilingualism and the literature on infant bilingual development. Saunders' description of his three children's linguistic development is based on speech samples of dyadic and triadic parent-child interactions, which are used abundantly throughout the text to illustrate all the relevant features of the children's language. Aside from the description of the parents' linguistic strategies conducive to the children's bilingualism, Saunders includes a chapter describing how they supplemented minority language by means of books, TV, playgroups and so on. All three of Saunders' children developed active bilingualism but the author-parent claims and gives specific examples of how, even when children are growing up in the same family, they do not acquire bilingualism in the same way.

The second instance of non-native input is Döpke's (1992) case study of Keith. Keith's case is one of the only two children in Döpke's sample who is deemed an active bilingual. Döpke credits his father's child-centered interactions, his use of insisting strategies, teaching techniques and general involvement with the child for Keith's active acquisition of German.

Pearson (2008) includes four case studies (case studies 5, 6, 7, and 8 pp. 178-184) as examples of non-native input. Case study 5, however, is Saunders', so it is not displayed on the table. Case 6, on the other hand, is complex, because the child's first languages were Catalan and (although the account is not clear) English. Then, after the child's first year Spanish was introduced in a more consistent way. Moreover, the father is a heritage Spanish speaker, although Pearson claims that his knowledge of the language came in high school, due to his father's family commitment to Catalan. Therefore, in line with the stance taken here, his would be a case of BFLA in Catalan and English and ESLA of Spanish. Case studies

6 and 8 are instances of active BFLA children. Case 6 is doubly interesting because the simultaneous use of two different non-native languages: American Sign Language and Spanish.

King and Logan-Terry (2008) explore two case studies to investigate caregiver speech and its relationship with children's linguistic outcomes. Only one of them (Family A) is included here owing to the fact that the other (Family B) involves the use of three languages. Family A's case is of interest because of the family configuration and, thus, the distribution of input. The authors explain that the English-speaking father was not very involved in the child's education, so English input was limited in the home. For that reason, aside from the mother, a full-time native Spanish speaker nanny is considered the other primary caregiver. Nevertheless, some amount of English input in the home is to be expected, this is the reason why, even if the authors imply the use of a MLAH strategy, I have coded it as OPOL as well. Minority language (Spanish) was used in mother-nanny interactions, while majority language (English) was used between the parent pair. King and Logan-Terry's research is also relevant because it sheds light into the discussion regarding whether speaking one's non-native language impacts quality of speech and thus, children's linguistic development. From their data, this is not the case. Although it is important to bear in mind that both mothers are highly proficient non-native speakers. Conversely, Snow et al. (1898 in Snow, 1990) found that children whose parents used non-native English at home with them performed worse on standardized literacy tests and oral tasks than children from monolingual native English and non-English households.

The only one of these NNBP examples to be set in Spain is García Armayor's (2019) case study of his daughter Helena. The author collected speech samples from audio and video recordings, and diary entries for eleven months (child's aged 2:9 to 3:5). García Armayor (2019) describes his daughter's bilingual upbringing in terms of the relative amount of input in English and Spanish that she received during this time and the activities in English that her father did with her. The child's linguistic development in the minority language seems to be stronger in her receptive skills than in her productive skills, since she is reported to use an increasing amount of Spanish over English in all interactions —including with her father—. An exception is her private speech while playing with toys from English shows when she seems to use English spontaneously. Armayor argues that the child might possibly need reinforcement in the input by means of trips to countries where English is a majority

language to counter the influence that Spanish has in her linguistic development so that she can start using English productively.

Finally, Liu & Lin's (2019) *autoethnography* reports on the authors' journey to raise their children bilingually in Chinese and English —their second language—, in monolingual China first, and in Canada later. In the same line as in King and Logan-Terry's case study (2008), the family configuration is not nuclear. In Liu and Lin's case, there are four people acting as primary caregivers for the children. When the first child was born, both maternal grandparents moved in with the family and provided the Chinese input while the parents provided the input in English. For this reason, this case study is coded as OPOL in **Table 1**. Then, when the first-born child was 4:6, the family (not the grandparents) moved to Canada and started a MLAH (Chinese) approach, thus, using their native language with their child. The authors report that the first-born child was able to function well in the new English environment. When the second child was born in Canada, the family reverted to the original strategy and the grandparents joined again.

Besides these publications, NNB parents have made up for the sparsity of research by looking to lay accounts and language support groups in online fora, social media or messaging platforms where families try to connect to others who share their non-native bilingual child-rearing goals (Piller, 2001). In addition, NNBP families have access to parent guides with encouragement and advice (Jernigan, 2015; Sampedro, 2015).

As it can be seen from the present case studies, even when dealing with NNBP, OPOL is the most often implemented strategy in published accounts. Besides, most reported cases of children reared in a non-native language inform of more or less active, balanced bilingualism. However, this result can obviously be influenced by reporting bias, given that parents whose children do not develop active bilingualism would presumably not feel so much inclination to share the results.

2.8. Conclusion

As I mentioned at the beginning of this chapter, the main goal of this investigation is the exploration of the FLP of NNBP families in monolingual contexts through parental self-reports. In order to offer an insightful analysis of the results of the questionnaire, an understanding of the various areas of scholarship covered above is necessary.

First, FLP is the field that encompasses all the other elements of the study and involves the exploration of all the decisions that parents make oriented towards the bilingual upbringing of their children. FLP is especially important for BFLA since the first exposure to language is most frequently done within the family. FLP includes the analysis of PDS, input patterns, and parental beliefs and attitudes. PDS and input patterns are part of children's linguistic socialization and influence children's output by means of controlling the amount of exposure to the second language. They also create the need for children to use that language or alternatively, socialize them into a linguistic environment where it is appropriate to mix languages. As we have seen, monolingual PDS, which pretend non-comprehension, are the most effective interactional strategy to attain active use of the minority language. In addition to PDS, parental continuity in language choice has been found to play a role in the development of active bilingualism in BFLA children, so a discussion of that variable was also included.

The decisions as to whether strict language separation is required are informed by parental ideologies about languages, acquisition, and bilingualism. It has been found that at least positive attitudes and an impact belief are necessary to foster childhood bilingualism. Finally, NNBP must be defined and the existing research on the matter discussed, since it is the area of research from which the present study stems. Even though as we saw in section 2.7, research in this area is limited and mostly based on case studies.

In the next Chapter, I will present the objectives and research questions for this investigation based on the review of the literature.

3. CHAPTER 3. OBJECTIVES AND RESEARCH QUESTIONS

3.1. Objectives

The overarching goal of this investigation is to try to fill a gap in the existing research about childhood bilingualism by exploring the FLP of NNBP families raising NNBFLA children in monolingual contexts.

The target population for this study are, therefore, NNB parents raising NNBFLA children who meet certain criteria:

- First, none of the main caregivers are a native speaker of the child's target language.
- Second, the family live in a monolingual context where the parents' native language is the same as the community language.
- Third, the child is exposed to the additional language from birth.
- Finally, the child is exposed to only two languages.

Owing to the fact that NNBP is an emergent phenomenon, not much is known about the circumstances in which NNBFLA children are raised. In order to gain a fuller understanding of this type of childhood bilingualism, four main objectives will be addressed. The first is to describe the FLP of NNBP families in terms of their language choices, socialization practices, and attitudes towards childhood bilingualism and the parents' role in the children's bilingual development. The second is to examine the consistency with which the FLP is implemented in each case. The third is to analyze whether various levels of parental competence in the non-native language are related to different linguistic choices, ideologies, or language socialization practices. Finally, the fourth objective is to see whether children's linguistic output changes NNBP families' FLP. Additionally, we will be able to describe the most common contexts where NNBP is present.

3.2. Research questions

In order to meet these objectives, the research questions that I intend to address are the following:

- 1. What is the FLP of NNB parents?
 - a. What type of input do NNBFLA children receive?
 - b. What language socialization practices do NNB parents use to raise their NNBFLA children?

- c. What are the attitudes and beliefs of NNB parents towards bilingualism and their impact belief?
- 2. Are NNB parents consistent in their implementation of FLP?
- 3. How does the parents' communicative competence in the non-native language influence FLP?
- 4. How is the FLP of NNB parents shaped by their child-rearing experience?

As an additional outcome, after the questions are answered and the data about participants analyzed, I hope to also be able to describe the typical NNBP family to better understand the characteristics of this demographic.

These research questions will be addressed by means of a parental self-report questionnaire which will be distributed on social media and whose data will be subject to statistical analysis using IBM SPSS statistical software.

4. CHAPTER 4. METHODS

In this chapter I will present a description of the methodological approaches that guided the data collection process for this investigation. I will first describe the participants and the instrument that was designed to obtain the data. The steps involved in the data collection process are covered in section 4.3 and the list of the variables that were included in the final data set are listed in section 4.4. Finally, an overview of the basic aspects of the analyses that were conducted will be presented in section 4.5.

4.1. Participants

The final sample included 62 families with first-born children ranging in age from 0 to 14 years (M= 3.35, S.D. = 2.85). In 72.6% of families the target child was already speaking. Fifty-one point six percent of families were formed by two different sex parents and a single child; and 30.6% of families, by different sex parents with two children.

Owing to the fact that data collection was done online through social media, the origin of the sample is heterogeneous. Forty point three percent of families resided in Spain and the rest in other parts of Europe or America (for a detailed description of participants' country of origin see section 5.1). Ninety point three percent of respondents lived in urban areas.

In 64.5% of cases, the mother was the sole provider of input in the minority language while an additional 22.6% shared this responsibility with the father. Only in 12.9% of cases did the father present the non-native input on his own.

The majority of respondents were health and education professionals (58.1%) and had completed some tertiary education (96.7%), with 51.6% holding a Bachelor's Degree and 38.7% a Master's Degree.

The selection of cases for the final sample followed the inclusion criteria (see section 3.1) strictly. Namely, being NNBFLA as per the definition given in this study. That is, children being raised bilingually in the parents second language in a community which was monolingual in the parents' native language. For instance, if respondents declared that the child was exposed to only two languages, but the main caregivers had two different native languages that did not correspond with the language of the wider community, the case was rejected. As were cases who responded that any of the child's relatives were native speakers of the target language. As a result, in all cases both parents and the extended family had the

same native language as the community, so children in the study did not have contact with third languages. Other decisions were made so as to keep the sample as homogeneous as possible and control extraneous variables. For example, excluding single parent households. Of the 153 questionnaires returned, only 62 were included in the study.

A more detailed description of the demographic characteristics of the final sample has been included in section 5.1.

4.2. Instrument

Data for this study was gathered by means of a self-report questionnaire (Appendix 1) where parents could record the strategies they used to manage languages in their family and their attitudes and beliefs about their child's bilingualism. The questionnaire was devised *ad hoc* for this investigation by the researcher in Microsoft Forms after reading the relevant literature and conversations with families about key issues regarding NNBP. Basic recommendations for subject selection and participants' language background were taken from De Houwer (2009). The typology of pattern of exposure was adapted from De Houwer, (2007) and relative frequency estimate categories from De Houwer (1999). Sample sentences for the PDS section of the questionnaire were adapted from Brooksbank (2017) and Lanza (1997). The questionnaire was prepared in two languages: English and Spanish. Both options were shared together so participants could choose their preferred language. A definition of native or non-native was not provided, so respondents included themselves in either category as they deemed appropriate.

The instrument was divided into seven sections which dealt with the demographic background of participants, the research questions of this study and a final contact and comments section. The front page of the questionnaire included information about the study and a request for the person who was using the non-native language with the child to be the one to fill out the survey. It also reminded respondents that all questions would be referred to the first-born child only. The terms Primary Caregiver 1 (CG1) and Primary Caregiver 2 (CG2) were used throughout the questionnaire instead of father/mother to encompass all types of family organizations.

The first section of the questionnaire dealt with subject selection. Demographic characteristics of gender or age of caregivers were not deemed relevant and thus, not

collected⁵. Instead, caregivers were asked to report on their native language, location of the family (country), number of languages used with the child and whether they were used from birth, as well as information about the native language of the extended family. These were in the form of polar questions and open questions. Lastly, there was a question about the family composition in terms of the people living in the same household as the child.

The second section was devoted to the languages that the caregivers used with each other. Respondents were also asked about both CG1's and CG2's level of competence in the non-native language according to the CEFRL (A1, A2, B1, B2, C1, C2 or no level) and any changes in patterns of use in order to estimate consistency.

The third section aimed to investigate the ways the two languages were presented to the child. Participants were asked to choose from five input patterns based on De Houwer's (2007) Flanders survey. Then, for the patterns where one or both caregivers used both languages, they were asked to specify the relative amount of exposure to the non-native language by choosing whether they spoke the non-native language "mainly", "sometimes" or "half of the time" (De Houwer, 1999). They were also asked about any changes in these as a new measure of consistency.

The next section targeted the child's linguistic environment outside of the home. Respondents were asked to fill out in which contexts the additional language was used with the child. Additionally, they were asked to record any supplementing strategies that parents might use to increase non-native input. In both cases parents had to choose from a multiple-choice item selection.

After that, the questionnaire focused on language socialization practices. Specifically, PDS and mixing. This was done through three multiple choice questions where caregivers had to choose their most frequent response to their child's mixing. In these three items of the questionnaire, parents were presented with increasingly more specific response types. The first question used definitions of the different responses as coded by Lanza (1997); the second, a sample response for each type of discourse strategy; and the third, a fictional conversation where a child responded by mixing languages. In all these there was the option

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⁵ De Houwer (2007) found that gender of the minority language speaking parent did not affect acquisition.

to choose the option "my child does not mix languages." Participants could select more than one response.

The sixth section targeted caregivers' attitudes and beliefs about their role in their child's language acquisition —including their impact belief— and the challenges related to non-native bilingual parenting. Attitudes and beliefs were measured using 4-item scales of the semantic-differential type— (4) very much, (3) somewhat, (2) a little, (1) not at all; and (4) very frequently, (3) occasionally, (2) rarely, (1) never— or Likert scales — (4) I strongly agree, (3) I agree, (2) I disagree, (1) I strongly disagree. This section included two polar questions about the parents' attitudes towards children mixing languages in the context of conversations or sentences.

Finally, the questionnaire closed with a contact and comments section where respondents could leave a comment on anything they felt was important for their bilingual journey, but had not been asked, and a form of contact if they wished to be informed of the results of the investigation.

A second, subsidiary questionnaire was required to collect data about the Socio Economic Status (SES) of respondents, since this information had not been included in the main questionnaire. This second brief survey (Appendix 1) targeted the parents' occupation, level of education and place of residence. We also asked whether the person responsible for the input in the non-native language was the mother or the father (although see footnote 4).

To collect information about occupation and level of education the relevant international classification systems were used: the International Standard Classification of Occupations (ISCO) in its latest version (2008) for occupation, and the International Standard Classification of Education (ISCED) in its latest version (2011) for the level of education.

4.3. Procedures

The main questionnaire was piloted twice. The first screening was done by two beta readers so that the terminology of the questions and the length of the questionnaire could be adjusted. The second piloting phase included seven mothers who were raising their children in a non-native language (English) in Spain. Their answers served to make some final readjustments to the questionnaire before moving on to the data collection process. Data from the piloting phase was not included in the final data set.

The sample was selected by convenience sampling. This non-probability sampling technique consists of selecting members of the target population if they meet certain practical criteria of accessibility as well as the key characteristics of the target population (Dörnyei, 2007). The questionnaire was posted on several Facebook groups for non-native parents raising bilingual or multilingual children, one WhatsApp group of Spanish parents raising bilingual in English and Spanish, and distributed among the families whose children were attending an English afternoon school the researcher had access to in her town in the center of Spain. Participants were not compensated in any way for their participation, but they were offered the possibility of being informed of the results of the study if they provided a form of contact at the end of the questionnaire. This type of sampling technique involves some drawbacks. First, the questionnaire was anonymous, so there was no sure way to prevent multiple responses from one person. Second, participants are self-selected, therefore, there is no way to differentiate characteristics of respondents and non-respondents (Dörnyei, 2007). This may influence the generalizability of the results of the survey to the population.

Both the Spanish and the English versions of the main instrument were shared together on the WhatsApp group, the English afternoon school and one of the Facebook groups so that participants could choose their preferred language. Only the English version was posted on the other Facebook groups in accordance with their publication guidelines. The questionnaire remained open for two weeks in April 2021.

The subsidiary questionnaire including SES information was emailed to those families included in the final sample who had left a form of contact (n=48). Of 48 emails sent, 31 responses were returned (64%).

Data was inputted and processed using IBM SPSS statistics software. Descriptive analyses were run for all the variables in order to explore the excluding factors (ITEMS 1, 2, 5, 7, 8 and 26). As I mentioned in section 4.1, all respondents who reported different native languages in the primary caregiver pair were excluded even if they declared that the first-born child was only exposed to two languages. In addition, all respondents who reported that relatives used a different language with the first-born child were excluded as well. Other decisions were made so as to keep the sample as homogeneous as possible and control extraneous variables. For example, excluding single parent households. After the excluded questionnaires were eliminated, data from both versions was merged. Of the 153

questionnaires returned (30 in Spanish and 123 in English), only 62 met all the criteria to be included in the sample (15 in Spanish and 47 in English).

4.4. Variables in the study

The main questionnaire consisted of forty-seven items which were analyzed to create the twenty-three variables included in the study. All twenty-three variables are presented in **Table 2** below together with the correlation to their questionnaire item and the research question they were meant to answer.

Table 2. Correlation between variables included in the analysis and items in the questionnaire.

questionnaire	5.		
NUMBER	VARIABLE	QUESTIONNAIRE ITEM	RESEARCH
	NAME	NUMBER	QUESTION
1.	L2CG1	ITEM 13-Level of L2 CG1	3
2.	CHILDSPEAKING	ITEM 34-Is your child already	4
		speaking?	
3.	INPUT1	ITEM 9/10- What is the language	1.a
		pattern caregivers use between each	
		other?	
4.	INPUT2	ITEM 15-Current input pattern	1.a/3
5.	INPUT3	ITEM 16/23- Current amount of	1.a
		input	
6.	INPUT4	ITEM 31- When is the non-native	1.a/3
		language spoken to the child?	
7.	FLP1	ITEM 29- How do you supplement	1.a
		your child's non-native input?	
8.	FLP3	ITEM 45- Are you in touch with	1.a
		other families using non-native	
		languages with their children?	
9.	DS1	ITEM 35-When your child says	1.b
		something in the non-native	
		language (definition)?	
-			

10.	DS2	ITEM 36- When your child says 1.b something in the non-native			
		language (sample)?			
11.	DS3	ITEM 37- When your child says 1.b			
		something in the non-native			
		language (example)?			
12.	DS4	ITEM 41a- I encourage my child to 1.b/3/4			
		use the non-native language in			
		response to non-native language			
		utterances.			
13.	MIX1	ITEM 41b- I mix my native language 1.b/3/4			
		with my non-native language when I			
		speak to my child.			
14.	IB1	ITEM 39-The more I speak the non- 1.c/3/4			
		native language to my child the more			
		she will learn.			
15.	FLP2	ITEM 40a-I have planned how the 1.c/3/4			
		input in the non-native language will			
		be provided to my child.			
16.	IB2	ITEM 40d- I pay close attention to 1.c/3/4			
		the input I provide to my child.			
17.	WORRY 1	ITEM 40b- I am worried my non- 1.c/3/4			
		native pronunciation will affect my			
		child's acquisition.			
18.	WORRY 2	ITEM 40c- I am worried my 1.c/3/4			
		mistakes in the non-native language			
		will become my child's mistakes.			
19.	MIX2	ITEM 42- I dislike my child mixing 1.c/3/4			
		in a conversation.			
20.	MIX3	ITEM 43- I dislike my child mixing 1.c/3/4			
	2011272	in a sentence.			
21.	CONSIST1	ITEM 11-Have there been any major 2			
		changes to the language(s) you use			

		with the other Primary Caregiver after the birth of your child?
22.	CONSIST2	ITEM 24- Have there been any major 2 changes to the language you use with your child since birth?
23.	CONSIST3	ITEM 40e- I am consistent with the 2/3/4 way I have chosen to expose my child to my non-native language.

In order to address my first research question: What is the FLP of NNB parents?, the relevant research (see Chapter 2) about FLP reveals that this area of language acquisition involves the study of language practices, including the type of input and the language socialization of children; language management; and parental attitudes.

The type of input that NNBFLA children received was analyzed through variables #3-8 involving the pattern and frequency of exposure, the languages parents use in their interactions; the variety of contexts where the minority language is spoken, supplementing strategies, and whether families were in touch with others practicing NNBP. These were all nominal variables relevant to my research question 1.a. It was considered that these elements were necessary to describe NNBFLA children's linguistic environments, since all that children hear influences the amount of input they receive.

Indeed, input patterns in parent-child interactions and, to a lesser extent, parent-parent interactions have been widely recorded in all types of research into childhood bilingualism. The variety of contexts where the minority language is spoken can also have a significant impact in the amount of exposure to the minority language. By the same token, supplementing strategies and societal support have been found to be key in minority language situations Piller, 2001; Lozano-Martínez, 2019).

Variable INPUT2 was coded with five values according to five input patterns based on De Houwer's (2007) Flanders survey (see Appendix 1). As we can see in **Table 2**, variables INPUT1 and INPUT3 were composite variables. In the case of INPUT1, by considering the information in ITEMS 3, 4 and 5, it was possible to unpack whether parents used majority,

minority, both languages, or maintained language separation between each other. As a result, INPUT1 had four values: MAJORITY, MINORITY, MIXED and OPOL.

For variable INPUT3, the coding process was more complex. In ITEMS 16-23, all parents, except those implementing OPOL and MINORITY LANGUAGE strategies, were asked whether they used the native and non-native language with the child "mainly", "sometimes" or "half of the time" (De Houwer, 1999). These responses were then classified into fourteen possible combinations (see **Table 4**). A detailed description of these combinations can be found in section 5.2.1.

To answer question 1.b. about the language socialization of NNBFLA children, variables #9-13 were analyzed. Variables DS1, DS2 and DS3 targeted PDS (Lanza, 1997) and they were only asked to parents who reported their child was already speaking (Variable CHILDSPEAKING). As we can see in Appendix 1, information about PDS was in the form of multiple-choice questions. Variable MIX1 was used to measure self-rated parents' language separation in their interactions with the child, while DS4 aimed to determine the parents' degree of commitment to encourage language separation in the child. These were in the form of 4-item scales of the semantic-differential type.

The latter two variables were included in the study to gauge whether language management efforts matched reported language practices in terms of the language socialization of NNBFLA children. If the parents' commitment to language separation and their use of PDS were in the same line, it would add validity to reported measures of language socialization practices by NNBP families.

Variables #14-20 served to describe the attitudes and beliefs of NNB parents, as expressed by question 1.c. Attitudinal variables #14-18 were ordinal as they were obtained through Likert and semantic-differential scales. These were in the form of qualitative statements created *ad hoc* after a careful consideration of the relevant literature. Unfortunately, there is not any instrument available to measure impact belief. Variables MIX2 and MIX3 were nominal and only contained 3 values ("yes", "no", "my child does not mix").

A wide variety of attitudinal measures was included in the questionnaire so that the belief system of our respondents regarding NNBP could be better described.

Impact belief as defined by variable IB1 has been found key in successful childhood bilingualism, as have been language planning (variable FLP2) and attention to input (variable IB2). Variables WORRY1 and WORRY2, on the other hand, were included to measure an aspect of the attitudes and beliefs of parents rearing bilingually exclusive to NNBP families —given the non-native nature of their input, a principal factor to consider was how much this feature affected their FLP.

A final attitudinal measure targeted parents' attitudes towards language mixing, since the relevant literature showed that parents raising bilingual children usually have negative opinions towards this practice (Baker & Wright, 2017).

Second, variables #21-23, were used to explore my second research question involving the consistency of the sample in terms of the implementation of FLP. They targeted caregivers' continuity in parent-parent and parent-child interactions as well as in their overall FLP. Consistency in all these areas has frequently been claimed to aid language acquisition (see section 2.6).

Finally, variables #1 and #2 were the independent variables for research questions 3 and 4. Variable #1 (L2CG1) was used to analyze how the competence in the L2 of the caregiver responsible for the input in the non-native language affected an entire range of aspects in their FLP. Participants were asked to report their level of competence according to the Common European Framework of Reference for Languages (CEFRL).

This variable was considered key in this study since it is the defining feature for the whole target population, and it has already been used by research into NNBP as an independent variable (Lozano-Martínez, 2019). In this study, the level of competence in the non-native language, which was originally coded with seven values, was recoded into four and two values for several statistical tests (a more detailed description of how these recodes have been used can be found in section 5.4). CG1 are expected to have a prominent level of competence in the non-native language.

To address my last research question, variable #2 (CHILDSPEAKING), was used to test the implications of children's developing linguistic competence in the application of FLP, especially focusing on parental attitudes. In this case, the sample was divided into two groups: those whose first-born child was in the pre-verbal stage and those whose first-born was already speaking, since previous research has showed that children are active agents in

defining FLP (Fogle & King, 2013). If the key measures analyzed against this variable were to differ between the two groups, it would indicate that NNBFLA children behave as other BFLA children in the process of shaping FLP.

After a description of the variables in the study and how they can influence the results of this research, in the next section an outline of the statistical procedures that were performed to address each of my research questions will be presented, including a rationale for the choice of statistical tests.

4.5. Data analysis

Data was inputted and processed using IBM SPSS statistics software version 27.0.1. Since an important part of this investigation was descriptive, first, I ran descriptive analyses of all the relevant variables to describe the final sample of participants and obtain preliminary answers for my research questions. Questions 1. a., 1. b., and 2 were partially answered by this procedure. Most of the data collected in the questionnaire was of either nominal or ordinal nature, therefore, measures of central tendency (means, medians, etc.) were not provided. Instead, frequency and crosstabulated data was presented. Besides, all statistical tests have been performed on the assumption that data did not meet normality criteria, as it was later corroborated by exploratory analyses.

The second part of this research aimed to find associations between variables. Therefore, as data was not normally distributed, I used non-parametric tests to investigate the relationships and associations between the variables, and the differences between groups in my sample. The different statistical tests were chosen on the basis of the type of data available.

Spearman Rank-Order Correlation coefficients were used for attitudinal variables to answer part c of my first research question and to explore the relationship between consistency and attitudinal variables in research question number 2. This test allowed us to determine whether there was an association between ordinal variables, but also the direction and the strength of said relationship.

In order to respond my third research question, two types of statistical tests had to be performed. On the one hand, Chi-square tests for independence were computed. This non-parametric test is normally used to look for associations between nominal variables, so it was chosen to analyze the interrelationships between the competence of parents in the L2

and the choice of input pattern, the contexts of use for the target language, and parental reports about attitudes towards child inter- and intra-sentential code-switching. Spearman Rank-Order Correlation coefficients, on the other hand, were calculated to assess whether parental attitudes towards language acquisition and linguistic practices were related to their competence in the non-native language. Since, as it has already been mentioned, attitudinal data was ordinal.

Finally, Mann-Whitney U tests were run to answer my final research question. This test can detect differences in the mean scores of ordinal variables between two populations. In this case, groups of families with pre-verbal and speaking children. However, Chi-square tests for independence had to be used for variables targeting parental attitudes towards child language mixing since data was dichotomous, not ordinal.

A more detailed description of the specific operations which were computed for each variable has been included in the appropriate sections of Chapter 5.

5. CHAPTER 5. DATA ANALYSIS

The focus of this study was to try to fill a gap in the literature about childhood bilingualism by exploring the FLP of NNBP families raising NNBFLA children in monolingual contexts. This broad goal was subdivided into four different objectives. The first was to describe the FLP of NNBP families in terms of their language choices, socialization practices and ideologies. The second was to examine the consistency with which the FLP was implemented among these families. The third was to analyze whether various levels of competence in the non-native language were related to other aspects of NNBP. Finally, the fourth objective was to see whether children's linguistic competence changed NNBP families' FLP. The terms caregiver and parent will be used interchangeably.

In this chapter I will present the descriptive analyses and statistical tests that I conducted to try to attain the objectives of the study. The results will be reported in separate sections for each of the research questions. First, however, I will describe the relevant features of the final sample.

5.1. Description of the final simple

In this section, a description of the sample will be made in terms of the age of first-born children, the parents' native language and L2, the composition of participant families, their countries of residence, the level competence in the non-native language of both caregivers, and CG1's SES. Frequency tables for each of the figures in this section have been included in Appendix 2.

The final sample included 62 families with first-born children ranging in age from 0 to 14 years (M=3.35, S.D.=2.85). In 72.6% of families the target child was already speaking.

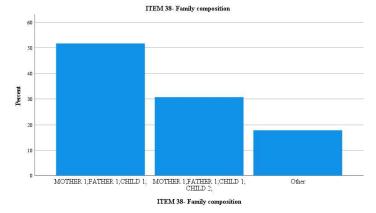
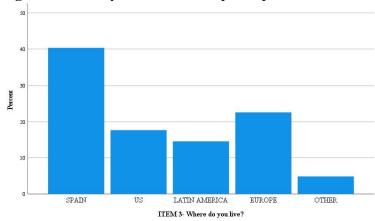


Figure 1. Most common types of families in the sample.

As for the types of families in the sample, we asked participants to list all the people who lived in the same house as the child. As we can see in **Figure 1**, in 51.6% of cases, the family was formed by two different sex parents and a single child. Other 30.6% were different sex parents with two children. The remaining 17.8% fell into many other different family types including families with three or more children and families living with grandparents.

Figure 2. Country of residence of participant families.



When looking at the countries of residence of respondents, fourteen countries and two continents are represented with a wider presence of urban areas (90.3%). The distribution shows a wider presence (40.3%) of families residing in Spain. As we can

see in **Figure 2**, 22.6% of NNBP families lived in other European countries (Cyprus, France, Germany, Greece, Hungary, Italy and The Netherlands), 17.7% in the US, 14.5% in Latin America (Bolivia, Chile and Mexico) and 4.8% in other places of the world (UK and Canada).

The native languages of the participant families were as follows: Fifty-six point five percent had Spanish as a native language and 19.4% had English, with Italian being the third most represented native language (8.1%). **Figure 3** shows the distribution of the most often mentioned native languages. Other languages included Arabic, Dutch, French, German, Greek and Hungarian.

ITEM 4/5-Native language

50

40

40

50

SPANISH ENGLISH ITALIAN Other

ITEM 4/5-Native language

Figure 3. Native language of the parent-pair.

As we can see in **Figure 4**, 75.8% of NNB parents were using English as their target language and 12.9% were using Spanish. The third most mentioned non-native language was German (6.5%). The only two other languages mentioned in the sample were French and Russian. Eighty-seven percent of mothers and 35.5% of fathers used the non-native language with the child.

ITEM 6-Non-native language you use with the child

80

40

ENGLISH SPANISH GERMAN Other

ITEM 6-Non-native language you use with the child

Figure 4. Non-native language used with the child.

SES data reveals that the majority of respondents were health and education professionals (58.1%) and had completed some tertiary education (96.7%), with 51.6% holding a Bachelor's Degree and 38.7% a Master's Degree.

Finally, **Figures 5** and **6** show the distribution of reported competence in the non-native language for both parents. Ninety-two percent of the caregivers providing the input for the non-native language (CG1) assessed their level in the child's target language as B2 and above according to the CEFRL. On the other hand, the level in the L2 of the other caregiver (CG2) was spread over a wider range with 59.7% of the sample in the lower end (no level to B1) and 40.3% in the higher end of the spectrum (B2 to C2).

Figure 5. CG1's level of L2.

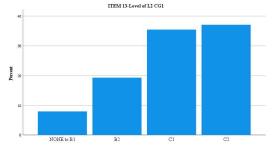
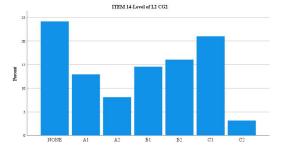


Figure 6. CG2's level of L2.



As a final remark about the sample, it is worth mentioning here that only 40.5% of returned questionnaires fulfilled all the criteria to be included in the study: In 19.6% of the returned questionnaires the child was being reared multilingual and in 28.7%, the context was ESLA rather than BFLA.

5.1.1. Summary

In sum, the sample was formed by a heterogeneous group of families in terms of family composition, age of the first-born child and native language. The most represented country in the sample was Spain, but there was presence of other thirteen countries with the most common family living in urban areas. English was the target language of most respondents followed far behind by Spanish. In any case, the mothers were most often responsible for the input in the non-native language. The average level of competence in the target language of the caregiver responsible for its input was high, while the level of the other caregiver showed great variation. In terms of SES, most CG1 had completed some tertiary education and had health or education occupations.

In the next four sections, the data analysis for each of my research questions will be presented.

5.2. RESEARCH QUESTION 1. What is the FLP of NNB parents?

5.2.1. RESEARCH QUESTION 1.a. What type of input do NNBFLA children receive?

In order to examine the type of input that NNB parents offer NNBFLA children, in this section I will present a descriptive analysis of variables INPUT1, INPUT2, INPUT3, INPUT4, FLP1 and FLP3, which involve the choice of parental input pattern, the language used between caregivers, the relative frequency of input for the minority language, the variety of contexts of exposure and the type of supplementing strategies that NNB parents in the sample reported using. All of them involving NNBFLA children's linguistic environment. Frequency tables for each of the figures in this section have been included in Appendix 3.

5.2.1.1. Input patterns

Five different patterns of language exposure were presented in the questionnaire based on De Houwer's (2007) classification, which revolves around parental language distribution as a function of the language of the community. The widely common acronym OPOL was used for families where one parent used the majority language and the other the minority language. MINORITY LANGUAGE referred to families where both parents only used the non-native language. The situation when both parents used both languages was referred to as MIXED, while Mm+M was used for families where one parent was using both the majority and the minority language, and the other only the majority and the minority language and the other only the majority and the minority language and the other only the minority language. In the questionnaire, these choices were presented as native and non-native language combinations (see Appendix 1).

In terms of input pattern choice, 38.7% of families reported using the OPOL approach at home. The second most reported strategy was that in which both parents used the majority language, but only one of them used the minority language (Mm+M: 32.3%). MIXED input was chosen by 12.9% of respondents, closely followed by MINORITY LANGUAGE input families (11.3%). The least frequent input pattern in the sample was that in which both parents used the minority language, but only one of them used the majority language with the child (Mm+m: 4.8%). **Figure 7** shows the distribution of input patterns in the sample.

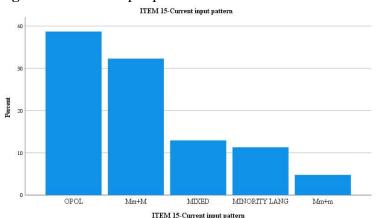


Figure 7. Current input pattern.

5.2.1.2. Language use between caregivers

Regarding the languages used between the parent pair (INPUT1), respondents were asked to include the language that they used with CG2 and CG2 with them. The resulting pairs of

languages were cross referenced with the alleged native and non-native language for each caregiver and the place of residence. Then, the combinations were recoded as MAJORITY, if both parents communicated with each other in the native language; OPOL, if they maintained language separation in their dyadic interactions; MIXED, if both used both languages with each other, and MINORITY if they only communicated with each other in the non-native language.

An observation of frequencies (**Figure 8**) tells us that an overwhelming majority of caregivers (82.3%) reported using majority language for parent-parent dyadic interactions.

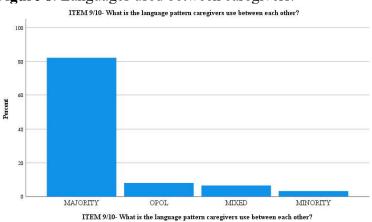


Figure 8. Languages used between caregivers.

A cross tabulation of input pattern and language use in the parent pair (**Table 3**) showed a more fine-grained classification of the variety of patterns of exposure in the sample.

Table 3. Patterns of exposure in the sample. Input pattern and language used in the parent pair.

INPUT1 ITEM 9/10- What is the language pattern caregivers use between each other?					
INPUT2 ITEM 15-Current input Percent within Percent within					
pattern		Frequency	input pattern	sample	
1 OPOL	1 MAJORITY	18	75,0	29.0	
	2 MIXED	2	8,3	3.2	
	3 OPOL	4	16,7	6.4	
2 MINORI	TY4 MAJORITY	4	57,1	6.4	
LANG	5 MINORITY	2	28,6	3.2	
	6 MIXED	1	14,3	1.6	
3 MIXED	7 MAJORITY	7	87,5	11.3	
	8 MIXED	1	12,5	1.6	
4 Mm+M	9 MAJORITY	20	100,0	32.3	
5 Mm+m	10 MAJORITY	2	66,7	3.2	
	11 OPOL	1	33,3	1.6	

As we can see in **Table 3**, from the 20 logically possible combinations of input pattern and language use between caregivers, only 11 were selected in the questionnaire. Among these, the most common was that in which both parents used the majority language, but only one of them used the minority language with the child (Mm+M) while the parents used the majority language with each other (32.3%) closely followed by OPOL families that used majority language for parent-parent interactions (29%). The third most often chosen pattern of exposure was that in which the child was presented with MIXED input and the majority language was used in the parent pair (11.3%).

5.2.1.3. Relative frequency

Fourteen different possible relative frequency combinations were identified for the questionnaire according to the five input patterns described (**Table 4**).

Table 4. Possible relative frequency combinations⁶.

ITEM 16/23- Cu	ITEM 16/23- Current amount of input					
Valid Values	1	OPOL				
	2	MINORITY LANGUAGE				
	3	STm+STm				
	4	Mst+Mst				
	5	half+half				
	6	STm+Mst				
	7	STm+half				
	8	Mst+STm				
	9	Mst+half				
	10	half+STm				
	11	half+Mst				
	12	STm				
	13	Mst				
	14	Half				

Values 3-11 correspond to input patterns in which both caregivers provide input in the majority and minority language (MIXED). Thus, the equation has two sides: CG1 + CG2. On the other hand, values 12-14 correspond to input patterns in which only one of the main

⁶ Lowercase indicates frequency for minority language while uppercase indicates frequency for majority language. The letter codes should be read as follows: M (mainly), ST (sometimes), half (half of the time).

caregivers provides input in both the majority and minority language (patterns Mm+M y Mm+m). Therefore, only CG1 was asked to report relative frequencies of exposure⁷.

An examination of the frequencies (**Tables 5** and **6**) reveals that the most often chosen distribution of languages within the family for those households where only one parent offered input in both majority and minority language (Mm+M and Mm+m) was that in which the minority language was used mainly or half of the time (STm= 43.4%, half= 39.1%). On the other hand, in MIXED input households, the majority of caregiver pairs (50%) admitted to using the majority language mainly and the minority language only sometimes. Frequency combinations that would have offered increased minority language input (values 7-9) were never chosen.

Table 5. Current amount of input by input pattern: MIXED.

INPUT2 ITEM 15-Curr	ent input pattern	Frequency	Percent
3 MIXED	3 STm+STm	1	12,5
	4 Mst+Mst	4	50,0
	5 half+half	1	12,5
	6 STm+Mst	1	12,5
	11 half+Mst	1	12,5
	Total	8	100,0

Table 6. Current amount of input by input pattern: Mm+M and Mm+m.

INPUT2 ITEM 15-Curre	ent input pattern	Frequency	Percent
4 Mm+M	12 STm	10	43.4
5 Mm+m	13 Mst	4	17.5
	14 half	9	39.1
	Total	23	100,0

5.2.1.4. Variety of contexts of exposure

The variety of contexts where the minority language is spoken is the final factor influencing the amount of input that was included in the survey. Fifty percent of the sample used the minority language according to their reported input pattern in all contexts ("At home and outside the home"). The second most often reported context was "Only at home" with 14.5% of the sample, followed by "At home and at daycare/school" with 11.3% of participants. If we subsume both groups, we can see that 25.8% of the parents used the minority language

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⁷ Since absolute frequencies were not targeted in this survey (number of hours of exposure per day), OPOL and minority language families were not asked to report relative frequencies. In OPOL families relative frequency is theoretically 50% and in MINORITTY LANGUAGE families, 100%.

only at home and from this, 11.3% supplemented this input at schools or daycare where their minority language was used. All other contexts of exposure were below the 10% frequency. "Only at certain times" or "Only when carrying out certain activities" were the least frequent contexts, while "Only when alone with the primary caregiver responsible for the input in the non-native language" was chosen by 8.1%. **Figure 9** shows the relative frequencies for each context of exposure.

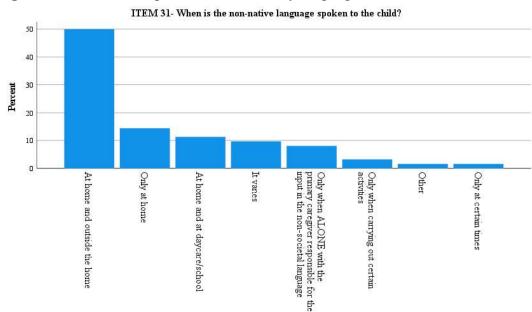


Figure 9. Contexts of exposure to the minority language.

5.2.1.5. Supplementing strategies

All the respondents reported using a variety of supplementing strategies.

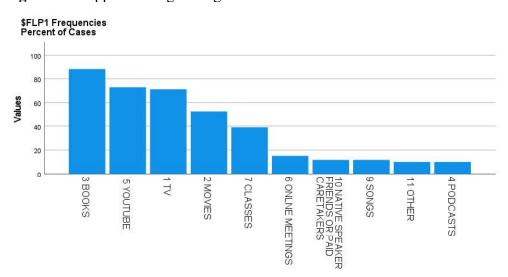


Figure 10. Supplementing strategies.

FLP1-ITEM 29- How do you supplement your child's non-native input?

The most often mentioned strategies were books (by 88.1% of the sample), YouTube (by 72.9% of the sample) and TV (by 71.2% of the sample), but only 11.9% of respondents referred having access to face-to-face native speaker models in their interactions (**Figure 10**). However, a little over half of the sample (54.8%) said that they were in touch with other NNBP families (**Figure 11**).

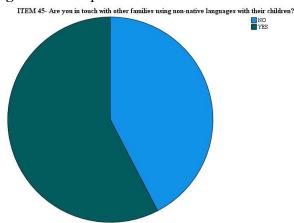


Figure 11. Frequencies of families who are in touch with others practicing NNBP.

5.2.1.1. Summary

In this section I have described those aspects that shaped children's linguistic environment in the sample. Not only by means of parental input patterns, but also through parents' language use in parent-parent interactions, absolute and relative frequencies of exposure, the variety of contexts in which the minority language is used with the child, and the type of supplementing strategies that NNB parents implement to support the minority language. The most often reported input pattern was OPOL. Besides, most parents or caregivers across all input patterns used majority language to communicate with each other. When these two factors were combined, Mm+M + majority was actually the most common combination. Reported relative frequencies indicated reduced minority input for MIXED households, but more exposure to the minority language in Mm+M and Mm+m families. Finally, only half of the sample claimed to be using the minority language with the child both inside and outside the home, but most respondents complemented minority language exposure with a variety of supplementing strategies, although most do not have access to real life native models of the minority language.

In the next section, I will continue with the description of the FLP of NNB parents by looking into the language socialization practices of the sample.

5.2.2. RESEARCH QUESTION 1.b. What language socialization practices do NNB parents use to raise their NNBFLA children?

This section covers the results of the descriptive analyses carried out for variables DS1, DS2, DS3, DS4 and MIX1, which pertain to the use of PDS in response to mixing and parental mixing, since a revision of the relevant literature reveals that these two aspects of the language socialization practices of bilingual children are normally looked at together. Frequency tables for all the figures in this section have been included in Appendix 4.

First, variable DS4 targeted caregivers' explicit intention to elicit non-native language responses in interactions with the child when the non-native language was being used.

An exploration of variable DS4 shows that 79% of all parents in the sample declared that they occasionally or very frequently encouraged their child to use the non-native language in response to non-native language utterances (**Figure 12**). Respondents could also choose the option "My child does not mix languages" in this item, which was done 9.7% of times.

Respondents were also asked about parental code-mixing (MIX1). Regarding parental language separation, 66.1% of respondents (n=62) declared that they did not mix languages in interactions with the child and an additional 19.4% that they did so only occasionally (**Figure 13**).

Figure 12. I encourage my child to use the non-native language in response to non-native language utterances.

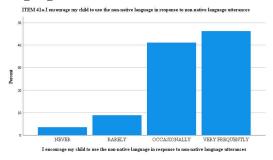
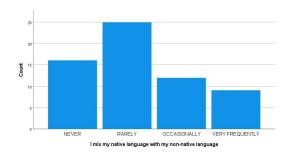


Figure 13. Reported parental mixing in conversations with child.



Data regarding PDS was gathered by means of multiple-choice questions, so that parents could choose all the strategies that they commonly used. PDS were analyzed with a subsample of the data (n=40), as only families with speaking children were asked about discourse strategies in response to mixing (27.4% of the sample reported that their first-born child was not speaking yet). Additionally, 11.1% of responses in variables DS1, DS2 and DS3 reported that the child did not mix languages. These did not provide data regarding PDS in response to mixing either.

Table 7 presents the equivalences between the alternatives from which parents had to choose in the survey and their association with a PDS that has been used in this analysis.

Table 7. Parental discourse strategies. Equivalences between the choices in the questionnaire and classification of PDS.

-	DADENITAI	OLIECTIONINIAI	DE ITEM	
	PARENTAL	QUESTIONNAI	RETIEM	
	DISCOURSE			
	STRATEGY			
		DS1	DS2	DS3
	MINIMAL	Pretend you	Say: I don't	What did you
	GRASP	don't	understand (in	say?
PDS		understand.	the non-native	I don't
			language)	understand.
MONOLINGUAL				What do you
GC GC				want for
Ž				breakfast?
ТС	REQUEST FOR	Ask the child to	Ask: How do	How does
Ž	TRANSLATION	repeat the	we say that in	(caregiver's
\mathbf{X}		sentence in the	(non-native	name) say that?
1		non-native	language)	. •
		language.	/	

	EXPRESSED GUESS	Use a question in the non-native language to translate what you thought the child wants to say.	•	
	REPETITION	Translate into the non-native language what your child has said in the native language.	the child said (translating it	
BILINGUAL PDS	MOVE ONE	Continue the conversation using the non-native language.	the	Great, let's prepare the milk.
	CODE SWITCH	Continue the conversation by	Change to the native	Vale, ¿algo más?
		switching to the native language.	language.	You want leche, something else?

As shown in **Table 7**, the parents were presented with options that coincided with Lanza's (1997) PDS as well as one additional strategy taken from Döpke's (1992) model of insisting strategies. DS3 included the most alternatives to allow the parents to choose the more natural responses including more and less constraining variations to signal not-understanding (*What did you say? /I don't understand*), translations and incorporated translations as described by Döpke (*I want milk. /Oh, you want milk, perfect!*) and inter- and intra-sentential code switching (*Vale, ¿algo más?/You want* leche, *something else?*). In total, the survey returned 209 choices of PDS between the three questions, which means that each of the 40 parents in the subsample selected an average of 1.74 PDS.

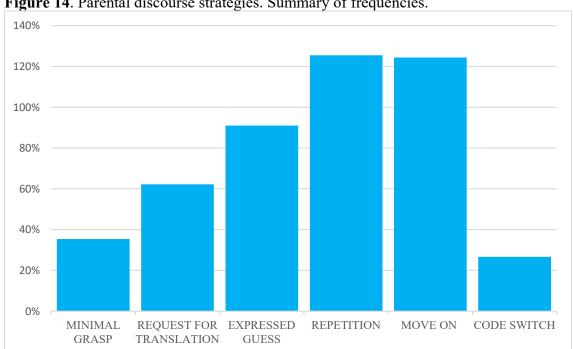


Figure 14. Parental discourse strategies. Summary of frequencies.

Figure 14 shows the distribution of these strategies. As we can see, the most often selected PDS were the **Repetition Strategy** (with 37.8%, 46.7% and 40% of cases respectively), the Move On Strategy (with 53.3%, 46.7% and 24.4% of cases respectively) and the Expressed Guess Strategy (with 31.1%, 17.8% and 42.2% of cases respectively). In DS3, where the choices were more specific, the most often selected response types were also the Expressed Guess Strategy, the Repetition Strategy and the Move On Strategy, but, as shown in Figure 15, the Expressed Guess Strategy was chosen the most frequently ["Do you want milk?" (42.2%); "Oh, you want milk, perfect" (37.8%) and "Great, let's prepare the milk" (24.4%)] (All original frequency tables have been included in Appendix 4). Overall, parents reported using Code Switching the least frequently, but strategies at the monolingual end of the continuum were also sparingly implemented in the sample. The Minimal Grasp Strategy was chosen 35.4% of the times and the Request for Translation Strategy 62.2% of the times.

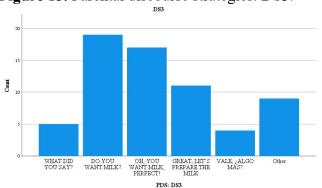


Figure 15. Parental discourse strategies. DS3.

5.2.2.1. Summary

The descriptive analyses in this section have helped gain better insights into the language socialization practices that NNB parents used in their interactions with NNBFLA children. We observed that most parents considered that they encouraged the child to respond in the non-native language to non-native language interactions and two thirds reported that they did not mix languages in interactions with the child. Simultaneously, the most often reported PDS in the sample were Move on, Repetition and Expressed Guess with minimal use of Code Switching.

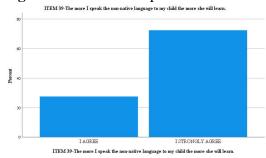
In the next section I will present the quantitative descriptive analysis of the data regarding NNB parents' attitudes towards different aspects of their bilingual child-rearing journey. The results from non-parametric tests for correlations between different aspects of the ideologies involved in NNBP will be included as well.

5.2.3. RESEARCH QUESTION 1.c. What are the attitudes and beliefs of NNB parents towards bilingualism and their impact belief?

The study of parental ideologies about languages, interactions, language learning and bilingualism is the third and final aspect of the FLP of NNBP that I explored with the survey. In the case of NNBP ideologies, as with many other aspects of this type of bilingual rearing, there is not much research about how attitudes and beliefs shape FLP nor about the interplay between them. In this section I will offer a descriptive analysis of variables IB1, IB2, FLP2, WORRY1, WORRY2, MIX2 and MIX3 so that a description of the sample can be made in terms of participants' views about their role in their child's language acquisition and their attitudes towards the process of non-native bilingual acquisition, with a specific focus on parents' worries about their non-native model and their opinion about code-switching.

Secondly, Spearman Rank-Order Correlation coefficients will be calculated between the variables in order to get a deeper understanding of the interactions between different aspects of NNBP ideological framework. Data about parental ideologies was gathered by means of semantic differential scales and polar questions. Frequency tables for each of the figures in this section have been included in Appendix 5.

Figure 16. Parental impact belief.



When looking at the parents' impact belief, data showed that all the respondents in the sample agreed (27.4%) or strongly agreed (72.6%) that the more they spoke the non-native language to their child, the more they would learn (**Figure 16**).

Figure 17. Parental degree of planning for FLP.

In addition, 83.8% of respondents answered that they had (somewhat or very much) planned how the input in the non-native language would be provided to the child (**Figure 17**); and more than 90% reported that they paid (somewhat or very much) attention to the input they directed at the child (**Figure 18**).

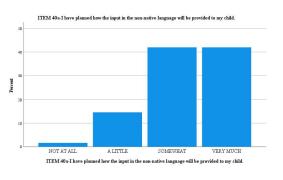
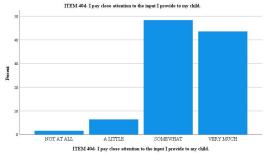


Figure 18. Parental attention to the child-directed input.



As for their attitudes towards specific challenges of NNBP, we asked whether parents were worried about the non-native model they were offering the child. Descriptive analyses showed that for 66.1% the possibility of negatively influencing their child's pronunciation was not a concern or worried them only a little (**Figure 19**), with frequencies showing a clearly descending pattern where only 12.9% were very worried. On the other hand, the attitudes towards non-native mistakes were more evenly distributed between those who were not worried at all or only a little worried (53.2%) and those somewhat and very worried (46.8%) (**Figure 20**).

Figure 19. Parental worries about non-native model: pronunciation.

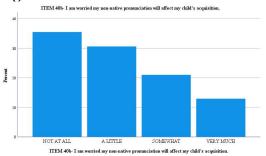
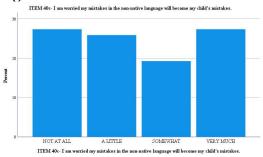


Figure 20. Parental worries about non-native model: mistakes.



A further analysis, exploratory in nature, included computing correlation coefficients by means of Spearman's Rank-Order Correlations between each of these variables so that a closer look at the composition of NNBP ideologies could be taken. Only those correlations which were found to be statistically significant will be reported in the main text (see Appendix 5 for details of all test results). The sample for each correlation was the same in all cases (n=62).

The results from these correlational findings will be reported in groups as those with positive correlations and those with negative correlations. A summary of all the correlation coefficients calculated can be seen in **Table 8.** As we can see, only three correlations were found significant.

Table 8. Summary of correlations between parental ideologies.

	IB1	FLP2	IB2	WORRY1	WORRY2
IB1	N^8	N	N	N	N
FLP2	N	N	Y	Y	N
IB2	N	Y^9	N	N	N
WORRY1	N	Y	N	N	Y
WORRY2	N	N	N	Y	N

⁸ N (no correlation found between the variables).

⁹ Y (correlation found between the variables).

As shown by **Table 9**, a small¹⁰ positive correlation was found between planning (FLP2) and attention to input (IB2), rho=.260, p=.042, which meant that careful planning and close attention to input grew proportionally.

There was also a statistically significant, strong positive correlation between how worried parents were about their non-native pronunciation affecting their child's pronunciation (WORRY1) and how worried parents were about their non-native mistakes affecting their child's acquisition (WORRY2), rho=.739, p<.005.

On the other hand, a moderate negative correlation was found between the level of planning (FPL2) and how worried parents were about their non-native pronunciation affecting their child's pronunciation (WORRY1), rho=-.331, p=.009.

 Table 9. Spearman's Rank-Order correlation for variables WORRY2, FLP2 and IB2.

			FLP2		
			ITEM 40a-		WORRY2
			I have		ITEM 40c- I
			planned		am worried
			how the	IB2 ITEM	my mistakes
			input in the	40d- I pay	in the non-
			non-native	close	native
			language	attention to	language will
			will be	the input I	become my
			provided to	provide to	child's
			my child.	my child.	mistakes.
Spearman's rho	FLP2 ITEM 40a-	Correlation	1,000	,260*	-,170
	I have planned	Coefficient			
	how the input in	Sig. (2-tailed)		,042	,186
	the non-native	N	62	62	62
	language will be				
	provided to my				
	child.				
	IB2 ITEM 40d- I	Correlation	,260*	1,000	,096
	pay close	Coefficient			
	attention to the	Sig. (2-tailed)	,042	•	,457
	input I provide to	N	62	62	62
	my child.				
	WORRY2 ITEM	Correlation	-,170	,096	1,000
	40c- I am	Coefficient			
	worried my	Sig. (2-tailed)	,186	,457	•

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¹⁰ All effect size statistics reported in this section follow Pallant (2010).

mistakes in the	N	62	62	62
non-native				
language will				
become my				
child's mistakes.				

With regard to codeswitching, respondents were asked to report their attitudes towards interand intra-sentential child code-mixing. Variables MIX2 and MIX3 also included the option "My child does not mix".

Figure 21. Parental attitudes towards child mixing in conversation.

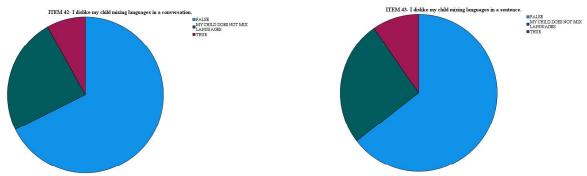


Figure 22. Parental attitudes towards child mixing in a sentence

A majority of parents (89.4%) said that they did not dislike their child mixing languages in a conversation (**Figure 21**), and a similar proportion did not find their child mixing languages in the context of a sentence problematic (87%) (**Figure 22**).

5.2.3.1. Summary

From the descriptive analyses in this section, we can already highlight some interesting facts regarding NNBP beliefs. The findings from variables IB1, IB2 and FLP2 revealed that parents in the sample believed that they could influence their child's language acquisition. In addition, the majority of parents claimed that they were making conscious choices to achieve their NNBP goal and that they were attentive to how they communicated with the child. Moreover, we observed that a little over half of the sample was not worried about their non-native model negatively influencing the child's minority language acquisition. Finally, the exploration of variables MIX2 and MIX3 showed that NNB parents did not have negative views about code-mixing in their children's speech. Correlational analyses revealed that there was a positive, albeit small relationship between FLP planning and attention to input,

and that parents' worries about their non-native input grew in direct proportion. Besides, there was a negative correlation between planning and parental concern about their pronunciation, but not their mistakes. Interestingly, the parents' impact belief is not related to any of the other attitudinal measures.

In the next section, I will present the descriptive data to address my second research question regarding NNB parents' consistency in their FLP. Then, the results from non-parametric statistical analyses of correlations between different aspects of the ideologies of NNBP and consistency will be included.

5.3. RESEARCH QUESTION 2. Are NNB parents consistent in their implementation of FLP?

In order to explore the overall consistency that NNB parents report in their preferred input pattern, the languages used between caregivers and, in general, their FLP, in this section I will offer a descriptive analysis of variables CONSIST1, CONSIST2 and CONSIST3. Then, I will report the results of Spearman's Rank Order Correlation coefficients for CONSIST3 and different attitude variables that may be correlated with consistency scores. Data for consistency measures was gathered by means of polar questions and a semantic differential scale. Frequency tables for each of the figures in this section have been included in Appendix 6. Only tables for statistically significant associations and correlations are included in the main text. All other tables are included in Appendix 6.

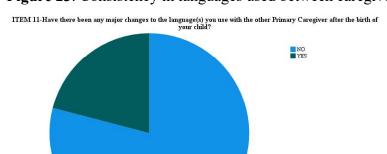


Figure 23. Consistency in languages used between caregivers.

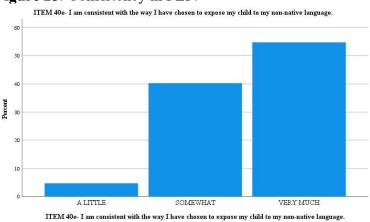
When asked about the languages they used with the other parent after the birth of the child, 79% of the sample reported no changes to their usual language of interaction (Figure 23).

In addition, 75.8% reported no changes to the language they used with their child since their birth (**Figure 24**) and 95.1% said that they were (somewhat or very much) consistent with the way they had chosen to expose their child to their non-native language (**Figure 25**).

ITEM 24- Have there been any major changes to the language you use with your child since birth?

Figure 24. Consistency in the language used with the child since birth.

Figure 25. Consistency in FLP.



The statistical analyses in the second part of this section were exploratory in nature, so Spearman's Rank-Order correlations were computed between consistency scores and all the different ordinal variables in the attitudes segment of the survey (IB1, FLP2, IB2, WORRY1 and WORRY2). Only those correlations which were found to be statistically significant will be reported in the main text (see Appendix 6 for details of all test results). The sample for each correlation was the same in all cases (n=62).

A summary of all the correlation coefficients calculated can be seen in **Table 10**.

Table 10. Summary of correlations between consistency and parental ideologies.

	CONSIST3
IB1	N^{11}

¹¹ N (no correlation found between the variables).

FLP2	Y ¹²
IB2	Y
WORRY1	N
WORRY2	Y

Table 11. Spearman's Rank-Order correlation for variables WORRY2, FLP2, IB2 and CONSIST3.

Correlations	3				
			CONSIST3 ITEM 40e- I am consistent with the way I have chosen to expose my child to		
			my non-native language.		
Spearman's	FLP2 ITEM 40a-I have	Correlation	,443**		
rho	planned how the input in the	Coefficient			
	non-native language will be	Sig. (2-tailed)	,000		
	provided to my child.	N	62		
	WORRY2 ITEM 40c- I am	Correlation	-,278*		
	worried my mistakes in the	Coefficient			
	non-native language will	Sig. (2-tailed)	,029		
	become my child's mistakes.	N	62		
	IB2 ITEM 40d- I pay close	Correlation	,327**		
	attention to the input I provide	Coefficient			
	to my child.	Sig. (2-tailed)	,009		
		N	62		
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed)					

As Table 11 showed, statistically significant relationships with regard to consistency in FLP were found for variables FLP2, IB2 and WORRY2, but not for the other two variables. However, the correlation between CONSIST3 and WORRY2 was small, due to a low effect size (rho=-.278, p=.029).

On the other hand, how much attention parents paid to the input they provided their child with (IB2, rho=.327, p=.009) and parental level of planning (FPL2, rho=.443, p<.0005) had moderate positive correlations with consistency.

5.3.1. Summary

The picture that emerges from the descriptive analysis of variables CONSIST1, CONSIST2 and CONSIST3 in this section is one of high levels of reported consistency in parental choice of input pattern, language use between caregivers and general FLP. Besides, the correlational analysis revealed that the more that parents planned their FLP, the more consistent they

¹² Y (correlation found between the variables).

reported being. In addition, high levels of attention to input correlated with high levels of consistency towards FLP. Consistency and concern about non-native mistakes were also seen to have a small relationship.

After a description of NNB parents' FLP and of continuity in parental language choices, in the next section I will explore the possible associations and correlations between the relevant variables and the level of competence in the L2 of CG1, owing to the fact that all caregivers in the sample were non-native speakers of the minority language and the differences in the level of L2 were bound to have an impact in their FLP.

5.4. RESEARCH QUESTION 3. How does the parents' communicative competence in the non-native language influence NNB parents' FLP?

Due to the type of bilingual family which was the target of this study, where the defining feature was the non-native nature of the input in the minority language, it was reasonable to think, as it had already been suggested by the literature (Lozano-Martínez, 2019), that the level of competence in the L2 of CG1 might affect different aspects of NNBP for the sample.

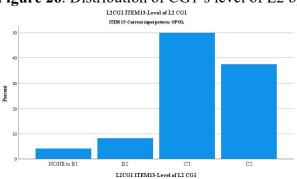
In this section I will present the results from non-parametric statistical tests for associations and correlations between the level of L2 of CG1 and the choice of input pattern (INPUT2), use of the target language in a variety of contexts (INPUT4), parental attitudes (IB1, IB2, FLP2, WORRY1, WORRY2, MIX2 and MIX3) and parental practices within their FLP (DS4, MIX1 and CONSIST3). CG1 was the person responsible for the input in the non-native language in all groups except for MIXED input households, where both caregivers used the non-native language with the child. Chi square test results will be reported for dichotomous variables and Spearman's Rank-Order correlations for ordinal variables. Frequency tables for each of the figures in this section have been included in Appendix 7. Only tables for statistically significant associations and correlations are included in the main text. All other tables are included in Appendix 7.

5.4.1. Type of input

First, whether there was a relationship between competence in the target language and the choice of strategy was explored. While in the majority of the sample, as we saw earlier, CG1 had overall high levels of L2 (B2 to C2), a preliminary exploration of the relationship between CG1's level of L2 and input pattern choice showed that a relationship appeared to

exist for OPOL families, who reported the highest levels of competence in the minority language, with most respondents (87.5%) clustered around the C1-C2 range (**Figure 26**).

Figure 26. Distribution of CG1's level of L2 by input pattern: OPOL.



On the other hand, distributions for other input patterns seemed more spread over a wider range of levels (Figures 27 to 30).

Figure 27. Distribution of CG1's level of L2 by input pattern: MINORITY LANGUAGE.

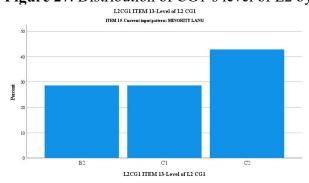


Figure 28. Distribution of CG1's level of L2 by input pattern: MIXED.

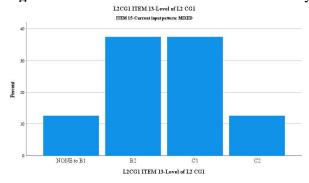


Figure 29. Distribution of CG1's level of L2 by input pattern: Mm+M.

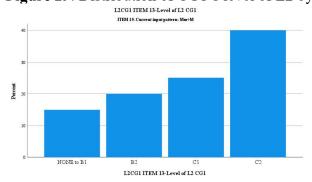
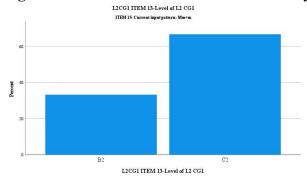


Figure 30. Distribution of CG1's level of L2 by input pattern: Mm+m.



A Chi-square test for independence was conducted to determine whether the observed association between the level of L2 of CG1, divided between low (no level to B2) and high (C1 to C2), and the choice of parental input pattern was statistically significant. Variable INPUT2 was recoded into two values: choosing or not choosing OPOL, the most represented input pattern in the sample (n=24). The results showed that there was a **significant**, **but small**¹³ association between the level of L2 and input pattern choice in a household (**Tables** 12 and 13), χ 2(1) = 4.380, p = .036, phi= -.266. Although standardized residuals were not significant¹⁴ for either L2 level (see Appendix 7), households where the CG1 had a lower L2 level were slightly less likely to choose OPOL than any of the other four input patterns included in the survey.

Table 12. Chi square test for independence for variables L2CG1 (2 levels) and INPUT PATTERN (recode OPOL vs. not OPOL).

Chi-Square Tests							
			Asymptotic				
			Significance	Exact Sig.	(2-Exact	Sig.	(1-
	Value	df	(2-sided)	sided)	sided)		
Pearson Chi-Square	4,380 ^a	1	,036				

¹³ All effect size statistics reported in this section follow Pallant (2010).

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¹⁴ Laerd Statistics (2015).

Continuity Correction ^b	3,242	1	,072		
Likelihood Ratio	4,734	1	,030		
Fisher's Exact Test				,044	,033
Linear-by-Linear	4,309	1	,038		
Association					
N of Valid Cases	62				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,58.

Table 13: Effect size statistics for variables L2CG1 and INPUT PATTERN: OPOL vs. not OPOL.

Symmetric Measures				
		Value	Approximate Significance	
Nominal by Nominal	Phi	-,266	,036	
	Cramer's V	,266	,036	
N of Valid Cases		62		

As for the relationship between level of L2 and contexts of exposure, since the sample was too small to explore the relationship maintaining all contexts, we recoded the variable to compare the frequency between those using the language in all contexts and those using it in a limited number of contexts, either only at home, only at certain times, etc. Then, we compared it with CG1's level of L2 with only two values: low and high. The original distribution of responses has been included in Appendix 7. Chi square tests for independence found a statistically **significant, moderate**¹⁵ **association** between the level of competence in the non-native language and the contexts of use, $\chi 2(1) = 9.807$, p = .002, Phi= -.398. Although standardized residuals were not significant¹⁶ for either L2 level, it seems that there is a lower frequency of use in all contexts by respondents with lower competence in the L2 (**Tables 14** and **15**).

Table 14. Chi square test for independence for variables INPUT4 (recode "All contexts" vs. "Limited use") and CG1L2 (recode two levels).

Chi-Square Tests					
			Asymptotic		_
			Significance	Exact Sig. (2-	Exact Sig. (1-
	Value	df	(2-sided)	sided)	sided)
Pearson Chi-Square	9,807 ^a	1	,002		•
Continuity	8,105	1	,004		
Correction ^b					

¹⁵ All effect size statistics reported in this section follow Pallant (2010).

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b. Computed only for a 2x2 table.

¹⁶ Laerd Statistics (2015).

Likelihood Ratio	10,439	1	,001		
Fisher's Exact Test				,004	,002
Linear-by-Linear	9,648	1	,002		
Association					
N of Valid Cases	62				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,50.

Table 15: Effect size statistics for variables INPUT4 (recode "All contexts" vs. "Limited use") and CG1L2 (recode two levels).

Symmetric Measures		.	
		Value	Approximate Significance
Nominal by Nominal	Phi	-,398	,002
	Cramer's V	,398	,002
N of Valid Cases		62	

5.4.2. Attitudes

First, the significance of the correlation between NNB parents' attitudes in terms of their role in the child's language acquisition (IB1, FLP2, and IB2) and CG1's level of L2, and between parents' worries towards the influence their non-native input could have in their child's acquisition (WORRY1 and WORRY2) and CG1's level of L2, were assessed by means of Spearman's Rank-Order Correlations.

No statistically significant correlations were found between variables IB1, IB2, FLP2 and CG1's competence in the L2. In all of the pairs of correlations p-values were greater than .05. However, statistically significant correlations were found between parents' worries about their non-native input and CG1's level of L2 (**Table 16**).

Regarding parental worries about pronunciation (WORRY1), there was a statistically **significant, strong, negative**¹⁷ correlation between parents' worries and CG1's level in the L2, rho= -.604, n= 62, p < .0005, with higher levels of L2 associated with lower levels of worry.

Additionally, there was a statistically **significant, moderate, negative** correlation between parents' worries about non-native mistakes (WORRY2), and their level in the L2, rho=-422, n=62, p=-001, with higher levels of L2 associated with lower levels of worrying.

b. Computed only for a 2x2 table.

¹⁷ All effect size statistics reported in this section follow Pallant (2010).

Table 16. Spearman's Rank-Order correlation for variables WORRY1, WORRY2 and CG1L2.

Correlations			
			L2CG1 ITEM 13- Level of L2 CG1
Spearman's rho	WORRY1 ITEM 40b- I am worried my non-native		-,604**
	pronunciation will affect my	Sig. (2-tailed)	,000
	child's acquisition.	N	62
	WORRY2 ITEM 40c- I am worried my mistakes in the		-,422**
	non-native language will	Sig. (2-tailed)	,001
	become my child's mistakes.	N	62
**. Correlat	ion is significant at the 0.01 leve	el (2-tailed)	

On the other hand, Chi square tests of independence determined that there was no association between reports about parental attitudes towards child inter- and intra-sentential codeswitching (MIX2 and MIX3) and the levels of L2 for CG1. Although due to small sample sizes, this result might not be reliable.

5.4.3. Practices

Finally, NNB parents' language socialization practices in terms of consistency in their chosen FLP (CONSIST3), the level of encouragement for the child to respond in the non-native language (DS4) and parental degree of code-mixing (MIX1) were tested for correlations with CG1's level of L2 by means of Spearman's Rank-Order Correlation coefficients.

No statistically significant correlations were found between variables CONSIST3 (rho=.142, n=62, p = .271.), DS4 (rho=.214, n=56, p = .114.) and CG1's level of L2 (**Table 17**). However, there was a **statistically significant**, **small negative** correlation between parental mixing as reported by MIX1 and CG1's level in the non-native language, rho=-.257, n=62, p=.044, with higher levels of L2 associated with lower levels of parental mixing.

Table 17 Spearman's rank-order correlation for variables MIX1 and CG1L2.

			L2CG1 ITEM 13-
			Level of L2 CG1.
Spearman's rho	MIX1 ITEM 41b- I mix my native language with my non-		-,257*
	native language when I speak	Sig. (2-tailed)	,044
	to my child.	N	62

5.4.4. Summary

The results obtained from the statistical analyses in this section emphasized the relationship between CG1's level of L2 and some aspects of NNBP practices and ideologies: the choice of input pattern, the contexts of use of the target language, parental mixing and parental worries about their non-native input seem to be related to the parents' competence on the target language. On the other hand, the level of L2 of CG1 did not seem to be associated with other aspects of NNBP, like parents' language management efforts and consistency, impact belief or their attitudes towards the child's inter- or intra-sentential code-switching. Although more research is needed to verify this last assertion with statistical rigor.

In the next section I will analyze how NNB parents' ideologies are shaped by their child-rearing experience.

5.5. RESEARCH QUESTION 4. How is the FLP of NNB parents shaped by their child-rearing experience?

As previous research had suggested that children are active agents in their linguistic development (e.g. Fogle & King, 2013), a further aim of this study was to explore whether children's growing competence in the target language changed parents' attitudes towards child code switching and their practices in terms of children's language socialization. In this case, two groups were compared: families with pre-verbal children and families with speaking children.

In this section I am going to report results from Mann-Whitney U tests for variables IB1, IB2, FLP2, WORRY1, WORRY2, DS4, MIX1 and CONSIST3 comparing families of preverbal and speaking children, and Chi square tests for independence for variables MIX2, MIX3 and CHILDSPEAKING.

As we saw earlier, the first-born child was already speaking in 72.6% of cases in our sample. Frequency tables for each of the figures in this section have been included in Appendix 8. Only tables for statistically significant associations are included in the main text. All other tables are included in Appendix 8.

5.5.1. Attitudes

First, Mann-Whitney U tests were conducted to determine if there were differences in attitudinal scores (IB1, IB2, FLP2, WORRY1 and WORRY2) for NNB parents between groups divided between those with verbal and pre-verbal children.

The results from said Mann-Whitney U tests showed no statistically significant differences between scores for cases with pre-verbal or speaking children in either variable. As we can see in **Table 18**, all p-values were greater than .05.

Table 18. Results of Mann-Whitney test for IB1, IB2, FLP2, WORRY1 and WORRY2 across categories of CHILDSPEAKING.

IB1	U = 424	z = .847	p = .397
IB2	U = 375.5	z =123	p = .902
FLP2	U = 450.5	z = 1.155	p = .248
WORRY1	U = 318.5	z = -1.056	p = .291
WORRY2	U = 366	z =269	p = .788

Secondly, since parental attitudes towards child code-mixing were measured by polar questions, the same non-parametric test could not be applied to compare groups, so chi-square tests for independence were conducted instead. A preliminary exploration of the distribution of parental attitudes towards child code-mixing comparing families with speaking vs. not speaking children did not appear to show relevant differences (**Figures 31** to **34**).

Figure 31. Parental attitudes towards child mixing in conversation. Parents of speaking children.

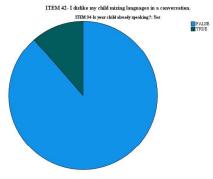


Figure 32. Parental attitudes towards child mixing in conversation. Parents of children who do not speak yet.

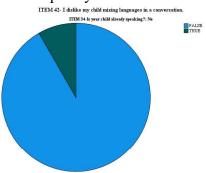


Figure 33. Parental attitudes towards child mixing in a sentence. Parents of speaking children.

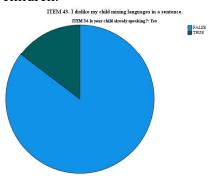
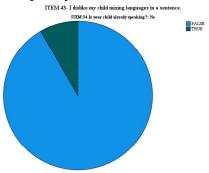


Figure 34. Parental attitudes towards child mixing in a sentence. Parents of children who do not speak yet.



Chi-square tests for independence seemed to indicate that there was no association between parents' attitudes towards the child mixing within a conversation (MIX2, $\chi 2(1) = .09$, p = .764, Phi= .044, or a sentence (MIX3, $\chi 2(1) = .318$, p = .573, Phi= .083) and whether the child spoke or did not speak yet, but results might not be reliable due to small sample sizes.

5.5.2. Practices

Next, Mann-Whitney U tests were conducted to determine if there were differences in scores for NNB parents' practices in terms of consistency in their chosen FLP (CONSIST3), the

level of encouragement for the child to respond in the non-native language (DS4) and parental degree of code-mixing (MIX1) between the two groups of parents.

The results from said Mann-Whitney U tests showed no statistically significant differences between scores for cases with pre-verbal or speaking children in either variable. (CONSIST3, U = 380.5, z = -.036, p = .971; DS4, U = 262.500, z = -.654, p = .513; MIX1, U = 375, z = -.124, p = .901).

5.5.3. Summary

In conclusion, as revealed from the statistical analyses in this section, parents' attitudes and socialization practices did not appear to differ when the group of families with speaking children was compared with those cases where the first-born child was not speaking yet. Therefore, it would seem that these ideas are preconceived and that potential code-mixing on the part of the child does not change them significantly. However, some of these tests should be replicated with a larger sample to increase statistical rigor.

Considering the results presented in the previous sections, a discussion of the findings about NNB parents' FLP, consistency, and the influence of the level of L2 and of interaction with children on parental in language practices, ideologies and overall FLP will be elaborated on in the next chapter.

6. CHAPTER 6. DISCUSSION

The purpose of this study was to try to fill a gap in the literature about childhood bilingualism by exploring the linguistic choices, language socialization practices and ideologies that guide NNB parents in the process of raising NNBFLA children in monolingual contexts. In addition, we investigated consistency in the implementation of FLP and the effect that parental level of competence in the non-native language had in several aspects of NNBP. Finally, whether linguistic practices and parental attitudes were dynamic or stayed unaltered throughout the child-rearing process was also analyzed by comparing the results from families with verbal and preverbal children.

In this chapter, a discussion of the results outlined in Chapter 5 will be presented. Different sections will be used according to each research question. Since much of this research was exploratory in nature, it might be difficult to compare our data to existing studies, but when appropriate, the results will be put forward along with their relationship with the literature reviewed in Chapter 2. Qualitative personal observations gathered throughout the process will also be provided to accompany the findings. Finally, the methodological limitations of the study will be discussed.

Before delving into the discussion of the results, however, it is relevant to say a word about the characteristics of the cases that were selected to participate in the study.

6.2. The sample

In terms of the features of the final sample, there was a set of rigorous criteria to be met for a case to be included in the study. First, only BFLA children were considered. Second, the child must receive only non-native input in their target language. Third, the child's community must be monolingual in the parents' native language. Finally, the child must be exposed to only two languages.

As a result, only 40.5% of questionnaires were included in the final dataset. There were two variables that caused the most rejection of cases: About one in five questionnaires received involved non-native parents rearing their children multilingual and almost a third involved ESLA children rather than BFLA. Although these cases were not included in the final sample, considering them now also helps form a better idea of the different circumstances in which non-native parents bring up bilingual children in monolingual contexts.

Second, regarding the age of children in participating families, we saw in Chapter 5 that NNBF in the study have very young first-born children. There might be several reasons for this. One possibility is that NNBP families need the most support from other NNB parents in the period when their children are developing language and stop seeking it after they have established their linguistic skills. Therefore, they participate more actively in the community in the earlier part of their NNBP journey. A bleaker explanation is that NNBP families cease in their attempts to rear their children bilingually at some point in the process; which could only mean that their endeavor has failed or does not suit the family dynamics any longer. In Lozano-Martínez's study (2019), 28% of families who had used English with their children at home had abandoned the practice.

Third, as revealed from the descriptive analyses of the demographic features of the sample, the most often chosen target language for NNBFLA children was English, used by three quarters of respondents. This is not surprising. English has become a *lingua franca* and the most often studied foreign language in schools and for employment or other reasons (Baker & Wright, 2017), so naturally, many parents have a knowledge of English as a foreign language. Similarly, previous research has found that parents see bilingual rearing of their children as an investment for their future (Piller, 2001). Therefore, it makes sense that parents would use a language that would become an asset for their children.

In the sample, the mothers were in charge of the non-native input in most cases. This feature might not impact NNBFLA children's linguistic development, since research shows that that gender of the minority language speaking parent does not affect acquisition (De Houwer, 2007). However, it speaks about the greater involvement of mothers in the child's education.

Moreover, if one looks at the geographic distribution of respondents, we can see that more than half of the cases came from urban Spain, but there was presence of NNBP data from fourteen countries over two continents with more prevalence of urban areas as well. To interpret this, we might need to consider that, although the questionnaires circulated on social media, they might have been shared more widely among Spanish parents due to the sampling method employed. However, there is not any data available to compare the pervasiveness of NNBP in different countries.

In Lozano-Martínez's study with non-native families raising children bilingually in English and Spanish in Spain (2019), 45.7% of all families were using English or had used it for some time. Conversely, when looking at home language use in Flanders, De Houwer (2003)

reports that 12.5% of families were using more than one language at home. In this sense, Piller (2001) argues that in studies about family bilingualism, there might be an overrepresentation of bilingual families since parents rearing bilingually might be more willing to participate than monolingual families.

Finally, SES data revealed that NNBP is more widespread in households where at least one of the main caregivers has completed some tertiary education; especially in those where CG1 has an occupation in health or education. Although the level of definiteness in the ISCO classification used does not allow us to unpack whether the parent's occupation in as a health or education professional, published accounts of NNBP and other bilingual case studies make us think that teachers are the most inclined to embark in NNBP (see section 2.7).

In the future, it might be interesting to explore the relative prevalence of NNBP in different countries by obtaining a bigger sample with a more even representation of NNBP families from various parts of the world.

After acknowledging these factors, I will move on now to discuss the results for each of my research questions.

6.3. FLP of NNB parents

In order to answer our first research question, we tried to target as many of the elements that comprise FLP as possible including the choice of parental input pattern, the language used between caregivers, the relative frequency of input for the minority language, the variety of contexts where NNBFLA children were exposed to the non-native language, the type of supplementing strategies used, PDS, and the parents' attitudes and beliefs. Each of these aspects will be discussed separately.

6.3.1. Type of input for NNBFLA children

From the input pattern data gathered by the parental questionnaire, we see that the most often reported pattern of input is OPOL, chosen by almost two-fifths of respondents, which stands in stark contrast with data from the best-known survey about family bilingualism (De Houwer, 2007) where only about one in ten families reported using this strategy. However, Piller (2001) also found that OPOL was the most frequently chosen strategy among "elite bilinguals". We can only speculate on the possible reasons for this discrepancy, but Piller argues that OPOL "has become axiomatic in recommendations for bilingual parents" (2001:65). From my personal experience monitoring and participating in online fora

throughout the process of conducting this study, it is also my impression that OPOL continues to be the most common recommendation for NNBP.

OPOL was followed by Mm+M (32.3%) and MIXED (12.9%) as the second and third most reported strategies. This is surprising since these patterns are never talked about in parent guides (Baker, 2014; Crisfield, 2020; Jernigan, 2015; Pearson, 2008) nor usually recommended (Piller, 2001). According to De Houwer's survey (2007), Mm+M were the least successful of the five types of families transmitting the minority language to the children, while MIXED input families were the third most successful. In the same study, one in four OPOL families had children who did not speak the minority language (the fourth strategy in terms of successful transmission of the minority language). If we were to apply this proportion to our sample, it would have a significant impact on the chances of NNBFLA children developing active use of the minority language, but there are many factors that influence children's language environment and, thus, their language acquisition process (De Houwer, 2009). For that reason, not only the language that the parents use with the child has been used in the study to define NNBFLA children's linguistic soundscape.

When looking at the languages caregivers use with each other, more than 80% of participants reported majority (native) language use for parent-parent dyadic interactions; and 8.1% of participant families, OPOL. Unfortunately, we cannot compare this proportion to existing research, but it seems reasonable for NNB parents in monolingual contexts to use majority language in parent-parent interactions. Among previous classifications of bilingual family types, only Döpke's (1992) categorization of OPOL families had considered the languages used in the parent pair. Data from the survey is in line with her claim that parent-parent majority language interactions are a necessity for the majority of families, since almost 60% of CG2 in our sample —the parent not responsible for input in the non-native language—had a low level of L2 (from no level to B1). In her commentary, Döpke also argued that the situation when "each parent speaks the language they speak to the child when addressing each other" (OPOL here) is rarely chosen (1992: 13), which seems to be the case in our sample.

By combining these two variables: the languages that the parents use with the child and with each other, the classification that emerges from this study reveals eleven types of NNBP families (see **Table 3**, Chapter 5). Since our target population were NNBP families in monolingual communities, all parents in the study spoke the same native language as the

other parent and the community. The two most common types of linguistic environments for NNBFLA children, making up more than 60% of the sample, are presented here:

Type 1:

Parents: same native language.

Community: monolingual, same language as the parents.

Strategy: Mm+M.

Language in the parent pair: majority.

Type 2:

Parents: same native language.

Community: monolingual, same language as the parents.

Strategy: OPOL.

Language in the parent pair: majority.

By contrast, as we saw in Chapter 2, previous research had only recorded one type of NNBP family: each parent using a different language with the child (OPOL) one of them being neither the language of the wider community, used by the other caregiver, nor the native language of the family (Harding & Riley, 1999; Romaine, 1995). Besides, most of the case studies about NNBP that we examined in Chapter2 used the OPOL method with the child(ren) and about half of them, majority language in parent-parent interactions (Döpke, 1992; García Armayor, 2019; King & Logan-Terry, 2008; Liu & Lin, 2019; Pearson, 2008; Saunders, 1988).

As for the frequency of exposure, it seems that NNBFLA children in MIXED input households hear the minority language the least among all groups of input patterns in the sample because, even if both parents speak the minority language at home, most parents report using it only sometimes, while they use majority language mainly. In De Houwer's (2007) Flanders survey, MIXED input families transmitted the minority language a little less than 80% of the time. She argued that the reason was that both caregivers used the minority language. On the other hand, in Mm+M families CG1 offer more relative amount of minority language input individually than each parent in MIXED input families. In order to effectively compare NNBFLA children's frequency of exposure, and understand, for example, whether

only one caregiver using the minority language mainly offers more or less input than two caregivers using it only sometimes, absolute word counts should be made. Data available from other studies shows that the better predictor of language acquisition is actually absolute amount of input, rather than relative frequency (De Houwer, 2011) because there are great differences in the number of words that individual bilingual children hear (Marchman *et al.*, 2016), but neither the number of hours that NNBFLA children heard each language nor NNBFLA children's competence in each language was the target of this study.

In addition to these three factors: the pattern and frequency of exposure, and the languages parents use in their interactions; the variety of contexts where the minority language is spoken is another element influencing the amount of input that NNBFLA children hear. Our data shows that only half the sample used the minority language in all contexts outside and inside the home according to their preferred input pattern and about a quarter used it only at home.

As for the reasons why only half of the families used the minority language in public, some might argue that fear of social rejection or judgement prevents these parents from using the minority language outside the house (Jernigan, 2015; Piller, 2001). However, previous research into NNBP showed that most parents did not fear social rejection while using the minority language with the child (Lozano-Martínez, 2019).

Finally, the findings from this section also reveal that NNBFLA children's linguistic environment is complemented by a wide variety of supplementing strategies. Books, YouTube, and TV are the most often tools used to enrich the exposure to the minority language perhaps because most families do not have access to real life native models of the minority language. Besides, most families look for the support of others in the same NNBP journey as them. This allows us to confirm that individual case studies reporting on the wide use of supplementing strategies (Caldas, 2006; Saunders, 1988) are generalizable to a wider NNBP community. The fact that, as we saw earlier, most families might not see their FLP reflected in the literature might also explain the need of these families to be in touch with one another.

The language socialization practices for NNBFLA children will be discussed in the next section.

6.3.2. NNBFLA children's language socialization

At the level of interaction, the results for the NNBP questionnaire show that parents express an important commitment to socialize their children into using their non-native language in response to non-native language utterances and low frequency of mixing in their own language use. In terms of language negotiation, NNB parents' use of PDS fall in the center of the monolingual-bilingual continuum. While leaning towards the bilingual end, there is a limited reported use of code-switching.

The most often used PDS was the Repetition Strategy, followed by the Move On Strategy and the Expressed Guess Strategy. Monolingual PDS like the Minimal Grasp Strategy or Request for Translation, that would negotiate the need for the NNBFLA child to actually use the minority language, were the second and third least used after Code Switching. These results are consistent with data about parental code-mixing: only 14.5% reported mixing languages very frequently in interactions with the child.

Considering the parents' explicit claim of language separation in parent-child interactions, it makes sense that the least selected PDS would be Code-Switching. However, research based on observations of language socialization practices has shown that even when parents claim to practice strict language separation, for example in the context of OPOL households, they make use of mixed utterances in their interactions with children (Goodz, 1989; Lanza, 1997). In the same line Döpke (1992), who conceptualized PDS as insisting strategies and, thus, did not classify Code Switch and Move On as such, claims that Keith's father, who used the most insisting strategies, did so 44.2% of times, which means that he moved on or codeswitched the rest of the time. In addition, Brooksbank (2017) found that the most used strategies in her sample of Spanish-English bilingual families were the Move On Strategy followed by Repetition and Code Switch. When interpreting our results based on parental reports of language use, we must take into account that, according to De Houwer and Bornstein (2016), these often represent an ideal more than actual linguistic practices.

Although NNB parents do not seem to respond to mixed utterances by code switching, their language socialization practices may not be constraining enough to create the need for children's active use of the minority language. According to Lanza (1997), the Repetition Strategy, the most often reported, does not necessarily require an answer. Moreover, when children are used to negotiating bilingual contexts where the Move On Strategy is the norm, they may even interpret more monolingual requests for clarification (such as the Expressed

Guess Strategy reported in the third place) as a continuation of the conversation rather than a request for reparation (ibid.). From the choice of PDS that I have just described, this would most likely be the case for the NNBFLA children in the sample. As we saw in Chapter 2, there is ample evidence of the relationship between the use of monolingual PDS and the development of active bilingualism (Döpke, 1992; Juan-Garau & Pérez-Vidal, 2001; Lanza, 1997) while bilingual discourse strategies result in receptive bilingual children (Nakamura, 2018).

It is important to mention here, however, that the wording and the design of the survey may have influenced these results. On the one hand, families of pre-verbal children were not asked to respond to some parts of the questionnaire. On the other, some items included an option to select the choice "My child does not mix languages" alongside with other attitudinal or interactional choices (see Appendix 1 for a copy of the original questionnaire). This means that some parents may have decided to respond to the statement regardless of whether the child mixed languages, while others may have refrained from doing so if they felt that reporting absence of child code-switching was more important. In practice, this implies that we are not able to confidently report on rates of code-switching for NNBFLA children in our sample. However, between 10 and 25% of the sample reported that their child did not code-mix. A second implication is that it was not possible to find an association between parents who reported their children did not mix languages and the use of certain PDS.

It would be interesting to carry out research about observed PDS use in NNBP households in the future to confirm whether NNB parents differ in their use of PDS from other bilingual families by switching languages in response to children's mixed utterances less often. In addition to this, observed rates of child code mixing could be compared with PDS.

As we saw in Chapter 2, FLP is the result of parental explicit or implicit attitudes and beliefs. The findings about NNB parents' ideologies will be discussed next.

6.3.3. Attitudes and beliefs

The final piece of data to answer the first research question involved looking at parental ideologies towards language acquisition and NNBP as well as at the interplay between these attitudes and beliefs. The main factors that stand out from the findings in this section are the strong impact belief of the NNB parents in the sample as well as the prominent levels of private language planning and attention to the non-native input. Second, it is interesting that

most parents were not concerned about the possible negative effects of their non-native pronunciation in the child's language acquisition of the minority language, but that their mistakes in the non-native language worried them more. Third, the fact that an overwhelming majority of parents do not consider child language mixing undesirable is also noteworthy.

Given the purposive nature of NNBP, which is not imposed by circumstance but a deliberate choice, it is reasonable that respondent families had a extraordinarily strong impact belief. Even more so in this context, when the parent is the only source of minority language input. Besides, correlational analyses showed that impact belief was independent from other attitudinal measures and other variables like the level of L2 or the child's ability to speak. Therefore, we can interpret it as a pre-existing factor for NNBP.

One limitation of statements about the strength of one's impact belief, however, is that there is not an exact definition of the elements that play a role in this variable, but each researcher evaluates the parents' impact belief subjectively as a general perception from their reported attitudes and practices. It would be interesting to develop a scale to be able to measure this construct more objectively and compare its magnitude among different populations.

The strong positive impact belief can also be read in connection with data about supplementing strategies in section 5.2.1.5 and language management efforts in section 5.2.2. Previous research had already highlighted this feature of the ideologies of the so-called "elite bilinguals". Nakamura (2019), for instance, had observed that a sense of strong impact belief emerged from conversations with the English-Japanese couples in her study when discussing their language management efforts and involvement in the bilingual community. In our sample, as we mentioned earlier, all participants made use of a wide variety of supplementing strategies, especially books, and many were in touch with other NNBP families. From my own experience in this community, I can attest to the enthusiasm with which NNB parents engage in book swaps, encouragement of book hoarding and recommendation exchanges of all kinds of NNBP-related items.

As for the level of planning, the results from the survey add to existing research which emphasizes the role of conscious decision-making on the part of the parents (Piller, 2001; Nakamura, 2019). In our research, important levels of parental planning correlated with lower levels of concern about one's non-native pronunciation, but not about mistakes. This might be explained by the fact that, as we saw in Chapter 5, NNBP families were more

worried about their mistakes than about their pronunciation negatively affecting the child's acquisition, although these two concerns strongly correlated to one another: the more a parent worried about their pronunciation, the more they would worry about mistakes.

Our findings about the opinions regarding some of the challenges of NNBP differ from those reported in Lozano-Martínez (2019). In her study, more respondents showed concern about their pronunciation than their mistakes. This discrepancy might be due to the fact that not all of Lozano-Martínez's families were raising bilingual children (54.3%) and so the prejudice they had against the non-native input might have been more strongly based on myths about the native speaker of English as the better model than on their day-to-day experience on NNBP. In fact, Nakamura (2019) mentions that by observing the bilingual development of other children, parents' positive opinions are reinforced; an experience that those who do not practice NNBP might not have. Besides, it is noteworthy that the average level of L2 in Lozano-Martínez's study was lower than the average level of our sample. 58.9% of her respondents had a level of spoken English ranging from 0 to B1, while only 8.1% of our participants fit in that range.

Finally, most of the parents declared that they did not dislike child code-mixing even though they denied making use of mixing in their utterances. Thus, the negative opinions about code-mixing that emerge from previous research about childhood bilingualism (Baker & Wright, 2017; Döpke, 1992; Lanza, 1997; Piller, 2001) do not seem to be a factor for NNB parents. Conversely, our results seem to go in the same line as Lozano-Martínez's (2019) with even a higher proportion of NNB parents affirming that they do not take exception to code mixing.

Overall, the findings from this survey fit with previous claims of the different ways in which language practices reflect language ideologies (De Houwer, 1999; King, Fogle & Logan-Terry, 2008; Nakamura, 2019).

As past research had argued convincingly that consistency played a major role in the active development of bilingualism in children, one aim of this study was to examine whether NNB parents were consistent in their implementation of their FLP.

6.4. Consistency

In order to address the second question, respondents were asked about continuity in their language choice for parent-parent interactions, parent-child interactions and overall FLP.

The image that emerges is one of elevated levels of reported language continuity in the three measures for consistency. Without invalidating this statement, the data reveals that parents report higher levels of consistency when asked about more general FLP than when they need to make consistency claims about more specific aspects of language choice. That is to say, between 20% and 25% admit some changes in the languages they use with the child or with the other caregiver, while less than 5% report variations in the way they have chosen to expose the child to the non-native language. Two inferences can be made from this. First, the importance of consistency for NNB parents. Second, the fact that perceptions about the degree to which FLP remain unchanged for NNBFLA might differ from actual practices.

On the one hand, consistency has repeatedly been found to be a key factor in achieving active balanced bilingualism (De Houwer, 1999, 2007, 2009; De Houwer & Bornstein, 2016; Döpke, 1992; Juan-Garau & Pérez-Vidal, 2001; King, Fogle & Logan-Terry, 2008; Lanza, 1997). This idea appears to have filtered into NNBP, which does not seem surprising because consistency is key for every aspect of life in general and parenting in particular. On the other, persevering in one's choices is usually hard to achieve as shown by comparison between reported and observed language use in bilingual families (De Houwer & Bornstein, 2016; Goodz, 1989). In fact, Lozano-Martínez (2019) found that for NNBP families, being persistent in the use of English throughout the years was perceived as a major challenge in bringing up a bilingual child.

In addition, correlation coefficients show that aspects of parental ideologies and parental practices are related with consistency in FLP. In line with what we discussed in the previous section, consistency is not related to parental impact belief, but it is positively correlated with planning and attention to input. A negative correlation was also found between consistency and concerns about non-native mistakes. It seems reasonable that language management efforts correlate to one another. In this case, consistency, planning and attention to input, but more research is needed to be able to interpret the interplay between these and parental views of the challenges of NNBP.

While these analyses help us gain a fuller understanding of how consistency in NNBP works in terms of the relationship between ideologies and practices, we also aimed to see how these were affected by a key factor in NNBP: the parents' level of competence in the target language. Specifically, the level of competence of the parent responsible for the input in the non-native language (CG1).

6.5. Influence of the level of parental competence in the non-native language on FLP

The third research question: *How does the level of L2 influence NNB parents' FLP?*, was answered by conducting Chi square tests of independence between nominal variables and CG1's level of L2 on the one hand, and Spearman's Rank-Order Correlation Coefficients between said factor and ordinal variables on the other. Not all tests could be carried out with statistical rigor due to small sample sizes, but preliminary results agree with the findings from other sections. Therefore, we are inclined to accept the relationships and associations suggested by them. The findings about the relationship between the level of L2 and the other factors of NNBP might add to the conversation regarding the decision-making process behind FLP for many families.

First, our results indicate that there is a relationship between CG1's competence in the non-native language and the choice of input pattern. Although the sample was too small to conduct Chi square tests among all five of the input patterns, by recoding this variable into two groups: OPOL vs. not OPOL households, Chi square returned a significant but small association. Lower levels of competence in the L2 relate to lower chance to choose OPOL as the preferred pattern of exposure. Simultaneously, Chi square test for independence found an association between lower levels of competence and less extensive use of the minority language in a variety of contexts of exposure.

Second, most aspects of parental attitudes and language management efforts appear to be independent from CG1's level of L2. Our study did not find correlations between non-native language competence and impact belief, planning, attention to input, consistency, or parental encouragement for the child to use the non-native language. However, better competence correlated with lower rates of concern about one's non-native input negatively influencing the child's acquisition. This appears to confirm earlier research highlighting the inversely proportional nature of these to the level of L2 (Lozano-Martínez, 2019).

Reports about parental attitudes towards child inter- and intra-sentential code-switching and the levels of L2 for CG1 did not seem to be related either. At this point, however, we must remember that, as we mentioned in Chapter 5, the assumptions about cell count were violated, so these results might not be reliable. On the other hand, previous research in the same line (Lozano-Martínez, 2019) found that higher levels of L2 competence were associated with a lower perception of code-mixing as problematic.

When looking at NNB parents' socialization practices, there was a small correlation between higher levels of non-native language and less parental language mixing. It is interesting that non-native parents with prominent levels of the non-native language code-switch the least, because it suggests that the source of parental mixing in these cases might be lack of equivalent terms in the non-native language rather than a natural result of the language socialization practices to which they were exposed, as it is with other bilinguals (De Houwer, 2009).

The lack of connection between parental ideologies and other factors of NNBP like the level of competence in the L2 might indicate that these are overarching and mostly preconceived.

In the closing section of this chapter, we will discuss the results pertaining to the effect that children's own language agency has in parental attitudes and socialization practices.

6.6. Influence of parent-child interactions on NNBP families' FLP

Regarding the final question: "How is the FLP of NNB parents shaped by their child-rearing experience?" this study looked at the comparison between the results from families with verbal and preverbal children in different attitudinal measures, and in terms of language management practices. This part of the comparison was cross-sectional, since we did not have access to before and after scores for each family. Mann-Whitney U tests were computed to compare scores from these groups.

The findings from this section indicate that attitudes and language management practices do not seem to be dependent on whether the NNBFLA child has started to interact verbally with the parents or not. Longitudinal research would be needed to confirm this finding. As of now, research looking into child agency in BFLA points in the opposite direction; arguing that children are actually a major influence in FLP in several ways (Fogle & King, 2013). Fogle and King mention, for example, that by resisting the parents' language choices children are sometimes able to transform FLP (ibid.). Whether NNBFLA children resist NNBP was not investigated, but by my interactions with these families, my personal impression is that NNBFLA children are as enthusiastic about their acquisition of the target language as their parents. It is possible that the parents strong, positive impact belief and the fact that the target languages are, for the most part, languages of prestige (see section 5.1), may work in the children's favor. A question might be raised as whether NNBFLA children resist their parents FLP less than other bilingual children in the literature.

On the other hand, the low average age of the first-born child in the sample (see **Table A2.1.** in Appendix 2) makes us wonder whether some families have abandoned NNBP at some point in the process. As we saw in section 6.2., in a survey study of families who had used English with their children at home in Spain, Lozano-Martínez (2019) found that 28% of families had abandoned the practice. If that were the case here as well, it would most certainly be those families whose children did not develop competence in the minority language who gave up. Therefore, results about the effect of parent-child interactions in FLP would be affected by this missing data.

After a discussion of the results, it is relevant to mention the most important limitations of the study.

6.7. Limitations

As it can be seen from the discussion of the findings in the study, there are several limitations to the generalizability and the interpretation of our results.

First, the sampling technique used to select participants was convenience sampling. As we discussed in section 4.3, this technique involves certain limitations regarding the generalizability of results.

Continuing with the sample, the relatively small number of participants prevented us from computing some statistical analyses with rigor, especially those comparing groups. As we saw in section 5.1, by limiting the scope of the research to BFLA we lost many potential participants. However, this decision was deemed appropriate in order to achieve a better fit into a theoretical framework.

In addition, the design of the instrument was an obstacle for some analyses as well as for comparing some of our results with previous research. First, the fact that Likert scales, semantic-differential scales with different options, and polar questions were used in combination in the attitudes and beliefs section of the questionnaire made results more complex to interpret. Only one type of scale should have been used consistently. Second, PDS were measured by means of multiple-choice questions, which do not allow for computing correlational tests. Moreover, the inclusion of three questionnaire items targeting PDS was found redundant. Regarding the comparison of results to previous research, in the case of parental perceptions towards child code-mixing our survey used a polar question, while Lozano-Martínez (2019) had used a Likert scale, which was a shortcoming of design.

Furthermore, our analysis comparing scores from families with speaking and pre-verbal children was cross-sectional. A longitudinal analysis would more accurately respond to answers about child agency among NNBFLA children.

Another limitation for the interpretation of results is the fact that data was based on reports rather than observations. So, according to research, it might be necessary to allow for some degree of deviation before making strong statements (De Houwer & Bornstein, 2016).

Finally, this study was exploratory and targeted many different areas of NNBP. For that reason, some aspects were not explored in depth and many unanswered questions remain. The most important of them have been pointed out throughout the discussion of results in this chapter.

7. CHAPTER 7. CONCLUSION

The use of one's non-native language to raise one's children bilingually has been repeatedly discouraged in the literature about childhood bilingualism (Kielhöfer & Jonekeit, 1983 in Saunders, 1988; Snow *et al.* 1989 in Snow, 1990; A. De Houwer, personal communication, November, 13, 2020), but more and more parents with a knowledge of a second language are making the decision to do it despite living in monolingual communities where their mother tongue is spoken. This type of family bilingualism has been called Non-Native Bilingual Parenting (NNBP) in this study and I have proposed the acronym NNBFLA (Non-Native Bilingual First Language Acquisition) to refer to the children that become bilingual this way.

Even when NNBP is an emergent type of bilingual family, it has not yet received much scholarly attention. In light of this situation, the present study sought to fill this gap by describing NNBFLA children's linguistic environments and the interplay between some key factors that affect and shape their parents' overall FLP. Most notably, the parent's competence in the target language and the children's growing competence in it.

In order to attain this goal, a questionnaire was designed and distributed among NNBP families on social media. The results were processed quantitatively using IBM SPSS statistics software. Given the sparsity of research in the field of NNBP, as we showed in Chapter 2, much of this work was exploratory in nature, but some comparisons could be made with previous research and case studies about NNBP families.

The first major contribution of this study is that we can now propose a survey-based classification of NNBP families according to the patterns of exposure of NNBFLA children to the minority language.

The most common communication strategy in the classic sense: that is to say, considering only the language addressed to the child, was OPOL. However, when other elements which conform the child's linguistic soundscape were taken into consideration, a more fine-grained classification emerged. In this sense, the most common communication strategies combining parent-child and parent-parent dyadic interactions were Mm+M + majority (where one parent was using both the majority and the minority language with the child and the other only the majority language, and simultaneously parents used majority language with the child and the other the minority language, and simultaneously parents used majority language with and the other the minority language, and simultaneously parents used majority language with

each other). Nine more types of NNBP families were identified in section 5.2.1., after considering these two elements, namely the language that each of the parents used with the child and with each other.

As we can see by reading Chapters 2 and 5, most patterns of exposure found in the data are not reflected in academic literature nor in parent guides, but are more common than it would seem by their presence in these. The good news is that, although OPOL + majority was not the pattern chosen by most parents, it was one of the most common, so published case studies of NNB parents can serve as an example for many. Nevertheless, the wide variety of strategies that can be appreciated here is more comprehensive than other classifications and can probably be relatable to a wider bilingual population.

Also pertaining to NNBFLA children's input, we saw that NNB parents made a prominent use of books to supplement minority language. This might indicate that NNBFLA children might be not only bilingual, but biliterate. However, the fact that only 50% of the sample declared using minority language at all times may counter this effort and result in passive bilingualism and biliteracy. To complete the picture about NNBFLA children's linguistic environments, a first approach to the relative frequency of exposure to the minority language was made, but more research is needed to make claims about the implications of the results.

A second finding is that we have been able to identify the language socialization practices which NNB parents implement. We saw in section 5.2.2., that families were committed to encourage the child to make active use of the minority language. In line with other studies about family bilingualism, respondents declared using a variety of PDS. The most common choices were Repetition Strategy, followed by the Move On Strategy and the Expressed Guess Strategy, with those PDS at either end of the monolingual-bilingual continuum (Minimal Grasp Strategy and Code Switching) being the least reported. In fact, two thirds of parents declared that they did not mix languages in interactions with the child. Parental rates of mixing seemed to correlate with the level of competence in their non-native language: more competent speakers reported code-switching less.

Simultaneously, although NNBFLA children's production of the non-native language was not a goal of this study, reports of child code-mixing rates could be calculated from several items throughout the questionnaire. Results showed ample variation probably due to the design of the instrument and the existence of two groups in the sample: those with pre-verbal and verbal children. Unfortunately, it was not possible to draw any conclusions about the

interrelation between the use of specific PDS and the prevalence of code-mixing in NNBFLA children. The same can be said about the association between parental rates of code-mixing and children's use of this strategy in their output.

As it was mentioned in the discussion, NNB parents' use of PDS might not be constraining enough to promote active use of minority language. However, when looking into reported parental rates of Code-Switching in response to mixed utterances in their interactions with children, it seemed to emerge that NNB parents switched languages less often than other bilingual parents. As I suggested in Chapter 6, this is an appealing hypothesis for future research.

Third, we have made a preliminary exploration of the ideologies that shape NNBP. Although we did not ask parents to explain why they had chosen their pattern of exposure, there appeared to be some association between the level of competence in the L2 of the parent responsible for the input in the target language, and the choice of input pattern. There was also an association between the level of L2 and the use of the minority language in different contexts outside the house. However, the level of the NNB parent's competence in the child's target language did not seem to correlate with any other attitudinal measures.

Additionally, data from the survey showed, as it was expected, that the parents in the sample had a strong impact belief as defined by De Houwer (1999). NNBP families also reported having deliberately planned the child's exposure to the minority langue and paying close attention to input, both of which can be considered to add to their general impact belief. The extensive use of supplementing strategies or the high degree of consistency found in the sample can also build on overall impact belief measures. Interestingly, the parents' impact belief did not correlate with any of the other attitudinal measures nor depended on the parents' or children's competence in the target language. Therefore, we can interpret it as a pre-existing factor for NNBP.

We might also read results about impact belief in combination with data regarding low rates of code-switching in these families. NNB parents may avoid code-mixing more consciously than if they had been socialized into this practice due to their strong impact belief and close attention to input. As a matter of fact, mixing in NNB speakers might not be a result of their language socialization, owing to the fact that they presumably learned the language in a monolingual context; either in the country where the target language was spoken or in a

classroom as a foreign language. As suggested by the data, code switching in these interactions might possibly be related to proficiency issues.

Moreover, NNB parents showed only relative concern about their non-native model, with more parents worried about their mistakes than their pronunciation. Both worries grew in direct proportion to each other but, in line with previous research (Lozano-Martínez, 2019), decreased in inverse proportion to the parents' competence in their L2. Parental worries did not seem to depend on children's ability to speak, nor did parents' opinions towards inter-or intra-sentential code-switching. This perception did not seem to depend on the parents' competence in their L2 either.

Finally, the picture that emerges from the analysis is one of prominent levels of reported consistency among NNBP families; which is most certainly also a result of the strong impact belief found in the sample. Although other authors have warned that reported language use may show an ideal situation rather than a reality (De Houwer & Bornstein, 2016), if this level of continuity were to be confirmed in observations, it would be good news for NNBFLA children, since consistency has repeatedly been shown to aid minority language acquisition (De Houwer, 1999, 2007, 2009; De Houwer & Bornstein, 2016; Döpke, 1992; Juan-Garau & Pérez-Vidal, 2001; King, Fogle & Logan-Terry, 2008; Lanza, 1997).

As we can see, no other feature of the sample was as prevalent and overarching as impact belief. In fact, only through a strong confidence in the idea that parents can influence a child's linguistic development by talking to them can we explain NNB parents' decision to embark on NNBP. Given the importance of this aspect of NNBP, it might be relevant to develop an instrument to explore impact belief more accurately and consistently

Aside from the abovementioned findings, which give answers to my research questions, it has been possible to gain other valuable insights into NNBP, given that much of this study was exploratory.

The first, unintended, lesson from this research is that we have learned much about the demographics of NNBP families. Even though the target population for this survey study were exclusively NNB parents raising NNBFLA children, many other types of NNBP have emerged. In fact, we can now say that although BFLA was the most representative context for NNBP, almost a third of NNBP families were rearing multilingual children or had started bilingualism later in their children's lives. Consequently, further research into NNBP cannot

fail to consider these factors, especially when looking into NNBFLA children's competence in their target language(s).

Second, even though it was not a main goal of this study, data showed that English was still consolidating its position as a *lingua franca* also for NNBP families, not only in Spain, but across South and Central America, and the rest of Europe.

Finally, we are now able to make some generalizations about the typical NNBP family in our sample as defined by the findings in this research. The most representative NNBP family was a middle-class household formed by a mother, a father and a single child living in an urban area. The parent responsible for the input in the non-native language, which was commonly English, was the mother. She had high linguistic competence in it, while the other parent was not fluent. However, they had a strong impact belief, so they decided to embark on NNBP despite this.

In addition, the parents in our NNBP family were only moderately worried about their nonnative model, they had planned carefully how they would rear their child bilingually, and paid close attention to the input they provided to the child.

The typical NNBFLA child's linguistic environment can be described as follows: the parents used a Mm+M communicative strategy with the child and the majority language with each other. They used the minority language both inside and outside the house and were in touch with other NNBP families, but not with native speakers of their target language. Besides, the minority language was supplemented especially by books. When the NNBFLA child mixed minority and majority language in a minority language conversation or sentence, even if this practice was not frowned upon by the parents, s/he was redirected to the non-native language. The NNB parent did not usually code-switch. Instead, the most common PDS used to achieve this were Repetition, Move On and Expressed Guess.

Lastly, as the child started developing language, some NNBP families might have abandoned their bilingual journey, but those who persisted showed a great degree of continuity in their attitudes towards bilingualism and linguistic practices.

I believe this depiction of the most common features of NNBP is of significant importance, because it can orient the direction of future research into the field.

As a final remark, I would like to insist on the fact that, although I have used the acronym NNBFLA to refer this type of additive childhood bilingualism, there is not yet any empirical

data to address the question of whether there are differences between the linguistic development of these children and other BFLA children. The key issue of the specific type of input that NNBFLA children receive throughout the earliest exposure to their other language must be considered by researchers addressing this topic before any claims about their linguistic development can be made. Especially, regarding the phonetic model which they are being offered, but also looking into the complexity and variety of input. Indeed, it has been argued that there might be significant differences in the input depending on the competence of the parent in the target language, but as we saw in Chapter 2, there is also noticeable individual variation in the input provided by native speakers. As a matter of fact, our quantitative findings indicate that these parents seem to be making use of many of the research proven ways to successfully raise a bilingual child.

All in all, the empirical results from this exploratory study have allowed us to shed some light into NNBFLA children's linguistic environments and language socialization as well as to form a better understanding of the ideologies behind NNBP and the factors that affect and shape their overall FLP. Although this study is only the beginning of the many more that will surely come in the future, I hope it can contribute to the field of NNBP and FLP. I also hope that it can provide NNBP families like mine with some factual information with which to make more informed decisions in their bilingual journey.

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APPENDIX

LIST OF TABLES

List of tables as they appear in the Appendix

Table A2.1. Descriptive statistics. Children's age.	118
Table A2.2. Frequencies for variable CHILDSPEAKING.	118
Table A2.3. Types of family compositions in the sample.	118
Table A2.4. Country of residence.	119
TableA2.5. Native language of the parent-pair.	119
Table A2.6. Non-native language used with the child.	119
Table A2.7. CG1's level of L2.	119
Table A2.8. CG2's level of L2.	120
Table A3.1. Current input pattern.	121
Table A3.2. Languages used between caregivers.	121
Table A3.3. Contexts of exposure to the minority language.	121
Table A3.4. Contexts of exposure to the minority language by input pattern.	122
Table A3.5. Supplementing strategies.	123
Table A3.6. Frequencies of families who are in touch with other NNBP.	124
Table A4.1. I encourage my child to use the non-native language in response to	o non-native
language utterances.	125
Table A4.2. Reported parental mixing in conversations with child.	125
Table A4.3. Frequencies for PDS (variable DS1).	125
Table A4.4. Frequencies for PDS (variable DS2).	126
Table A4.5. Frequencies for PDS (variable DS3).	127
Table A4.6. Parental discourse strategies. Summary of frequencies.	128
Table A5.1. Parental impact belief.	129

Table A5.2 . Parental degree of planning for FLP.	129
Table A5.3. Parental attention to the child-directed input.	129
Table A5.4. Parental worries about non-native model: pronunciation.	130
Table A5.5. Parental worries about non-native model: mistakes.	130
Table A5.6. Parental attitudes towards child mixing in conversation.	130
Table A5.7 . Parental attitudes towards child mixing in a sentence.	130
Table A5.8. Spearman's rank-order correlation for parental attitudes.	131
Table A6.1. Consistency in languages used between caregivers.	133
Table A6.2 . Consistency in the language used with the child since birth.	133
Table A6.3 . Consistency in FLP.	133
Table A6.4. Spearman's Rank-Order Correlation coefficients for parental at consistency in FLP.	titudes and
Table A7.1 . Distribution of CG1's level of L2 by input pattern.	136
Table A7.2 . Chi square test for independence for variables L2CG1 (2 levels) ar	nd INPUT2.
	137
Table A7.3 . Chi square test for independence for variables L2CG1 (2 levels) PATTERN (recode OPOL vs. not OPOL).	and INPUT
Table A7.4 . Contexts of exposure by CG1 level of L2.	139
Table A7.5. Chi square test for independence for variables INPUT4 (recode "A	ll contexts"
vs. "Limited use") and CG1L2 (recode two levels).	140
Table A7.6 . Spearman's rank-order correlation for variables IB1 and CG1L2.	140
Table A7.7 . Spearman's rank-order correlation for variables FLP2 and CG1L2.	141
Table A7.8. Spearman's rank-order correlation for variables IB2 and CG1L2.	141
Table A7.9. Parental attitudes towards child mixing in conversation by CG1's	level of L2.

Table A7.10 . Parental attitudes towards child mixing in a sentence by CG1's le	evel of L2. 142
Table A7.11. Chi square test for independence for variables MIX2 and CG1L2.	143
Table A7.12 . Chi square test for independence for variables MIX3 and CG1L2.	145
Table A7.13. Spearman's rank-order correlation for variables CONSIST3 and Constraints	G1L2. 146
Table A7.14. Spearman's rank-order correlation for variables DS4 and CG1L2.	147
Table A8.1. Frequencies for variable CHILDSPEAKING.	148
Table A8.2. Mann-Whitney test for IB1 across categories of CHILDSPEAKING	j .
	148
Table A8.3. Mann-Whitney test for FLP2 across categories of CHILDSPEAKIN	
	149
Table A8.4. Mann-Whitney test for IB2 across categories of CHILDSPEAKING	3. 150
Table A8.5. Mann-Whitney test for WORRY1 across categories of CHILDSF	PEAKING. 150
Table A8.6. Mann-Whitney test for WORRY2 across categories of CHILDSE	PEAKING. 151
Table A8.7 . Parental attitudes towards child mixing in conversation. Parents of spot speaking children.	peaking vs. 151
Table A8.8 . Parental attitudes towards child mixing in a sentence. Parents of sproof speaking children.	peaking vs.
Table A8.9. Chi square test for independence for variables MIX2 and CHILDSF	PEAKING. 152
Table A8.10. Chi square test for independence for variables MIX3 and CHILDSE	PEAKING. 154
Table A8.11. Mann-Whitney test for CONSIST3 across categories of CHILDSF	PEAKING.

Table	A8.12.	Mean	rank	scores	for	variables	CONSIST3	across	categories
CHILD	SPEAKI	NG.							156
Table A	A8.13 . M	ean rank	scores	for vari	able l	DS4 across	categories of	CHILDS:	PEAKING. 157
Table A	48.14. Re	ported p	arental	mixing	in coi	nversations	with child. Par	rents of s	peaking vs.
not spe	aking chi	ldren.							158
Table A	48.15. M	ann-Whi	itney te	st for M	IX1 a	cross catego	ories of CHILI	OSPEAK	
									159
Table A	48.16 . M	ean rank	scores	for MIX	X1 acr	oss categor	ies of CHILDS	SPEAKI	NG.
									159
Table A	48.17 . M	edians fo	or MIX	1 across	categ	ories of CH	IILDSPEAKIN	NG.	159

LIST OF FIGURES

List of figures as they appear in the Appendix

Figure A7.1. Distribution of CG1's level of L2 by input pattern.	138
Figure A7.2 . Distribution of CG1's level of L2 (2 levels) by input pattern: Ol OPOL.	POL vs. not
Figure A8.1. Histogram for variable IB1 across categories of CHILDSPEAKIN	īG.
	148
Figure A8.2. Histogram for variable FLP2 across categories of CHILDSPEAK	ING. 149
Figure A8.3. Histogram for variable IB2 across categories of CHILDSPEAKIN	
	1149
Figure A8.5. Histogram for variable WORRY2 across categories of CHILDS	PEAKING.
Figure A8.4. Histogram for variable WORRY1 across categories of CHILDS	
Figure A8.6. Clustered bar chart for variable MIX2 grouped by CHILDSPEAK	ING. 154
Figure A8.7. Clustered bar chart for variable MIX3 grouped by CHILDSPEAK	ING. 155
Figure A8.8. Histogram for variable CONSIST3 across categories of CHILDS	
Figure A8.9. Histogram for variable DS4 across categories of CHILDSPEAKIN	156 NG. 157
Figure A8.10. Histogram for variable MIX1 across categories of CHILDSPEA	

APPENDIX 1. QUESTIONNAIRES

ENGLISH VERSION

NON-NATIVE BILINGUAL PARENTING

Dear parent,

You are being invited to participate in a research project about non-native bilingual parenting in monolingual contexts. That is to say, parents who are raising their children to speak a language which is neither the parents' mother tongue/first language/native language NOR the language of the wider community.

If you think you fit that description, please, consider answering the questions below. It takes about 15 minutes.

The questions should be answered by the person who is using the NON-native language with the child. This person will be referred to as Primary Caregiver 1 throughout the questionnaire. The other person will be addressed as Primary Caregiver 2. If both of you use the NON-native language with the child, this distinction will not be relevant.

All questions refer to the first-born child

Participation is voluntary and you can withdraw at any time.

No personal information will be collected in this questionnaire.

If you would like to be informed of the results, you can include your email or any other form of contact at the end of the questionnaire.

Should you have any questions about this questionnaire or about the final report, do not hesitate to contact me at mgarcia11895@alumno.uned.es.

ITEM	1. Context	
ITEM 1	Is your child exposed to two (and only two)	Yes
	languages?	No
ITEM 2	Is any of the languages of your child different	Yes
	from the language of the social context outside	No
	the home?	
ITEM 3	Where do you live?	
ITEM 4	What is your native language?	

ITEM 5	What is the native language of the other	
	Primary Caregiver?	
	**The terms Primary Caregiver 1 and Primary	
	Caregiver 2 will be used throughout the questionnaire to	
	refer to the parent, guardian, relative or some other	
	person who is raising the child.	
ITEM 6	What is the NON-native language you are	
	using with your child?	
ITEM 7	Is any of your child's primary caregivers (a	Yes
	parent, guardian, relative or some other person	No
	who is raising the child) a native speaker of the	
	non-native language?	
ITEM 8	Did you start speaking two languages to your	Yes
	child from birth?	No
	2. Languages used between caregivers	
	Select which language the Primary Caregivers use with	
	each other. Remember: the person who speaks the NON-	
	native language is Primary Caregiver 1.	
ITEM 9	Primary Caregiver 1 speaks to Primary	
	Caregiver 2:	
ITEM 10	Primary Caregiver 2 speaks to Primary	
	Caregiver 1:	
ITEM 11	Have there been any major changes to the	Yes
	languages you use in your family AFTER the	No
	birth of your child?	
	Level of non-native language	
ITEM 13	Primary Caregiver 1	None
		A1
		A2
		B1
		B2
		C1
TOTAL STATE		C2
ITEM 14	Primary Caregiver 2	None
		A1 A2
		A2

	-			B1	
				B2	
				C1	
				C1 C2	
	3. Current input pa	attern		C2	
		guage to the child? Rem	ambar: 1	the nerson s	who speaks the NON
	native language is Prima		ember.	ille person v	who speaks the NON-
			rimary o	caregiver 2]
		Situation #1			
	native language			<u>√</u>	
	non-native language	√			
		Situation #2			
	native language				
	non-native language	✓		√	
		Situation #3			
	native language	√		√	
	non-native language	✓		√	
		Situation #4			
	native language	✓		√	
	non-native language	✓			
		Situation #5			
	native language	✓			
	non-native language	√	•	√	
ITEM 15	Please, select the t	type of input pattern	n that	Situation #	
	most closely reflect	ets your current far	mily's		
	language situation v	vith regard to your ch	nild.	Situation #	
				Situation #	
	Current amount of	F:		Situation	73
ITEL 10	Current amount of			Maint	
ITEMS		: non-native languag	ge	Mainly Sometime	_
16-23	Primary Caregiver 1	: native language		Half of the	
	Primary Caregiver 2	2: non-native languag	ge	11411 01 1116	onne
	Primary Caregiver 2	2: native language			
ITEM 24	Have there been any	major changes to the	input	Yes	
		ise with your child		No	
	birth?	,			
		the home			
	4. Context outside	the nome			

ITEM 26	What languages are spoken to the child by	
	relatives?	
ITEM 29	How do you supplement your child's NON-	TV
	native input?	Movies
	1	Books
		Podcasts
		YouTube
		Online meetings with other
		children
		Classes
		I do not supplement
ITEN (2.1	Will a distribution of the state of the stat	Other
ITEM 31	When is the non-native language spoken to the	Only at home At home and outside the home
	child?	At home and at daycare
		Only when alone with the
		primary caregiver responsible
		for the input in the non-societal
		language
		Only on certain days
		Only at certain times
		Only when carrying out certain
		activities
		It varies
		Other: please, specify
	5. Language use in conversation	
ITEM 33	How old is your child?	
ITEM 34	Is your child already speaking?	Yes
		No
ITEM 35	When your child says something in the native	My child does not mix languages
	language while the non-native language is	Pretend you don't understand
	being used, you are more likely to?	Ask the child to repeat the sentence in the non-native
		language.
		Use a question in the non-native
		language to translate what you
		thought the child wants to say.

ITEM 36	When your child says something in the native language while the non-native language is	Translate into the non-native language what your child has said in the native language. Continue the conversation using the non-native language. Continue the conversation by switching to the native language. My child does not mix languages Say: I don't understand (in the non-native language)
	being used, you are more likely to?	Ask: How do we say that in (non-native language) Ask: Did you say X? (in the non-native language) Repeat what the child said (translating it into the non-native language) Move on with the conversation (in the non-native language) with no comment. Change to the native language.
ITEM 37	In the following situation:	My child does not mix languages
	Parent: what do you want for breakfast? Child:!leche! your most likely response would be:	What did you say? I don't understand What do you want for breakfast? How does (caregiver's name) say that? Do you want milk?
		I want milk. Oh, you want milk, perfect! Great, let's prepare the milk. Vale, ¿algo más? You want leche, something else?
ITEM 38	Mark all that apply to your family composition	Mother 1 Mother 2 Father 1 Father 2 Grandmother Grandfather Child 1

		Child 2
		Child 3 and subsequent
	6. Attitudes and practices	
ITEM 39	The more I speak to my child, the more she/he	I strongly disagree
	will learn	I disagree
		I agree
		I strongly agree
ITEM 40a	I have planned how the input in the non-	Not at all
	societal language will be provided to my child	Somewhat A little
ITEM 40b	I am worried my non-native pronunciation will	Very much
	affect my child's acquisition	very maon
ITEM 40c	I am worried my mistakes in the non-native	
	language will become my child's mistakes	
ITEM 40d	I pay close attention to the input I provide to	
	my child	
ITEM 40e	I am consistent with the way I have chosen to	
	expose my child to the NON-native language	
ITEM 41a	I encourage my child to use the non-societal	My child does not mix languages
	language in response to non-societal language	Never
	utterances	Rarely
		Occasionally
		Very frequently
ITEM 41b	I mix my native language with my non-native	Never
	language when I speak to my child	Rarely Occasionally
		Very frequently
ITEM 42	I dislike my child mixing languages in a	Yes
11211112	conversation	No
	Conversation	My child does not mix languages
ITEM 43	I dislike my child mixing languages in a	Yes
	sentence	No
		My child does not mix languages
ITEM 45	Are you in touch with other families using	Yes
	NON-native languages with their children?	No
	7. Comments and contact	
t	1	ı

ITEM 46	If you have any comments or there is			
	something I have not asked that you feel is			
	important for your bilingual journey, feel free			
	to include them here.			
ITEM 47	If you would like to hear about the results of			
	the survey, feel free to include your email here.			

SPANISH VERSION

ENSEÑANZA BILINGÜE NO NATIVA

Estimada/o madre/padre:

Te invitamos a participar en un proyecto de investigación sobre enseñanza bilingüe no nativa en contextos monolingües. Es decir, familias que están educando a sus hijos en una lengua que no es la lengua nativa de los padres ni la lengua de la comunidad.

Si crees que tu familia encaja en esta descripción, por favor, considera responder a estas preguntas. Te llevará unos 15 minutos.

Las preguntas deberían ser contestadas por la persona que usa la lengua NO nativa con el niño. Nos referiremos a esta persona a lo largo del cuestionario como Cuidador 1. La otra persona será Cuidador 2. Si ambos usáis el idioma NO nativo, esta distinción no es relevante.

Todas las preguntas irán referidas exclusivamente al primer hijo.

La participación es voluntaria y puedes dejar de contestar en cualquier momento.

En esta encuesta no se recogerá ningún tipo de información personal.

Si te gustaría que te informásemos sobre los resultados de este proyecto, puedes incluir tu email o cualquier otra forma de contacto al final del cuestionario.

Si tienes alguna pregunta sobre el mismo o sobre los resultados, puedes ponerte en contacto conmigo en esta dirección de correo: mgarcia11895@alumno.uned.es.

**A lo largo de esta encuesta, los masculinos se usarán de forma genérica para referirse a hijos e hijas, padre y madre, cuidador y cuidadora.

ITEM	1. Context	
ITEM 1	¿Está siendo expuesto tu hijo a dos (y solo dos)	Sí
	idiomas?	No
ITEM 2	¿Es alguno de los idiomas a los que está	Sí
	expuesto tu hijo diferente al idioma de la	No
	comunidad/ sociedad?	
ITEM 3	¿Dónde reside su familia?	
ITEM 4	¿Cuál es tu lengua nativa?	
ITEM 5	¿Cuál es la lengua nativa del otro cuidador?	
	**Los términos Cuidador 1 y Cuidador 2 se usan en este	
	cuestionario en referencia al padre, madre, tutor legal,	
Maria C	otro familiar o persona que esté educando al niño.	
ITEM 6	¿Cuál es la lengua NO nativa que se está	
	usando con el niño?	
ITEM 7	¿Es alguno de los cuidadores principales del	Sí No
	niño (padre, madre, tutor legal, otro familiar o	NO
	cualquier otra persona que esté educando al	
	niño) un hablante nativo de esa lengua?	
ITEM 8	¿Empezasteis a usar la lengua no nativa con el	Sí
	niño desde su nacimiento?	No
	2. Idiomas que usan los cuidadores entre	
	ellos.	
	Indica qué lengua habláis los cuidadores principales	
	entre vosotros. Recuerda que la persona que habla el idioma NO nativo es el Cuidador 1.	
ITEM 9	Cuidador 1 con Cuidador 2	
ITEM 10	Cuidador 2 con Cuidador 1	
ITEM 11	¿Ha habido algún cambio importante en el	Sí
	idioma que usas con el otro cuidador	No
	DESPUÉS del nacimiento del niño?	
	Nivel del idioma no nativo	
ITEM 13	Cuidador 1	Cero
		A1
		A2
		B1

	1				
				B2	
				C1	
				C2	
ITEM 14	Cuidador 2			Cero	
				A1	
				A2	
				B1	
				B2	
				C1	
				C2	
	3. Exposición al idi	ioma: cómo se pres	entan l	as dos len	guas al niño
	¿Quién habla cada idior	na con el niño?			
	Recuerda que la persona	a que habla el idioma No	O nativo	es el Cuidad	or 1. Si ambos usáis el
	idioma NO nativo, esta	distinción no es relevan	te.		
		Cuidador 1	Cuid	ador 2	
		Situación #1			
	Idioma nativo			✓	
	Idioma no nativo	✓			
		Situación #2			
	Idioma nativo				
	Idioma no nativo	Idioma no nativo ✓ ✓		√	
		Situación #3			
	Idioma nativo	✓		√	
	Idioma no nativo	✓		√	
		Situación #4			
	Idioma nativo	✓		√	
	Idioma no nativo	✓			
		Situación #5			
	Idioma nativo	√			
	Idioma no nativo	✓		√	
ITEM 15	Por favor, marca la s	situación que más se	acerca	Situación	#1
				Situación	
	al uso que hacéis de	e los idiomas con el i	nino.	Situación	
				Situación	
				Situación	
	Cantidad de expos	ición al idioma:			
ITEMO				Dain air -1	aanta
ITEMS	Cuidador 1: idioma			Principalm	шие
16-23	Cuidador 1: idioma	nativo		A veces	1.12
				La mitad d	lel tiempo

	Cuidador 2: idioma no nativo	
	Cuidador 2: idioma nativo	
ITEM 24		Sí
11EM 24	¿Ha habido algún cambio importante en el	No
	patrón de exposición idioma que usas con niño	INO
	desde su nacimiento?	
	4. Contexto fuera del hogar	
ITEM 26	¿Qué idioma(s) habla con el niño el resto de la	
	familia?	
ITEM 29	¿Cómo suplementas la exposición al idioma	TV
	NO nativo de tu hijo?	Películas
		Libros
		Podcasts
		YouTube
		Reuniones online con otros
		niños Clases
		No suplementamos
		Otro
ITEM 31	¿Cuándo se usa el idioma no nativo con el	Solo en casa
	niño?	En casa y fuera de ella
	iiiio:	En casa y en la guardería/colegio
		Solo cuando está A SOLAS con
		el cuidador que habla el idioma
		no nativo
		Solo algunos días
		Solo en algunos momentos
		Solo cuando se realizan ciertas
		actividades
		Es variable Otro
	5. La lengua en la conversación	Out
ITEM 33	¿Qué edad tiene el niño?	
ITEM 34	¿Habla el niño?	Sí
1112111 34	Gradia et illilo:	
l l		No
ITEM 35	Si el niño dice algo en el idioma nativo cuando	No Mi hijo no mezcla idiomas
ITEM 35	_	
ITEM 35	Si el niño dice algo en el idioma nativo cuando la conversación se está llevando en el idioma	Mi hijo no mezcla idiomas

	no-nativo ¿Cómo es más probable que respondas?	Usando una pregunta en la lengua no nativa para traducir lo que el niño quiere decir. Traduciendo a la lengua no nativa lo que el niño dijo en la lengua nativa. Continuando la conversación en la lengua no nativa. Continuando la conversación
ITEM 36	Si el niño dice algo en el idioma nativo cuando la conversación se está llevando en el idioma no-nativo ¿Cómo es más probable que respondas?	cambiando a la lengua nativa. Mi hijo no mezcla idiomas Diciendo: No te he entendido (en la lengua no nativa) Preguntando: ¿Cómo se dice eso en (lengua no nativa)? Preguntando: ¿Has dicho X? (en la lengua no nativa) Repitiendo lo que el niño ha dicho (traduciéndolo a la lengua no nativa) Continuando la conversación en la lengua no nativa. Cambiando a la lengua nativa
ITEM 37	En una situación como esta: Parent: What do you want for breakfast? Child: !leche! ¿Cómo es más probable que respondas?:	Mi hijo no mezcla idiomas What did you say? I don't understand What do you want for breakfast? How does (caregiver's name) say that? Do you want milk? I want milk. Oh, you want milk, perfect! Great, let's prepare the milk Vale, ¿algo más? You want leche, something else?
ITEM 38	Indica la composición de tu familia:	Madre 1 Madre 2 Padre 1 Padre 2 Abuela

		Abuelo
		Niño 1
		Niño 2
		Niño 3 y siguientes
	6. Ideas sobre las lenguas	, ,
ITEM 39	Cuanto más hable con mi hijo en la lengua no	Muy en desacuerdo
	, c	En desacuerdo
	nativa, más aprenderá	De acuerdo
		Muy de acuerdo
ITEM 40a	He planeado cómo expondré a mi hijo a la	Nada
	lengua no nativa	Poco
ITEM 40b	Me preocupa que mi pronunciación no nativa	Bastante
11 LW 400		Mucho
	afecte la adquisición del idioma de mi hijo	
ITEM 40c	Me preocupa que mis errores en la lengua no	
	nativa pasen a mi hijo	
ITEM 40d	Pongo atención al tipo de exposición a la que	
	proveo a mi hijo	
ITEM 40e	Soy consistente en el método que he elegido	
	para exponer a mi hijo al idioma NO nativo.	
ITEM 41a	Animo a mi hijo a que use el idioma NO nativo	Mi hijo no mezcla idiomas
	como respuesta a frases en este idioma	Nunca
		Con poca frecuencia
		Casi siempre
		Siempre
ITEM 41b	Mezclo mi idioma nativo con el NO nativo	Nunca
	cuando hablo con mi hijo	Con poca frecuencia
		Casi siempre
		Siempre
ITEM 42	Me disgusta que mi hijo mezcle idiomas en una	Sí
	conversación	No Mi hijo no mezcla idiomas
ITEM 43	Me disgusta que mi hijo mezcle idiomas en una	Sí
111111171		No
	misma frase	Mi hijo no mezcla idiomas
ITEM 45	¿Estás en contacto con otras familias que usan	Sí
	su lengua NO nativa con sus hijos?	No
	7. Comentarios y contacto	
<u> </u>	1	I

ITEM 46	Si quieres hacer algún comentario, puedes	
	incluirlo aquí. Por ejemplo: ¿hay algo que no	
	haya preguntado que creas que es importante	
	para tu crianza bilingüe?	
ITEM 47	Si quieres mantenerte informado sobre los	
	resultados de esta encuesta, puedes incluir tu	
	email o alguna otra forma de contacto aquí.	

SES QUESTIONNAIRE

You have received this questionnaire as a follow up of the one you were kind enough to complete in April 2021. There are only four questions that you can answer to complete the data in the survey. This will help me write the report for my Master's Thesis. I want to thank you again for your time filling up the questionnaire. I hope you found the results I emailed you together with this survey interesting.

ITEM		
ITEM 1	Who is the parent responsible for the input in the non-native language?	Mother Father Both
ITEM 2	Do you live in a rural or urban area?	Urban area Rural area
ITEM 3	Please, select the occupation of the person responsible for the input in the non/native language.	1. Directors and managers (Legislators and senior officials; General Government and social- interest organization executives Executive directors; Administrative and commercial department managers; Production and operations managers; Accommodation, catering and trade managers; Services managers). 2. Health and education scientific and intellectual technicians and professionals (Health

professionals; Early childhood, primary, secondary and postsecondary teaching professionals; Other education professionals). Other scientific and intellectual technicians and professionals (Physical chemistry, science, mathematics and engineering professionals; Legal professionals; Business, administration marketing professionals; Information technology professionals; Social sciences professionals; Cultural and entertainment professionals). 3. Technicians; support professionals (Science and engineering technicians; Mining, manufacturing and construction supervisors; Alternative therapy health technicians and Financial professionals; and mathematical support professionals; Representatives, sales and purchasing agents and related professionals; Clerical support workers; security force technicians; social, Legal, cultural, sporting and similar services support professionals; Information and communications technology (ICT) technicians). 4. Office employees who do not deal with the public (Accounting and finance services employees, and production and transport support services employees; Library, mail carrier and related clerks: Other administrative

employees who do not work with customer services)

- 5. Customer services clerks (Travel consultants and clerks, receptionists and telephone switchboard operators; window employees and the like (except ticket sellers); Administrative employees who work with customer services and are not elsewhere classified).
- 6. Catering and trade service workers (Waiters and bartenders, and cooks who are restaurant owners; Catering services wage-earning workers; Shop salespersons; Shop owner traders Sales workers (except in shops and department stores); Cashiers and ticket clerks (except in banks)).
- 7. Health services and personal care workers (Nursing assistants; Child care workers; Hairdressers, beauticians, well-being and related workers; Traveler assistants, travel guides and related workers; Building and housekeeping supervisors, building caretakers and domestic housekeepers).
- 8. Protective and security services workers (Civil guards; Police; Fire-fighters; Private security personnel; Other protective and security services workers).
- Skilled agricultural, livestock, forestry and fishery workers.
 Skilled construction workers,

machinery

operators

except

(Structural construction workers and related workers; Building and installation finishers (except electricians), painters and related workers.

- 10. Skilled manufacturing industry workers, except installation and machine operators (Welders, sheet-metal workers, structural-metal preparers and erectors, blacksmiths, toolmakers and related trades workers; Machinery mechanics and adjusters; Electrical and electronic trades workers; Metal precision mechanics, ceramists, glass workers, handicraft and printing workers; Food, beverage and tobacco industry workers; Woodworking, textile, garment, fur, leather, footwear and other trade workers).
- 11. Stationary plant and machine operators, and assemblers.
- 12. Mobile machine drivers and operators (Locomotive engine drivers, agricultural machine and mobile heavy equipment operators, and seamen; City or road transport vehicle drivers).
- 13. Unskilled services workers (except transport) (Domestic Other employees; cleaning workers; Food preparation assistants; Urban garbage workers, street vendors and other elementary services occupations). 14. Agricultural, fishing,

		transport industry laborers (Agrarian, forestry and fishery laborers; Construction and mining laborers; Manufacturing laborers Transport, loading and stocking laborers). 15. Armed forces occupations.
ITEM 4	What is your highest level of educational qualification? For the parent responsible for the input in the non-native language.	Early childhood education Primary education Lower secondary education Upper secondary education Post-secondary non-tertiary education Short-cycle tertiary education Bachelor's or equivalent level Master's or equivalent level Doctoral or equivalent level

APPENDIX 2. DESCRIPTION OF THE FINAL SAMPLE

Table A2.1. Descriptive statistics. Children's age.

Statistics AGE ITEM 33-Hov	w old is your child?		
N	Valid	62	
	Missing	0	
Mean	_	3,35	
Median		3,00	
Mode		0	
Std. Deviation		2,858	
Variance		8,167	
Skewness		1,127	
Std. Error of Skewi	ness	,304	
Kurtosis		2,102	
Std. Error of Kurto	sis	,599	
Minimum		0	
Maximum		14	

Table A2.2. Frequencies for variable CHILDSPEAKING.

CHILDSPEAKING ITEM 34-Is your child already speaking?						
	Frequency Percent Valid Percent Cumulative Percent					
Valid	1 No	17	27,4	27,4	27,4	
	2 Yes	45	72,6	72,6	100,0	
	Total	62	100,0	100,0		

Table A2.3. Types of family compositions in the sample.

	ITEM 38- Family composition				
				Valid	
		Frequ	Perce	Perce	Cumulativ
		ency	nt	nt	e Percent
Vali	1 MOTHER 1;CHILD 1;OTHER ;	1	1,6	1,6	1,6
d	2 MOTHER 1;FATHER 1;CHILD 1;	32	51,6	51,6	53,2
	3 MOTHER 1;FATHER 1;CHILD 1;CHILD 2;	19	30,6	30,6	83,9
	4 MOTHER 1; FATHER 1; CHILD 1; CHILD	2	3,2	3,2	87,1
	2;CHILD 3 AND SUBSEQUENT;				
	5 MOTHER 1; FATHER 1; GRANDMOTHER;	3	4,8	4,8	91,9
	GRANDFATHER;CHILD 1;				
	6 MOTHER 1;FATHER	1	1,6	1,6	93,5
	1;GRANDMOTHER;CHILD 1;				
	7 MOTHER 1;FATHER	1	1,6	1,6	95,1
	1;GRANDMOTHER;CHILD 1;CHILD 2;				
	8 MOTHER 1;FATHER	1	1,6	1,6	96,7
	1;GRANDMOTHER;CHILD 1;CHILD				
	2;CHILD 3 AND SUBSEQUENT;OTHER;				
	9 MOTHER 1;GRANDMOTHER;CHILD 1;	1	1,6	1,6	98,3
	10 MOTHER 1;MOTHER 2;CHILD 1;	1	1,6	1,6	100,0
	Total	62	100,0	100,0	

Table A2.4. Country of residence.

I to I t	Tuble 112:1: Country of residence.						
ITEM 3	ITEM 3- Where do you live?						
			-	•	•	Cumulative	
			Frequency	Percent	Valid Percent	Percent	
Valid	1 SPAIN		25	40,3	40,3	40,3	
	2 US		11	17,7	17,7	58,1	
	3	LATIN	9	14,5	14,5	72,6	
	AMERICA						
	4 EUROPE		14	22,6	22,6	95,2	
	5 OTHER		3	4,8	4,8	100,0	
	Total		62	100,0	100,0		

TableA2.5. Native language of the parent-pair.

L1 ITE	L1 ITEM 4/5-Native language								
					Cumulative				
		Frequency	Percent	Valid Percent	Percent				
Valid	1 ARABIC	1	1,6	1,6	1,6				
	2 DUTCH	1	1,6	1,6	3,2				
	3 ENGLISH	12	19,4	19,4	22,6				
	4 FRENCH	2	3,2	3,2	25,8				
	5 GERMAN	2	3,2	3,2	29,0				
	6 GREEK	3	4,8	4,8	33,9				
	7 HUNGARIAN	1	1,6	1,6	35,5				
	8 ITALIAN	5	8,1	8,1	43,5				
	9 SPANISH	35	56,5	56,5	100,0				
	Total	62	100,0	100,0					

Table A2.6. Non-native language used with the child.

L2 ITEM 6-Non-native language you use with the child									
					Cumulative				
		Frequency	Percent	Valid Percent	Percent				
Valid	1 ENGLISH	47	75,8	75,8	75,8				
	2 FRENCH	2	3,2	3,2	79,0				
	3 GERMAN	4	6,5	6,5	85,5				
	4 RUSSIAN	1	1,6	1,6	87,1				
	5 SPANISH	8	12,9	12,9	100,0				
	Total	62	100,0	100,0					

Table A2.7. CG1's level of L2.

ITEM 1	3-Level of L2 CG1				
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 NONE to B1	5	8,1	8,1	8,1
	2 B2	12	19,4	19,4	27,4
	3 C1	22	35,5	35,5	62,9
	4 C2	23	37,1	37,1	100,0
	Total	62	100,0	100,0	

Table A2.8. CG2's level of L2.

ITEM 1	4-Level of L2	CG2			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 A1	8	12,9	12,9	12,9
	2 A2	5	8,1	8,1	21,0
	3 B1	9	14,5	14,5	35,5
	4 B2	10	16,1	16,1	51,6
	5 C1	13	21,0	21,0	72,6
	6 C2	2	3,2	3,2	75,8
	7 NONE	15	24,2	24,2	100,0
	Total	62	100,0	100,0	

APPENDIX 3. TYPE OF INPUT

Table A3.1. Current input pattern.

INPUT2 ITEM 15-Current input pattern									
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	1 OPOL	24	38,7	38,7	38,7				
	2 MINORITY LANG	7	11,3	11,3	50,0				
	3 MIXED	8	12,9	12,9	62,9				
	4 Mm+M	20	32,3	32,3	95,2				
	5 Mm+m	3	4,8	4,8	100,0				
	Total	62	100,0	100,0					

 Table A3.2. Languages used between caregivers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 MAJORITY	51	82,3	82,3	82,3
	2 MINORITY	2	3,2	3,2	85,5
	3 MIXED	4	6,5	6,5	91,9
	4 OPOL	5	8,1	8,1	100,0
	Total	62	100,0	100,0	

Table A3.3. Contexts of exposure to the minority language.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 At home and daycare/school	at7	11,3	11,3	11,3
	2 At home and outside home	the31	50,0	50,0	61,3
	3 It varies	6	9,7	9,7	71,0
	4 Only at certain times	1	1,6	1,6	72,6
	5 Only at home	9	14,5	14,5	87,1

6 Only when ALONE wit the primary caregive responsible for the input i the non-native language	er	8,1	8,1	95,2
7 Only when carrying or certain activities	ut2	3,2	3,2	98,4
8 Other	1	1,6	1,6	100,0
Total	62	100,0	100,0	

Table A3.4. Contexts of exposure to the minority language by input pattern.

	INPUT4 ITEM 31- When is the non-native language spoken to the child?					
INPUT2 ITEM 15-Curi	rent input pattern	Frequency	Percent	Valid Percent	Cumulative Percent	
1 OPOL Valid	1 At home and a daycare/school	t3	12,5	12,5	12,5	
	2 At home and outside the home	e14	58,3	58,3	70,8	
	3 It varies	2	8,3	8,3	79,2	
	4 Only at certain times	11	4,2	4,2	83,3	
,	5 Only at home	2	8,3	8,3	91,7	
	6 Only when ALONE1 4,2 with the primary caregiver responsible for the input in the non-societal language			4,2	95,8	
,	8 Other	1	4,2	4,2	100,0	
	Total	24	100,0	100,0		
2 MINORITYValid LANG	2 At home and outside the home	e3	42,9	42,9	42,9	
	3 It varies	1	14,3	14,3	57,1	
	5 Only at home	1	14,3	14,3	71,4	
	7 Only when carrying out certain activities	g2	28,6	28,6	100,0	
	Total	7	100,0	100,0		
3 MIXED Valid	1 At home and a daycare/school	t1	12,5	12,5	12,5	

		2 At home and outside the home	le4	50,0	50,0	62,5
		3 It varies	3	37,5	37,5	100,0
		Total	8	100,0	100,0	•
4 Mm+M	Valid	1 At home and a daycare/school	at2	10,0	10,0	10,0
		2 At home and outside the home	le8	40,0	40,0	50,0
		5 Only at home	6	30,0	30,0	80,0
		6 Only when ALON with the primar caregiver responsible for the input in the non-societal language	ry le ne	20,0	20,0	100,0
,		Total	20	100,0	100,0	
5 Mm+m	Valid	1 At home and a daycare/school	at1	33,3	33,3	33,3
		2 At home and outside the home	le2	66,7	66,7	100,0
		Total	3	100,0	100,0	

 Table A3.5.
 Supplementing strategies.

		Res	ponses	Percent of	
	-	N	Percent	Cases	
\$FLP1 ITEM 29- How	1 TV	42	18,6%	71,2%	
do you supplement your chil ^a	2 MOVIES	31	13,7%	52,5%	
	3 BOOKS	52	23,0%	88,1%	
	4 PODCASTS	6	2,7%	10,2%	
	5 YOUTUBE	43	19,0%	72,9%	
	6 ONLNE MEETINGS	9	4,0%	15,3%	
	7 CLASSES	23	10,2%	39,0%	
	9 SONGS	7	3,1%	11,9%	

	10 NATIVE SPEAKER FRIENDS OR PAID CARETAKERS	7	3,1%	11,9%
	11 OTHER	6	2,7%	10,2%
Total		226	100,0%	383,1%
a. Group				

Table A3.6. Frequencies of families who are in touch with other NNBP.

FLP3 ITEM 45- Are you in touch with other families using non-native languages with their children?

	Frequency	Percent	Valid Percent	Cumulative Percent
1 NO	25	40,3	42,4	42,4
2 YES	34	54,8	57,6	100,0
Total	59	95,2	100,0	
3	3	4,8		
	62	100,0		
	2 YES Total	1 NO 25 2 YES 34 Total 59 3 3	1 NO 25 40,3 2 YES 34 54,8 Total 59 95,2 3 3 4,8	1 NO 25 40,3 42,4 2 YES 34 54,8 57,6 Total 59 95,2 100,0 3 3 4,8

APPENDIX 4. LANGUAGE SOCIALIZATION PRACTICES

Table A4.1. I encourage my child to use the non-native language in response to non-native language utterances.

DS4 ITEM 41a-I encourage my child to use the non-native language in response to non-native language utterances

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 MY CHILD DOES NOT MIX	6	9,7	9,7	9,7
	1 NEVER	2	3,2	3,2	12,9
	2 RARELY	5	8,1	8,1	21,0
	3 OCCASIONALLY	23	37,1	37,1	58,1
	4VERY FREQUENTLY	26	41,9	41,9	100,0
Total		62	100,0	100,0	

Table A4.2. Reported parental mixing in conversations with child.

	AIX1 ITEM 41b I mix my native language with my non-native language when I speak o my child									
		_	_		Cumulative					
		Frequency	Percent	Valid Percent	Percent					
Valid	1 NEVER	16	25,8	25,8	25,8					
	2 RARELY	25	40,3	40,3	66,1					
	3 OCCASIONALLY	12	19,4	19,4	85,5					
	4 VERY	9	14,5	14,5	100,0					
	FREQUENTLY									
	Total	62	100,0	100,0						

Table A4.3. Frequencies for PDS (variable DS1).

					Respo	nses	Percent	of
					N	Percent	Cases	01
DEFINITION DS ^a	OF		MY OT M	DOES	5	6,3%	11,1%	

	2 PRETEND YOU 2 DON'T UNDERSTAND.	2,5%	4,4%
	3 ASK THE CHILD TO 14 REPEAT THE SENTENCE IN THE NON-NATIVE LANGUAGE.	17,5%	31,1%
	4 USE A QUESTION IN 14 THE NON-NATIVE LANGUAGE TO TRANSLATE WHAT YOU THINK THE CHILD WANTS TO SAY.	17,5%	31,1%
	5 TRANSLATE INTO 17 THE NON-NATIVE LANGUAGE WHAT YOUR CHILD HAS SAID IN THE NATIVE LANGUAGE.	21,3%	37,8%
	6 CONTINUE THE 24 CONVERSATION USING THE NONNATIVE LANGUAGE.	30,0%	53,3%
	7 CONTINUE THE 4 CONVERSATION BY SWITCHING TO THE NATIVE LANGUAGE.	5,0%	8,9%
Total	80	100,0%	177,8%
a. Group			

Table A4.4. Frequencies for PDS (variable DS2).

		Responses		Percent	of
		N	Percent	Cases	
sample of the DS ^a	1 MY CHILD DOES NOT MIX.	5	6,8%	11,1%	
	2 SAY: I DON'T UNDERSTAND (IN THE NON-NATIVE LANGUAGE).	_	6,8%	11,1%	

	3 ASK: HOW DO WE 11 SAY THAT IN (NON- NATIVE LANGUAGE?)	14,9%	24,4%
	4 ASK: DID YOU SAY X? 8 (IN THE NON-NATIVE LANGUAGE).	10,8%	17,8%
	5 REPEAT WHAT THE 21 CHILD SAID (TRANSLATING IT INTO THE NON-NATIVE LANGUAGE).	28,4%	46,7%
	6 MOVE ON WITH THE 21 CONVERSATION (IN THE NON-NATIVE LANGUAGE) WITH NO COMMENT.	28,4%	46,7%
	7 CHANGE TO THE 3 NATIVE LANGUAGE	4,1%	6,7%
Total	74	100,0%	164,4%

Table A4.5. Frequencies for PDS (variable DS3).

\$DS3QUESTION F	requencies			
		Responses		Percent of
		N	Percent	Cases
example of the DS ^a	1 MY CHILD DOES NOT MIX LANGUAGES	5	7,1%	11,1%
	2 WHAT DID YOU SAY?	5	7,1%	11,1%
	3 I DON'T UNDERSTAND	2	2,9%	4,4%
	4 WHAT DO YOU WANT FOR BREAKFAST?	2	2,9%	4,4%
	5 HOW DOES (CAREGIVER'S NAME) SAY THAT?	3	4,3%	6,7%
	6 DO YOU WANT MILK?	19	27,1%	42,2%
	7 I WANT MILK.	1	1,4%	2,2%

	8 OH, YOU WANT MILK, PERFECT!	17	24,3%	37,8%
	9 GREAT, LET'S PREPARE THE MILK	11	15,7%	24,4%
	10 VALE, ¿ALGO MÁS?	4	5,7%	8,9%
	11 YOU WANT LECHE, SOMETHING ELSE?	1	1,4%	2,2%
Total		70	100,0%	155,6%
a. Group				

 Table A4.6. Parental discourse strategies. Summary of frequencies.

NIMAL ASP	REQUEST FOR	EXPRESS	REPETITI	MOV	CODE
ASP	FOR			IVIO V	CODE
		ED	ON	E ON	SWITCH
	TRANSLAT	GUESS			
	ION				
%	31.1%	31.1%	37.8%	53.3	8.9%
				%	
1%	24.4%	17.8%	46.7%	46.7	6.7%
				%	
1%+4.4%+4	6.7%	42.2%	2.2% +	24.4	8.9%+2.2
6= 19.9%			37.8%=	%	%=
			40%		11.1%
4%	62.2%	91.1%	124.5%	124.4	26.7%
				%	
•	% 1% 1%+4.4%+4 %= 19.9% 4%	% 31.1% 1% 24.4% 1%+4.4%+4 6.7% 6= 19.9%	% 31.1% 31.1% 1% 24.4% 17.8% 1%+4.4%+4 6.7% 42.2% %= 19.9%	% 31.1% 31.1% 37.8% 1% 24.4% 17.8% 46.7% 1%+4.4%+4 6.7% 42.2% 2.2% + 37.8%= 40%	% 31.1% 37.8% 53.3 % 1% 24.4% 17.8% 46.7% 46.7 % 1%+4.4%+4 6.7% 42.2% 2.2% + 24.4 37.8%= % 40% 4% 62.2% 91.1% 124.5% 124.4

^{*}Totals do not equal 100% because it was a multiple response question.

APPENDIX 5. ATTITUDES AND BELIEFS

Table A5.1. Parental impact belief.

IB1 ITEM 39-The more I speak the non-native language to my child the more she will learn.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 I AGREE	17	27,4	27,4	27,4
	4 I STRONGLY AGREE	45	72,6	72,6	100,0
	Total	62	100,0	100,0	

Table A5.2. Parental degree of planning for FLP.

FLP2 ITEM 40a-I have planned how the input in the non-native language will be provided to my child.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 NOT AT ALL	1	1,6	1,6	1,6
	2 A LITTLE	9	14,5	14,5	16,1
•	3 SOMEWHAT	26	41,9	41,9	58,1
•	4 VERY MUCH	26	41,9	41,9	100,0
	Total	62	100,0	100,0	

Table A5.3. Parental attention to the child-directed input.

IB2 ITEM 40d- I pay close attention to the input I provide to my child. Cumulative Valid Percent Frequency Percent Percent Valid 1 NOT AT ALL 1 1,6 1,6 1,6 2 A LITTLE 6,5 4 6,5 8,1 3 SOMEWHAT 30 48,4 48,4 56,5 4 VERY MUCH 27 43,5 43,5 100,0 Total 62 100,0 100,0

Table A5.4. Parental worries about non-native model: pronunciation.

WORRY1 ITEM 40b- I am worried my non-native pronunciation will affect my child's acquisition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 NOT AT ALL	22	35,5	35,5	35,5
	2 A LITTLE	19	30,6	30,6	66,1
	3 SOMEWHAT	13	21,0	21,0	87,1
	4 VERY MUCH	8	12,9	12,9	100,0
	Total	62	100,0	100,0	

Table A5.5. Parental worries about non-native model: mistakes.

WORRY2 ITEM 40c- I am worried my mistakes in the non-native language will become my child's mistakes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 NOT AT ALL	17	27,4	27,4	27,4
	2 A LITTLE	16	25,8	25,8	53,2
	3 SOMEWHAT	12	19,4	19,4	72,6
	4 VERY MUCH	17	27,4	27,4	100,0
	Total	62	100,0	100,0	

Table A5.6. Parental attitudes towards child mixing in conversation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 FALSE	42	67,7	89,4	89,4
	3 TRUE	5	8,1	10,6	100,0
	Total	47	75,8	100,0	
Missing	System	15	24,2		
Total		62	100,0		

Table A5.7. Parental attitudes towards child mixing in a sentence.

MIX3 ITEM 43 I dislike my child mixing in a sentence						
Frequency	Percent	Valid Percent	Cumulative Percent			

Valid	1 FALSE	40	64,5	87,0	87,0
	3 TRUE	6	9,7	13,0	100,0
	Total	46	74,2	100,0	
Missing	System	16	25,8		
Total		62	100,0		

Table A5.8. Spearman's rank-order correlation for parental attitudes.

1 able A5.8	. Spearman's 1	rank-order c	<u>orrel</u> ation	for paren	<u>tal a</u> ttituc	les.	
				FLP2			WORRY
			IB1	ITEM			2 ITEM
			ITEM	40a-I			40c- I am
			39-The	have			worried
			more I	planned	IB2		my
			speak	how the	ITEM		mistakes
			the non-	input in	40d- I	WORRY1	in the
			native	the non-	pay	ITEM 40b- I	non-
			languag	native	close	am worried	native
			e to my	languag	attentio	my non-	language
			child	e will	n to the	native	will
			the	be	input I	pronunciatio	become
			more	provide	provide	n will affect	my
			she will	d to my	to my	my child's	child's
			learn.	child.	child.	acquisition.	mistakes.
-	IB1 ITEM	Correlatio	1,000	-,024	,092	,027	-,060
s rho	39-The more I speak the	n Coefficie nt					
	non-native language to my child the	Sig. (2-tailed)		,852	,475	,832	,646
	more she will learn.	N	62	62	62	62	62
	FLP2 ITEM 40a-I have planned how the input in	Correlatio n Coefficie nt	-,024	1,000	,260*	-,331**	-,170
	the non- native language	Sig. (2-tailed)	,852		,042	,009	,186
	will be provided to my child.	N	62	62	62	62	62

	IB2 ITEM	Correlatio	,092	,260*	1,000	,006	,096
	40d- I pay	n					
	close	Coefficie					
	attention to the input I	nt					
	provide to my child.	Sig. (2-tailed)	,475	,042	•	,962	,457
		N	62	62	62	62	62
	WORRY1	Correlatio	,027	-,331**	,006	1,000	,739**
	ITEM 40b- I						
	am worried	Coefficie					
	my non-	nt					
	native	Sig. (2-	,832	,009	,962	•	,000
	pronunciatio n will affect my child's	tailed)	,	,	,		,
		N	62	62	62	62	62
	acquisition.						
	WORRY2	Correlatio	-,060	-,170	,096	,739**	1,000
	ITEM 40c- I	n	ŕ	•	•	•	
	am worried	Coefficie					
	my mistakes	nt					
	in the non-	Sig. (2-	,646	,186	,457	,000	•
	native	tailed)	,	,	,	,	
	language will become my child's	N	62	62	62	62	62
		1N	02	UΖ	02	02	02
	mistakes.						
Comolo	tion is signified	ent at the O.O.	5 love1 () toiled)			
Correla	tion is significa	mi ai me 0.0.	o ievei (∠	z-tameu).			

APPENDIX 6. CONSISTENCY

Table A6.1. Consistency in languages used between caregivers.

CONSIST1 ITEM 11-Have there been any major changes to the language(s) you use with the other Primary Caregiver after the birth of your child?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 NO	49	79,0	79,0	79,0
	2 YES	13	21,0	21,0	100,0
	Total	62	100,0	100,0	

Table A6.2. Consistency in the language used with the child since birth.

CONSIST2 ITEM 24- Have there been any major changes to the language you use with your child since birth?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 NO	47	75,8	75,8	75,8
	2 YES	15	24,2	24,2	100,0
	Total	62	100,0	100,0	

Table A6.3. Consistency in FLP.

CONSIST3 ITEM 40e- I am consistent with the way I have chosen to expose my child to my non-native language.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 A LITTLE	3	4,8	4,8	4,8
	3 SOMEWHAT	25	40,3	40,3	45,2
	4 VERY MUCH	34	54,8	54,8	100,0
	Total	62	100,0	100,0	

Table A6.4. Spearman's Rank-Order Correlation coefficients for parental attitudes and consistency in FLP.

consistenc	y in FLP.							
			IB1	FLP2		CONSIS		WORR
			ITEM	ITEM		T3		Y2
			39-	40a-I		ITEM		ITEM
			The	have		40e- I		40c- I
			more I	planne		am		am
			speak	d how	IB2	consisten		worried
			the	the	ITEM	t with	WORRY1	my
			non-	input	40d- I	the way I	ITEM	mistake
			native	in the	pay	have	40b- I am	s in the
			langua	non-	close	chosen	worried	non-
			ge to	native	attenti	to	my non-	native
			my	langua	on to	expose	native	languag
			child	ge will	the	my child	pronunciat	e will
			the	be	input I	to my	ion will	become
			more	provid	provid	non-	affect my	my
			she	ed to	e to	native	child's	child's
			will	my	my	language	acquisition	mistake
			learn.	child.	child.			S.
Spearma	IB1 ITEM	Correlati	1,000	-,024	,092	,063	,027	-,060
n's rho	39-The	on	1,000	-,024	,092	,003	,027	-,000
11 5 1110		Coeffici						
	speak the							
	non-native	CIII						
	language	Sig. (2-		,852	,475	,625	,832	,646
	to my child	4 '1 1\		•	•	•	•	•
	-							
	the more she will	N	62	62	62	62	62	62
	learn.							
	icaiii.							
	FLP2	Correlati	-,024	1,000	,260*	,443**	-,331**	-,170
	ITEM 40a-	on	•		-	•		-
	I have	Coeffici						
	planned	ent						
	how the							
	how the input in the	Sig. (2-	,852	•	,042	,000	,009	,186
	non-native	tailed)						
	language		62	62	62	62	62	62
	will be	1.4	02	02	02	02	02	02
	provided							
	to my							
	child.							
				• *	1.000	2 2 -**		
	IB2 ITEM		,092	,260	1,000	,327**	,006	,096
	40d- I pay							
	close	Coeffici						
	attention to	ent						

	the input I provide to		,475	,042		,009	,962	,457
	my child.	N	62	62	62	62	62	62
	CONSIST 3 ITEM 40e- I am consistent	on Coeffici	,063	,443**	,327**	1,000	-,221	-,278*
	with the way I have chosen to	Sig. (2-tailed)	,625	,000	,009		,085	,029
,	expose my child to my non-native language.	N	62	62	62	62	62	62
	worried	on Coeffici ent	,027	-,331**	,006	-,221	1,000	,739**
	my non- native pronunciat	Sig. (2-	,832	,009	,962	,085		,000
	ion will affect my child's acquisition .	N	62	62	62	62	62	62
	WORRY2 ITEM 40c- I am worried my	on Coeffici	-,060	-,170	,096	-,278*	,739**	1,000
	mistakes in the non-	. 1 1	,646	,186	,457	,029	,000	•
	native language will become my child's mistakes.	N	62	62	62	62	62	62

^{*.} Correlation is significant at the 0.05 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 7. COMPETENCE IN THE SECOND LANGUAGE

Table A7.1. Distribution of CG1's level of L2 by input pattern.

INPUT2 ITEM	15-Current	input pattern	Frequency	Percent	Valid Percent	Cumulative Percent
1 OPOL	Valid	1 NONE to B1	1	4,2	4,2	4,2
		2 B2	2	8,3	8,3	12,5
		3 C1	12	50,0	50,0	62,5
		4 C2	9	37,5	37,5	100,0
		Total	24	100,0	100,0	
2 MINORITY	Valid	2 B2	2	28,6	28,6	28,6
LANG		3 C1	2	28,6	28,6	57,1
		4 C2	3	42,9	42,9	100,0
		Total	7	100,0	100,0	
3 MIXED	Valid	1 NONE to B1	1	12,5	12,5	12,5
		2 B2	3	37,5	37,5	50,0
		3 C1	3	37,5	37,5	87,5
		4 C2	1	12,5	12,5	100,0
		Total	8	100,0	100,0	
4 Mm+M	Valid	1 NONE to B1	3	15,0	15,0	15,0
		2 B2	4	20,0	20,0	35,0
		3 C1	5	25,0	25,0	60,0
		4 C2	8	40,0	40,0	100,0
		Total	20	100,0	100,0	
5 Mm+m	Valid	2 B2	1	33,3	33,3	33,3
		4 C2	2	66,7	66,7	100,0
		Total	3	100,0	100,0	

Table A7.2. Chi square test for independence for variables L2CG1 (2 levels) and INPUT2. L2CG1 ITEM 13- Level of L2 CG1 * INPUT2 ITEM 15-Current input pattern Crosstabulation

				INPU'	T2 ITEM 15	-Current	t input p	attern	
				1 OPOL	2 MINORITY LANG	3 MIXED	4 OMm+M	5 IMm+m	- nTotal
L2CG1	ITEM		Count	3	2	4	7	1	17
13- Level CG1		NONE to B2		6,6	1,9	2,2	5,5	,8	17,0
			% within L2CG1 ITEM 13- Leve of L2 CG1		511,8%	23,5%	41,2%	5,9%	100,0%
			Standardized Residual	-1,4	,1	1,2	,6	,2	
•			-Count	21	5	4	13	2	45
		C2	Expected Count	17,4	5,1	5,8	14,5	2,2	45,0
			% within L2CG1 ITEM 13- Leve of L2 CG1	-	511,1%	8,9%	28,9%	4,4%	100,0%
			Standardized Residual	,9	,0	-,7	-,4	-,1	
Total		-	Count	24	7	8	20	3	62
			Expected Count	24,0	7,0	8,0	20,0	3,0	62,0
			% within L2CG1 ITEM 13- Leve of L2 CG1	-	511,3%	12,9%	32,3%	4,8%	100,0%

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5,369 ^a	4	,251
Likelihood Ratio	5,568	4	,234
Linear-by-Linear Association	3,262	1	,071
N of Valid Cases	62		

		Value	Approximate Significance
Nominal by Nominal	Phi	,294	,251
	Cramer's V	,294	,251
N of Valid Cases		62	

Figure A7.1. Distribution of CG1's level of L2 by input pattern.

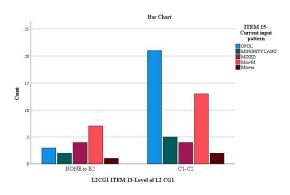


Table A7.3. Chi square test for independence for variables L2CG1 (2 levels) and INPUT PATTERN (recode OPOL vs. not OPOL).

L2CG1 ITEM 13- Level of I	L2 CG1 * INPUTreco	de recode	OPOL no	t OPOL
Crosstabulation				
		INPUTred OPOL no	code recod t OPOL	e
		1 OPOL	2 OTHER	Total
L2CG1 ITEM 13- Level1 NON	ECount	3	14	17
of L2 CG1 to B2	Expected Count	6,6	10,4	17,0
	% within L2CG1 ITEN 13- Level of L2 CG1	M17,6%	82,4%	100,0%
	Standardized Residual	-1,4	1,1	
2 C1-C2	Count	21	24	45
	Expected Count	17,4	27,6	45,0
	% within L2CG1 ITEN 13- Level of L2 CG1	M46,7%	53,3%	100,0%
	Standardized Residual	,9	-,7	
Total	Count	24	38	62

Expected Count	24,0	38,0	62,0
% within L2CC 13- Level of L2		61,3%	100,0%

Figure A7.2. Distribution of CG1's level of L2 (2 levels) by input pattern: OPOL vs. not OPOL.

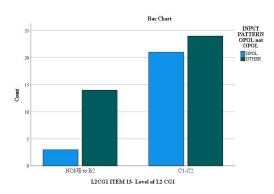


Table A7.4. Contexts of exposure by CG1 level of L2.

INPUT4 ITEM 31- When is the non-native language spoken to the child? * L2CG1 level
of L2 for CG1 Crosstabulation

Count						
		L2CG1 Level of L2 for CG1			CG1	-
		1 NONE to B1	2 B2	3 C1	4 C2	Total
INPUT4 ITEM 31- When is the non-	1 At home and at daycare/school	2	2	3	0	7
native language spoken to the child?	2 At home and outside the home	0	3	11	17	31
	3 It varies	2	0	4	0	6
	4 Only at certain times	0	1	0	0	1
	5 Only at home	1	4	0	4	9
	6 Only when ALONE with the primary caregiver responsible for the input in the non-societal language	0	1	3	1	5
	7 Only when carrying out certain activities	0	1	1	0	2
	8 Other	0	0	0	1	1
Total		5	12	22	23	62

TableA7.5. Chi square test for independence for variables INPUT4 (recode "All contexts" vs. "Limited use") and CG1L2 (recode two levels).

			L2CG1 ITEM 13- Level of L2 CG1		
			1 NONE to B2	2 C1-C2	- Total
INPUT4 outside vs	1 All	Count	3	28	31
at home	contexts	Expected Count	8,5	22,5	31,0
		% within INPUT4 outside vs at home	9,7%	90,3%	100,0%
		Standardized Residual	-1,9	1,2	
	2	Count	14	17	31
	Limited use	Expected Count	8,5	22,5	31,0
		% within INPUT4 outside vs at home	45,2%	54,8%	100,0%
		Standardized Residual	1,9	-1,2	
Total	•	Count	17	45	62
		Expected Count	17,0	45,0	62,0
		% within INPUT4 outside vs at home	27,4%	72,6%	100,0%

Table A7.6. Spearman's rank-order correlation for variables IB1 and CG1L2.

Correlation	S			
			•	IB1 ITEM
				39-The
				more I
				speak the
				non-native
				language
				to my
				child the
			L2CG1 ITEM 13- Level	more she
			of L2 CG1	will learn.
Spearman's	L2CG1 ITEM 13- Level	Correlation	1,000	,225
rho	of L2 CG1	Coefficient		
		-		

	Sig. (2-tailed)	•	,079
	N	62	62
IB1 ITEM 39-The more I speak the non-native	Correlation Coefficient	,225	1,000
language to my child the more she will learn.	Sig. (2-tailed)	,079	
	N	62	62

Table A7.7 Spearman's rank-order correlation for variables FLP2 and CG1L2.

Correlations	,			
			L2CG1 ITEM 13- Level of L2 CG1	FLP2 ITEM 40a-I have planned how the input in the non-native language will be provided to my child.
Spearman's rho	L2CG1 ITEM 13- Level of L2 CG1	Correlation Coefficient	1,000	,235
		Sig. (2-tailed)		,066
		N	62	62
	FLP2 ITEM 40a-I have planned how the input in the non-native language will be provided to my child.	Correlation Coefficient	,235	1,000
		Sig. (2-tailed)	,066	
		N	62	62

Table A7.8 Spearman's rank-order correlation for variables IB2 and CG1L2.

Correlations				
				IB2 ITEM
				40d- I pay
				close attention
			L2CG1 ITEM	to the input I
			13- Level of	provide to my
			L2 CG1	child.
Spearman's rho	L2CG1 ITEM 13- Level of L2 CG1	Correlation Coefficient	1,000	,219

-		Sig. (2-tailed)		,088
		N	62	62
c	B2 ITEM 40d- I pay lose attention to the	Correlation Coefficient	,219	1,000
	nput I provide to my hild.	Sig. (2-tailed)	,088	
		N	62	62

Table A7.9. Parental attitudes towards child mixing in conversation by CG1's level of L2.

L2CG1recod L2 for CG1 f	e4VALUES r for crosstab	Frequency	Percent	Valid Percent	Cumulative Percent	
1 NONE to	Valid	1 FALSE	3	60,0	75,0	75,0
B1		3 TRUE	1	20,0	25,0	100,0
		Total	4	80,0	100,0	
	Missing	System	1	20,0		
	Total		5	100,0		
2 B2	Valid	1 FALSE	11	91,7	91,7	91,7
		3 TRUE	1	8,3	8,3	100,0
		Total	12	100,0	100,0	
3 C1	Valid	1 FALSE	18	81,8	90,0	90,0
		3 TRUE	2	9,1	10,0	100,0
		Total	20	90,9	100,0	
	Missing	System	2	9,1		
	Total		22	100,0		
4 C2	Valid	1 FALSE	10	43,5	90,9	90,9
		3 TRUE	1	4,3	9,1	100,0
		Total	11	47,8	100,0	
	Missing	System	12	52,2		
	Total		23	100,0		

Table A7.10. Parental attitudes towards child mixing in a sentence by CG1's level of L2. *MIX3 ITEM 43- I dislike my child mixing languages in a sentence*.

L2CG1recode	4VALUES re	ecode of level of	•	-	Valid	Cumulative
L2 for CG1 for crosstab			Frequency	Percent	Percent	Percent
1 NONE to B1	Valid	1 FALSE	4	80,0	100,0	100,0
DI	Missing	System	1	20,0		
	Total		5	100,0		
2 B2	Valid	1 FALSE	11	91,7	91,7	91,7
		3 TRUE	1	8,3	8,3	100,0
		Total	12	100,0	100,0	
3 C1	Valid	1 FALSE	15	68,2	78,9	78,9
		3 TRUE	4	18,2	21,1	100,0
		Total	19	86,4	100,0	
	Missing	System	3	13,6		-
	Total	•	22	100,0		
4 C2	Valid	1 FALSE	10	43,5	90,9	90,9
		3 TRUE	1	4,3	9,1	100,0
		Total	11	47,8	100,0	
	Missing	System	12	52,2		-
	Total	<u> </u>	23	100,0		-

Table A7.11. Chi square test for independence for variables MIX2 and CG1L2.

L2CG1 ITEM 13-Level of L2 for CG1 * MIX2 ITEM 42- I dislike my child mixing languages in a conversation. Crosstabulation L2CG1 ITEM 13-Level of L2 for CG1 1 NONE to B2 2 C1-C2 Total MIX2 ITEM 42- I Count 14 28 42 dislike my child **FALSE Expected Count** 14,3 27,7 42,0 mixing languages in a conversation. 66,7% % within MIX2 33,3% 100,0% ITEM 42- I dislike my child mixing languages in a conversation.

	·	Standardized Residual	-,1	,1	
	3	Count	2	3	5
	TRUE	Expected Count	1,7	3,3	5,0
		% within MIX2 ITEM 42- I dislike my child mixing languages in a conversation.	40,0%	60,0%	100,0%
		Standardized Residual	,2	-,2	
Total	,	Count	16	31	47
		Expected Count	16,0	31,0	47,0
		% within MIX2 ITEM 42- I dislike my child mixing languages in a conversation.	34,0%	66,0%	100,0%

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1 sided)
Pearson Chi-Square	,088ª	1	,766	•	-
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,087	1	,769		
Fisher's Exact Test				1,000	,561
Linear-by-Linear Association	,087	1	,769		
N of Valid Cases	47				

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	-,043	,766
	Cramer's V	,043	,766
N of Valid Cases		47	

Table A7.12. Chi square test for independence for variables MIX3 and CG1L2.

languages in a senten		or CG1 * MIX3 ITEM tabulation	43- I dislike my) Child mixin	g
			L2CG1 ITE of L2 fo		
			1 NONE to B2	2 C1-C2	- Total
MIX3 ITEM 43- I	1	Count	15	25	40
dislike my child mixing languages in	FALSE	Expected Count	13,9	26,1	40,0
a sentence.		% within MIX3 ITEM 43- I dislike my child mixing languages in a sentence.	37,5%	62,5%	100,0%
		Standardized Residual	,3	-,2	
	3	Count	1	5	6
	TRUE	Expected Count	2,1	3,9	6,0
		% within MIX3 ITEM 43- I dislike my child mixing languages in a sentence.	16,7%	83,3%	100,0%
		Standardized Residual	-,8	,5	
Total		Count	16	30	46
		Expected Count	16,0	30,0	46,0
		% within MIX3 ITEM 43- I dislike my child mixing languages in a sentence.	34,8%	65,2%	100,0%

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1 sided)
Pearson Chi-Square	,998ª	1	,318	•	
Continuity Correction ^b	,291	1	,590		
Likelihood Ratio	1,109	1	,292		
Fisher's Exact Test				,649	,307
Linear-by-Linear Association	,977	1	,323		
N of Valid Cases	46				

b. Computed only for a 2x2 table

Symmetric Measures				
		Value	Approximate Significance	
Nominal by Nominal	Phi	,147	,318	
	Cramer's V	,147	,318	
N of Valid Cases		46		

Table A7.13 Spearman's rank-order correlation for variables CONSIST3 and CG1L2.

CONSIST3	
ITEM 40e-	
I am	
consistent	
with the	
way I have	
chosen to	
expose my	
child to my	
non-native	L2CG1 ITEM 13- Leve
language.	of L2 CG1

Spearman's rho	CONSIST3 ITEM 40e- I am consistent with the	Correlation Coefficient	1,000	,142
	way I have chosen to expose my child to my non-native language.	Sig. (2-tailed)	٠	,271
		N	62	62
	L2CG1 ITEM 13- Level of L2 CG1	Correlation Coefficient	,142	1,000
		Sig. (2-tailed)	,271	
		N	62	62

Table A7.14 Spearman's rank-order correlation for variables DS4 and CG1L2.

Correlations				
			-	DS4
				ITEM41a- I
				encourage my
				child to use
				the non-native
				language in
			L2CG1 ITEM 13- Level of L2 CG1	response to non-native language utterances
Spearman's rho	L2CG1 ITEM 13- Level of L2 CG1	Correlation Coefficient	1,000	,214
		Sig. (2-tailed)		,114
		N	62	56
	DS4 ITEM41a- I encourage my child to	Correlation Coefficient	,214	1,000
	use the non-native language in response to	Sig. (2-tailed)	,114	•
	non-native language utterances	N	56	56

APPENDIX 8. COMPARISONS BETWEEN SPEAKING VS. PRE-VERBAL CHILDREN

Table A8.1. Frequencies for variable CHILDSPEAKING.

CHILDS	SPEAKING	ITEM 34-Is your	child already	speaking?	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 No	17	27,4	27,4	27,4
	2 Yes	45	72,6	72,6	100,0
	Total	62	100,0	100,0	

Figure A8.1. Histogram for variable IB1 across categories of CHILDSPEAKING.

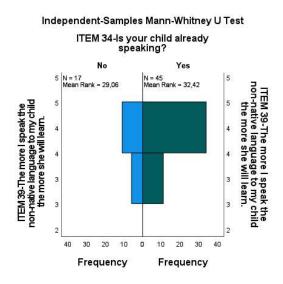


Table A8.2. Mann-Whitney test for IB1 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Summary		
Total N	62	
Mann-Whitney U	424,000	
Wilcoxon W	1459,000	
Test Statistic	424,000	
Standard Error	48,974	
Standardized Test Statistic	,847	
Asymptotic Sig.(2-sided test)	,397	

Figure A8.2. Histogram for variable FLP2 across categories of CHILDSPEAKING.

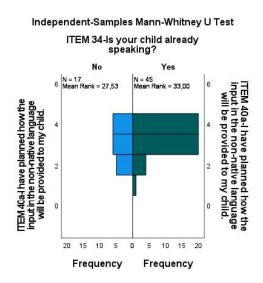


Table A8.3. Mann-Whitney test for FLP2 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Summary		
Total N	62	
Mann-Whitney U	450,000	
Wilcoxon W	1485,000	
Test Statistic	450,000	
Standard Error	58,416	
Standardized Test Statistic	1,155	
Asymptotic Sig.(2-sided test)	,248	

Figure A8.3. Histogram for variable IB2 across categories of CHILDSPEAKING.

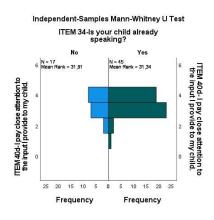


Table A8.4. Mann-Whitney test for IB2 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Sun	nmary
Total N	62
Mann-Whitney U	375,500
Wilcoxon W	1410,500
Test Statistic	375,500
Standard Error	56,827
Standardized Test Statistic	-,123
Asymptotic Sig.(2-sided test)	,902

Figure A8.4. Histogram for variable WORRY1 across categories of CHILDSPEAKING.

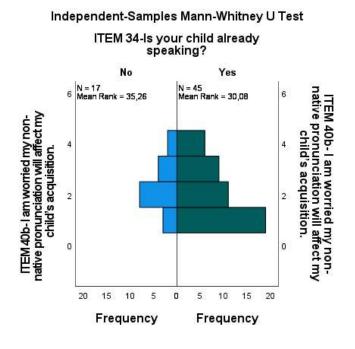


Table A8.5. Mann-Whitney test for WORRY1 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Summary		
Total N	62	
Mann-Whitney U	318,500	
Wilcoxon W	1353,500	
Test Statistic	318,500	
Standard Error	60,634	

Standardized Test Statistic	-1,056
Asymptotic Sig.(2-sided test)	,291

Figure A8.5. Histogram for variable WORRY2 across categories of CHILDSPEAKING.

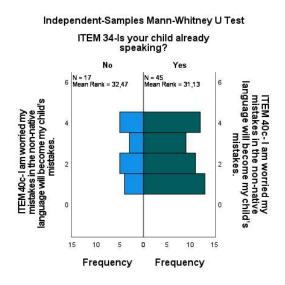


Table A8.6. Mann-Whitney test for WORRY2 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Sun	nmary
Total N	62
Mann-Whitney U	366,000
Wilcoxon W	1401,000
Test Statistic	366,000
Standard Error	61,266
Standardized Test Statistic	-,269
Asymptotic Sig.(2-sided test)	,788

Table A8.7. Parental attitudes towards child mixing in conversation. Parents of speaking vs. not speaking children.

MIX2 ITEM 42- I dislike my child mixing languages in a conversation.						
	PEAKING ITEI ady speaking?	M 34-Is your	Frequency	Percent	Valid Percent	Cumulative Percent
1 No	Valid	1 FALSE	11	64,7	91,7	91,7
		3 TRUE	1	5,9	8,3	100,0

	.	Total	12	70,6	100,0	
	Missing	System	5	29,4		
	Total		17	100,0		
2 Yes	Valid	1 FALSE	31	68,9	88,6	88,6
		3 TRUE	4	8,9	11,4	100,0
		Total	35	77,8	100,0	
	Missing	System	10	22,2	·	
	Total		45	100,0	·	

Table A8.8. Parental attitudes towards child mixing in a sentence. Parents of speaking vs. not speaking children.

MIX3 ITE	M 43- I dislike n	ny child mixing	languages in	a sentence	2.	
CHILDSPEAKING ITEM 34-Is your child already speaking?		Frequency	Percent	Valid Percent	Cumulative Percent	
1 No	Valid	1 FALSE	11	64,7	91,7	91,7
		3 TRUE	1	5,9	8,3	100,0
		Total	12	70,6	100,0	
	Missing	System	5	29,4		
	Total		17	100,0		
2 Yes	Valid	1 FALSE	29	64,4	85,3	85,3
		3 TRUE	5	11,1	14,7	100,0
		Total	34	75,6	100,0	
	Missing	System	11	24,4		
	Total		45	100,0		

Table A8.9. Chi square test for independence for variables MIX2 and CHILDSPEAKING.

Crosstab		dislike my	le ITEM 42- child mixing a conversation	ing
		1 FALSE	3 TRUE	Total
1 No	Count	11	1	12
	Expected Count	10,7	1,3	12,0

CHILDSPEAKING ITEM 34-Is your child already speaking?	% within 91,7% CHILDSPEAKING ITEM 34-Is your child already speaking?		8,3%	100,0%
	Standardized Res	Standardized Residual ,1		
$\overline{2 \text{ Ye}}$	s Count	31	4	35
	Expected Count	31,3	3,7	35,0
	% within88,6% CHILDSPEAKING ITEM 34-Is your child already speaking?		11,4%	100,0%
	Standardized Res	sidual ,0	,1	
Total	Count	42	5	47
	Expected Count	42,0	5,0	47,0
	% CHILDSPEAKII ITEM 34-Is you already speaking	r child	10,6%	100,0%

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. sided)	(2-Exact Sig. (1-sided)
Pearson Chi-Square	,090ª	1	,764	.	-
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,094	1	,759		
Fisher's Exact Test				1,000	,621
Linear-by-Linear Association	,088	1	,767		
N of Valid Cases	47				
a. 2 cells (50,0%) have	expected	l count le	ess than 5. The mir	nimum expect	ted count is 1,28.
b. Computed only for a	2x2 tabl	le			

Symmetric Measures			
	Value	Approximate Significance	

Nominal by Nominal	Phi	,044	,764	
	Cramer's V	,044	,764	
N of Valid Cases		47		

Figure A8.6. Clustered bar chart for variable MIX2 grouped by CHILDSPEAKING.

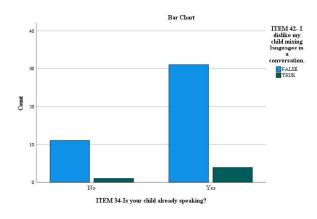


Table A8.10. Chi square test for independence for variables MIX3 and CHILDSPEAKING.

Crosstab				
		MIX3recode ITEM 43- I dislike my child mixing languages in a sentence.		
		1 FALSE	3 TRUE	Total
CHILDSPEAKING 1 No	Count	11	1	12
ITEM 34-Is your child already speaking?	Expected Count	10,4	1,6	12,0
	% within CHILDSPEAKING ITEM 34-Is your child already speaking?	n91,7% d	8,3%	100,0%
	Standardized Residual	,2	-,5	
2 Yes	Count	29	5	34
	Expected Count	29,6	4,4	34,0
	% within CHILDSPEAKING ITEM 34-Is your child already speaking?	n85,3% d	14,7%	100,0%
	Standardized Residual	-,1	,3	
Total	Count	40	6	46

Expected Count	40,0	6,0	46,0
% CHILDSPEAKI ITEM 34-Is you already speaking	r child	13,0%	100,0%

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. sided)	(2-Exact Sig. (1 sided)
Pearson Chi-Square	,318 ^a	1	,573	-	
Continuity Correction ^b	,004	1	,948		
Likelihood Ratio	,344	1	,557		
Fisher's Exact Test				1,000	,500
Linear-by-Linear Association	,311	1	,577		
N of Valid Cases	46				
a. 2 cells (50,0%) have b. Computed only for a	•		ess than 5. The mir	nimum expec	ted count is 1,57.

Symmetric Measures			Annrovimata
		Value	Approximate Significance
Nominal by Nominal	Phi	,083	,573
	Cramer's V	,083	,573
N of Valid Cases		46	

Figure A8.7. Clustered bar chart for variable MIX3 grouped by CHILDSPEAKING.

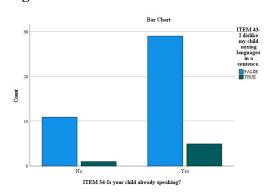


Figure A8.8. Histogram for variable CONSIST3 across categories of CHILDSPEAKING.

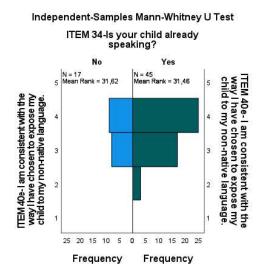


Table A8.11. Mann-Whitney test for CONSIST3 across categories of CHILDSPEAKING.

Independent-Samples Mann-Whitney U Test Summary			
Total N	62		
Mann-Whitney U	380,500		
Wilcoxon W	1415,500		
Test Statistic	380,500		
Standard Error	55,596		
Standardized Test Statistic	-,036		
Asymptotic Sig.(2-sided test)	,971		

Table A8.12. Mean rank scores for variables CONSIST3 across categories CHILDSPEAKING.

Ranks				
	CHILDSPEAKING ITEM 34-Is your child already speaking?	N	Mean Rank	Sum of Ranks
CONSIST3 ITEM 40e- I	1 No	17	31,62	537,50
am consistent with the way I have chosen to	2 Yes	45	31,46	1415,50
expose my child to my non-native language.	Total	62		

Figure A8.9. Histogram for variable DS4 across categories of CHILDSPEAKING.

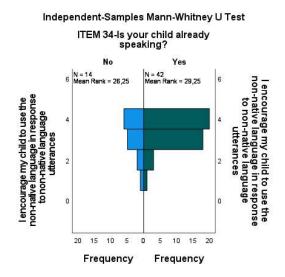


Table A8.13. Mean rank scores for variable DS4 across categories of CHILDSPEAKING.

Ranks		
CHILDSPEAKING ITEM 34 your child already speaking?		Mean Rank
DS4 ITEM 41a- I encourage my1 No	14	26,25
child to use the non-native language in response to non-2 Yes	42	29,25
native language utterances Total	56	

Test Statistics ^a	
	DS4 ITEM 41a- I encourage my child to use the non-native language in response to non-native language utterances
Mann-Whitney U	262,500
Wilcoxon W	367,500
Z	-,654
Asymp. Sig. (2 tailed)	2-,513
a. Grouping Variabl	e: CHILDSPEAKING ITEM 34-Is your child already speaking?

Report	
Median	

CHILDSPEAKING speaking?	ITEM 34-Is	your child	the	language	in
1 No			3,00		
2 Yes			3,00		
Total			3,00		J

Table A8.14. Reported parental mixing in conversations with child. Parents of speaking vs. not speaking children.

MIXI ITEM 41b- I mix my native language with my non-native language when I speak to my child.

CHILDSPE already spe		TEM 34-Is your ch		encyPercent	Valid Percent	Cumulative Percent
1 No	Valid	1 NEVER	4	23,5	23,5	23,5
		2 RARELY	7	41,2	41,2	64,7
		3 OCCASIONALI	4 LY	23,5	23,5	88,2
		4 VEF Frequently	RY2	11,8	11,8	100,0
		Total	17	100,0	100,0	
2 Yes	Valid	1 NEVER	12	26,7	26,7	26,7
		2 RARELY	18	40,0	40,0	66,7
		3 OCCASIONALI	8 LY	17,8	17,8	84,4
		4 VEF Frequently	RY7	15,6	15,6	100,0
		Total	45	100,0	100,0	

Figure A8.10. Histogram for variable MIX1 across categories of CHILDSPEAKING.

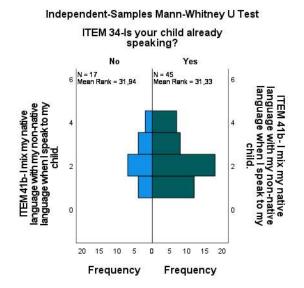


Table A8.15. Mann-Whitney test for MIX1 across categories of CHILDSPEAKING.

	MIX1 ITEM 41b- I mix my native language with my non-native language when I speak to my child.
Mann-Whitney U	375,000
Wilcoxon W	1410,000
Z	-,124
Asymp. Sig. (2-tailed	d) ,901

Table A8.16. Mean rank scores for MIX1 across categories of CHILDSPEAKING.

Ranks					
	CHILDSPEAKING 34-Is your child			Sum	of
	speaking?	N	Mean Ra	ankRanks	01
MIX1 ITEM 41b- I m		17	31,94	543,00	
native language with non-native language w	n my hen I ² Yes	45	31,33	1410,00	
speak to my child.	Total	62			

Table A8.17. Medians for MIX1 across categories of CHILDSPEAKING.

Report

Median	
	MIX1 ITEM 41b- I mix my native language with my non-native
CHILDSPEAKING ITE speaking?	M 34-Is your child alreadylanguage when I speak to my child.
1 No	2,00
2 Yes	2,00
Total	2,00