La casa – dom – el dom or la dom? A Pilot Study on Grammatical Gender in Spanish-Polish Bilingual Children

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A Pilot Study on Grammatical Gender in Spanish-Polish Bilingual Children

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ABSTRACT

This thesis presents the findings of a pilot study investigating the language production of Spanish-Polish children. These participants are heritage speakers of Spanish, with Polish being the majority language in their environment. This language contact situation between Spanish and Polish, leads to code-switching (CS), a phenomenon defined by Deuchar (2012) as "*code-switching is an activity which may be observed in the speech (or writing) of bilinguals who go back and forth between their two languages in the same conversation*".

The first aim of the present study is to investigate the acquisition of grammatical gender in Spanish and Polish within the noun phrase (NP), to understand to what extent the children acquired both gender systems. The second goal is to examine gender assignment within mixed nominal constructions, including determiners in Spanish and nouns in Polish. This analysis considers the structural differences between two languages: Spanish, which has a binary (masculine/feminine) gender system, and Polish, which features a three-way gender system (masculine/feminine/neuter). Another key focus of this study is evaluating effectiveness of the research design, particularly the success rate in collecting valid responses. Additionally, the study explores how the choice of stimuli and other contextual factors, such as linguistic background of the participants, may have influenced the results.

Based on the literature on the acquisition of two gender systems by bilinguals, and considering previous findings on gender assignment in mixed nominal constructions, the following research questions were formulated: (1) To what extent have the Spanish-Polish bilingual children acquired the Polish and Spanish gender systems? (2) What are the gender assignment strategies within mixed determiner phrases (DPs) used by Spanish-Polish bilingual children? (3) Do the Spanish-Polish bilingual children show a clear preference for one gender assignment strategy over the other(s)?

For the purpose of this study, the Director-Matcher Task (Gullberg et al., 2009) was conducted in two *monolingual modes* and one *mixing mode*. The *monolingual modes* were carried out to investigate to what extent each participant acquired gender system in Polish and Spanish, while the *mixing mode* examined gender assignment within mixed DPs. In the *Polish mode*, the implementation of the adjectives was the easiest way to obtain information about the acquired gender of the noun, since in Polish determiners are not used. Thereby, for the *Spanish mode* - the monolingual DPs were elicited, and for the *Polish mode* - the monolingual NPs were obtained. A total of fifteen Spanish-Polish bilingual children were examined across four cities

in Poland. Additionally, parental and children's questionnaires were used as supplementary research method.

The results of the *monolingual modes* show that simultaneous bilinguals were more accurate in acquiring Polish grammatical gender than Spanish, while the sequential bilinguals performed better in Spanish. In the *mixing mode*, some CS strategies were identifiable. It also revealed that for some of the participants CS felt rather unnatural, thereby they produced fewer mixed DPs. However, given the small sample size and exploratory nature of this pilot study, it was difficult to draw definitive conclusions. Nevertheless, the findings provide a foundation and suggest refining the methodology for future research in exploring bilingualism among Spanish-Polish bilingual children.

Keywords: heritage Spanish; Polish; bilingual children; simultaneous bilinguals; sequential bilinguals; grammatical gender; gender acquisition; code-switching; gender assignment; determiner phrase; noun phrases

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CHAPTER ONE. INTRODUCTION

1.1. INTRODUCTION

Monolingualism can be considered as an exception and multilingualism as a norm, as most of the human language users in the world speak more than one language, which makes them at least bilinguals (Auer & Wei, 2007: 1). This widespread bilingualism is often influenced by many social factors. According to Montrul (2013) many historical and political events, as well as different circumstances may cause situations of bilingualism. The author raises an important issue of massive displacements of populations and immigration processes that take place nowadays (Montrul, 2013). She also suggests that globalization leads to the fact that people worldwide learn foreign languages and live in different countries (Montrul, 2013: 25). Immigrants take their language with them during the process of settling around the world, using it among themselves and their children. Therefore, language mixing becomes a common feature of communication among immigrants. This could be the reason why throughout the last decades we have experienced a sharp rise of scientific interest in phenomena of bilingual speech, and in code-switching (hereafter CS) (Auer, 1998). In the literature, many definitions of CS can be found. One of the most recent definitions of CS is the one proposed by Deuchar (2012): "*codeswitching (CS) is an activity which may be observed in the speech (or writing) of bilinguals who go back and forth between their two languages in the same conversation".*

This pilot study investigates the production of Spanish-Polish simultaneous and sequential bilingual children living in Poland, each of whom has at least one parent from a Latin American country. And the same time, these children are heritage speakers of Spanish residing in Poland. The primary reason for the immigration process of the recruited families was employment, while others met their spouses while traveling around the world and chose to settle down in Poland. Consequently, they opted to send their children to Polish schools and often learned Polish themselves.

From a linguistic standpoint, it is interesting to examine how heritage speakers of Spanish acquire both Polish and Spanish gender systems and how they assign gender when code-switching within mixed[1] nominal constructions.

Therefore, one of the primary objectives of the study is to investigate how Spanish-Polish bilingual children assign gender in mixed determiner phrases (DPs), where the determiner

[1] In this paper, terms 'mix' and 'code-switch' will be used interchangeably.

comes from Spanish, and the noun from Polish. Additionally, the task included two monolingual modes, considering that the acquisition of grammatical gender in these bilinguals may vary between each language. This approach makes it possible to examine whether the bilingual child has already internalised the gender system in each language separately.

It is essential to highlight that Spanish-Polish is an under-researched language pair, particularly concerning children's production. Therefore, the present study should be considered as a pilot study that focuses on collecting preliminary data. Rather than focusing on testing specific hypotheses in depth, this thesis will present and discuss the number of valid and invalid responses obtained. Additionally, the study will investigate other crucial factors, including participant selection, stimuli, and the impact of those stimuli on the participants' responses.

1.2. THESIS OVERVIEW

In terms of structure, this thesis begins by presenting, both the definitions of bilingualism and the clarification of the concept of heritage speakers' language. It then introduces the notions of gender, gender assignment, and gender agreement. This is followed by a discussion of the characteristics of CS phenomenon, in both adult and children's language production. Chapter 2 shifts the focus to the grammatical gender systems in Spanish and Polish, along with the acquisition of gender in both studied languages. In Chapter 3, the research questions and hypotheses are presented, and in Chapter 4, the methodology used for this research is described. Chapter 5 will provide the results and Chapter 6 will present the findings based on the *mixing mode*, where mixed DPs were elicited. These findings will be supplemented by the results obtained from the *monolingual modes*, where monolingual DPs in Spanish and monolingual NPs were obtained. This thesis concludes with a discussion and conclusion, highlighting areas for further research. This will be followed by the list of references and appendices.

1.3. BILINGUALISM

Ethnologue (2009) states there are more than 7,000 languages around the world which makes bilingualism far from being an exceptional phenomenon. It is important to acknowledge that certain events significantly contribute to the growth of bilingualism/multilingualism, such as frequent immigration processes happening today. There are various reasons why speakers of different languages come into contact with one another. Some do so out of their own choosing, while others are forced by circumstances (Bhatia, Ritchie & Wiley, 2013). In this context,

immigrants bring their language into contact with another language spoken in a particular place or country. This raises the question: What does it mean to be bilingual? Hence, as suggested by Bhatia, Ritchie & Wiley (2013: 110) the term 'bilingual' refers to individuals, who obtained the ability to use more than one language. However, as the authors note (2013: 110), bilingualism is a highly more complex social, psychological, and linguistic phenomenon, that needs to be understood from a multidimensional aspect. Due to the comprehensive nature of this concept, the following section will extensively explore the theory of children's bilingualism, as it constitutes the main focus of this research.

1.3.1. BILINGUAL CHILDREN

Approximately one hundred years ago, researchers embarked on investigations into child bilingualism, with the Ronjat's pioneering study in 1913. More recently, Crystal (2003: 69) revealed that "*two-thirds of the world's children grow up in a plurilingual environment*". Nonetheless, the question remains: What exactly is bilingualism in a child? What are its defining characteristics? How does acquiring two languages simultaneously or sequentially differ? And, finally, does this acquisition vary from that of monolinguals? These inquiries lead us to delve deeper into the child bilingualism and its unique complexities.

Thiery (1978: 145) proposes the term "true bilingualism", which as the author claims is fairly common among children but very rare in adults. The linguist distinguishes two factors referring to being 'perfectly bilingual': a) the subject speaks both languages equally well; b) the subject has two mother tongues (1978: 145). Afterwards, Thiery discusses these two conditions, discerning some imperfections in them. As argued later by Pinter (2011: 74), there are three ways to become bilingual: by birth (infant bilingualism), by immigration, or by schooling. Another categorization is presented by Paradis (2007: 15) who distinguishes two types of bilingualism: simultaneous bilingualism (0-3 years) and sequential bilingualism. Thus, children who start acquiring one of their languages after birth can be classified as sequential bilinguals. This means that their second language is the one they start later than their first language (Janssen, 2016: 12). These bilinguals can be also subdivided into the category of early sequential bilinguals (4-7 years), or late sequential bilinguals (8-14 years). And, if children are raised bilingually from birth, they are considered simultaneous bilinguals (2016: 12).

One of the most interesting insights gained from studies on child bilingualism over the past 25 years is perhaps that the simultaneous acquisition of two or more languages can indeed be

qualified as an instance of multiple first language acquisition (Meisel, 2004). The only factors that would not support such a statement, relate to the possibility of significant delays in the rate of acquisition, children's ability to differentiate the linguistic system, and possible deviations from developmental paths observed in monolingual acquisition (2004). Nonetheless, back in the 1970s, researchers already found that children growing up with more than one language eventually succeed in separating their languages, without much effort or specific pedagogical support (2004). Additionally, as found by Meisel (2004) children also code-switch. However, to code-switch, they need to acquire both the grammatical knowledge and the social skills required for adult-like code-switching (2004). Therefore, in the pursuit of understanding child bilingualism, this study aims to investigate whether these children have already acquired, and to what extent, grammatical gender in both languages.

In addition, it is important to note that children's bilingualism is influenced by various factors, including parental input, as well as language status, and language interference. As Janssen (2016) suggests, the quality and quantity of input play a very important role in the successful acquisition in each of the two languages. This implies that the proficiency level of the parents/caretakers influences the development of the child's grammar (Döpke, 1992). Moreover, the sociolinguistic status of each language within a given country can also influence the acquisition process. For example, when a language is the majority language, children will likely obtain more input in that language. And, if the language is a minority language (usually a home language situation), exposure to that language will usually decrease as soon as a child starts attending school or daycare (Ytsma, 1995). According to De Houwer (1999), parental beliefs and attitudes toward the use of the home language also have a large impact on bilingual acquisition. Additionally, language interference may constitute a significant factor in acquiring two languages. As Janssen (2016: 15) points out, when a child acquires two languages, a certain degree of interaction and transfer, both positive and negative, between those languages is to be expected. Positive transfer refers to linguistic features that are realized in the same manner in both languages, whereas negative transfer is expected in the case of language-specific differences between languages (Extra & Verhoeven, 1994).

1.3.2. HERITAGE SPEAKERS

As mentioned earlier, one of the most common language contact situations arises due to immigration processes. This leads to the use of the immigrants' native language in the country where they choose to settle. Consequently, their children become heritage speakers of this language. These children learn one language, the heritage language, at home; and simultaneously or subsequently acquire the majority language. As a result, they become simultaneous or sequential bilinguals.

As widely known, Spanish occurs as one of the most popular examples of the languages that became a heritage language in the United States. In this context, the definition on SHL (Spanish Heritage Language), developed by Valdés (2001: 31), states that a 'heritage speaker' is a person who is raised in a home where a non-English language is spoken, who speaks or at least understands the language, and who is to some degree bilingual in that language and in English. Another definition was proposed in the publication of Beaudrie & Fairclough (2012) where Montrul (2012: 101) states that Spanish heritage speakers are individuals who emigrated in early childhood with their parents […], or children of immigrants from Spanish-speaking countries. Although the parents are either monolingual or dominant in a variety of Spanish, the children grow up in a context where both English and Spanish are spoken.

Within the literature on linguistic characteristics of heritage languages, it is often observed the language used by heritage speakers often exhibits features that evidence contact with the majority language (Silva, 2015: 415). There can also be observed a syntactic modification, as well as other features, for instance: attrition; transfer from the dominant language; and/or 'incomplete acquisition'(2015). Both Silva (2015), as well as several other linguists, as Silva-Corvalán (2003), Polinsky (2006), and Montrul (2008) have studied 'incomplete acquisition' of heritage speakers of different languages. Montrul (2008: 299) asserts that incomplete acquisition occurs primarily in early childhood due to insufficient input to develop the full L1 system. Additionally, the author suggests that a variety of sociolinguistic circumstances and lack of schooling in the heritage language may contribute to this phenomenon.

Given the purpose of the study and the aim to explore the issues raised above, in the following section the nature of gender and gender agreement will be presented in more detail. Subsequently, gender assignment will be discussed, and the focus will shift towards CS definitions.

1.4. THE NATURE OF GRAMMATICAL GENDER

As commonly known, languages can be classified into various categories and language families. They can differ not only in terms of phonology/phonetics, and morphology, but also in terms of grammatical gender, which is a specific form of a noun class system. For instance, in German three grammatical genders are distinguished, while Dutch and French are characterized by a two-way gender system. On the other hand, languages like English lack grammatical gender altogether. Thus, when two languages are in contact and they differ in terms of the number of genders, a linguistic situation arises where a conflict site appears between the grammar of the two languages.

1.4.1. GENDER AGREEMENT

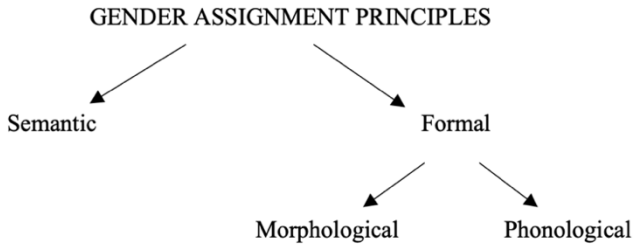
Linguists, among others Lehmann (1982), Barlow (1988), and Corbett (1991) perceived grammatical gender and gender agreement as a linguistic phenomenon. They challenged to define gender agreement almost forty years ago. According to Corbett (1991), grammatical gender categorizes nouns into two or more genders or classes and is part of a native speaker's linguistic competence. The linguist also referred to gender agreement using Steel's definition (1978:610) as follows: "*The term agreement commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another. For example, adjectives may take some formal indication of the number and gender of the noun they modify.*"

It is important to mention here that in some languages, grammatical gender stands in an agreement relation with several parts of speech, including adjectives, numerals, verbs, demonstrative pronouns, adverbs, determiners, and complementizers.

1.4.2. GENDER ASSIGNMENT

Nouns are assigned to different genders (or noun classes) according to two sets of principles: semantic and formal (Corbett, 1991: 7-69). Fialkowska (2011) presents the graph (Figure 1. below) suggesting that any world language which distinguishes gender, will have some assignment system.

Figure 1. Gender Assignment Principles



(Fialkowska, 2011: 19)

The primary rule in the semantic assignment system is the ability to determine the gender of a noun by only knowing its meaning (Fialkowska, 2011). And, as Corbett (1991) suggests, the term 'semantic' refers to the natural gender (or perceived sex) principle (male human beings are assigned masculine, female human beings feminine). Moreover, morphological and phonological assignment systems can be distinguished within formal gender assignment principles. And, as suggested by Fialkowska (2011), these two differ significantly. The morphological assignment system applies to the inflection and derivation of nouns. Whereas, phonological criteria concern languages such as for example Qafar (East-Cushitic), where the position of the accent is an indicator of gender (Corbett, 1991: 51).

1.5. CODE-SWITCHING

Starting from the 1950s up until today, numerous scholars defined the phenomenon of code-switching, resulting in various definitions, capturing different approaches to CS. The essential consensus among these scholars is that CS is a natural, product of bilingual/multilingual language use, and it is not indicative of any lack of the language competence in the bilingual/multilingual speaker. In the following part, several definitions of CS will be introduced and discussed.

1.5.1. DEFINITIONS OF CODE-SWITCHING

In this section, I will focus on the code-switching definitions, starting with one of the earliest definitions which dates back to Weinreich (1953). According to the linguist, code-switching occurs when bilingual speakers switch "from one language to the other according to appropriate changes in speech situations" (Naseh, 1997: 202). Building on this, Poplack later discovered

that CS follows predictable patterns and is governed by linguistic structural constraints (Poplack, 1980: 584-585). It is worth noting that Poplack (1980) distinguished two separate kinds of code-switching: intersentential/interclausal, and intrasentential/intraclausal (examples presented below).

1. Intersentential/interclausal

   Qué pasa? Can't you come over today?
   ['What's happening?']

   (Pfaff, 1979: 316)

2. Intrasentential/intraclausal

   Randy started out *bien chico.* ['very young']

   (Pfaff, 1979: 316)

Subsequently, Romaine (1992:110) suggested that code-switching is "*the use of more than one language, variety or style by a speaker within an utterance or discourse, or between different interlocutors or situations*". Furthermore, seventeen years later Bullock & Toribio (2009) interpreted the same phenomenon as "*a back-and-forth switching between languages in the speech of bilinguals*".

1.5.2. CODE-SWITCHING IN BILINGUAL CHILDREN

Numerous studies have extensively investigated language mixing as code-switching in the speech of bilingual children, primarily focusing on children aged three and older. However, intriguingly, Lanza's (1992) research delving into infant bilingualism showed that code-switching also occurs as early as the age of two.

According to Köppe and Meisel (1995) bilingual code-switching can be characterized as being governed by grammatical as well as pragmatic constraints. Furthermore, Nicoladis and Secco (2000) propose in their study that children code-switch to fill lexical and grammatical gaps, particularly in the weaker language.

Another influential factor in code-switching phenomenon lies in the desire of bilingual children to showcase their preference for the dominant language in the community. This form of switching, linked to self-identity issues, as suggested by Pan (1995), serves as an example of how code-switching can convey deeper aspects of a bilingual speaker's identity.

CHAPTER TWO. LITERATURE REVIEW

2.1. INTRODUCTION

In Chapter 2, I will give an extended explanation of the grammatical gender system of Spanish and Polish. Subsequently, the gender acquisition of bilingual children in each language will be thoroughly explored. This chapter will also examine the strategies identified for gender assignment within mixed nominal constructions. Finally, several studies on parental input and children's perspectives on bilingualism will be presented.

2.2. GRAMMATICAL GENDER

2.2.1 GRAMMATICAL GENDER IN SPANISH

As highlighted by Corbett (1991), grammatical gender categorizes nouns into two or more genders or classes, forming an integral part of a native speaker's linguistic competence. For example, German or Greek have a three-way gender system, and Dutch and French are characterized by a binary gender system. On the other hand, some languages have limited or no grammatical gender, like English. Spanish, one of the languages under study in this thesis, belongs to the second category. In Spanish, nouns are classified into two genders: masculine and feminine. As described by Pérez-Pereira (1991), nouns referring to people and animals generally have both masculine and feminine forms, whereas nouns for inanimate objects have only one form, either masculine or feminine. There is also neuter gender, although it only occurs when adjectives are used nominally, with the neuter article, e.g. *lo bueno* 'the good one', and in pronominal forms, such as e.g. *esto, eso, aquello, ello,* 'this', 'that', 'it' (1991: 571). Masculine nouns tend to end in the /-*o*/, while feminine nouns tend to take the /-*a*/ suffix. Plural nouns also have a masculine and feminine forms, formed by adding suffixes /-s/, /-*es*/, or zero to singulars. It should be also mentioned that Spanish exhibits gender agreement for determiners (*el/los/uno/estos* for masculine; *la/las/una/estas* for feminine gender), as well as also other types of agreement, such as agreement with adjectives. Nonetheless, many adjectives, which end in /-*a*/ can be either masculine or feminine, while adjectives ending in /-*o*/ are almost always masculine.

2.2.2 GRAMMATICAL GENDER IN POLISH

In the previous section, the characteristics of the gender system in Spanish were introduced. Now, the focus will shift to gender in Polish to facilitate a comparison between these two studied languages. Generally, it is acknowledged that Polish language has a three-way gender system. However, as numerous studies have demonstrated, the number of grammatical genders in Polish remains a subject of debate. In his study, Oscar Swan (2015: 83) presented that there can be distinguished from three to nine, or even more genders in Polish. This continuum is conveyed by the designations: gender, subgender, quasi-gender, and 'other issues' (2015: 117). Nevertheless, many linguists, among others Janssen (2016) and Novikow (2017), refer to the classification proposed by Mańczak (1956), which distinguishes five grammatical genders:

a) masculine personal (*męskoosobowy*): e.g. *nauczyciel* 'teacher'
b) masculine animate (*męskozwierzęcy)*: e.g. *pies* 'dog'
c) masculine inanimate (*męskonieżywotny)*: *zeszyt* 'notebook'
d) feminine (*żeński):* e.g. *kobieta* 'woman', *książka* 'book'
e) neuter (*nijaki):* e.g. *okno* 'window', *dziecko* 'child'

(my translation of Nowikow, 2017: 262)

According to Corbett (1991), every noun in Polish has a grammatical gender. It means that every noun is either masculine, feminine, or neuter, considering that for masculine nouns, there are also different declension paradigms for animate and inanimate nouns (Janssen, 2016: 27). In this pilot study, the classification of Polish genders (as presented above) will be utilized.

The assignment of a noun to a particular group is signaled morphologically by means of an inflectional ending (Teslar & Teslar, 1947). These suffixes not only mark gender but also indicate number and case. As a result, it is not possible to look at gender strictly in isolation (Janssen, 2016: 26). For Polish, it is expected about 48,5% of nouns to be masculine. Nouns that are morphologically masculine end in a consonant, which can be either hard (e.g., *rower* 'bike'), or soft (e.g., *gość* 'guest') (2016: 27). Approximately 37,4% of all nouns are feminine. (2016: 27). Feminine nouns can end in /-*a*/ (e.g., *kobieta* 'woman'), or in a soft consonant (e.g., *miłość* 'love'). For neuter noun declension, it is expected about 14% of nouns. Most often neuter nouns end in /-*o*/ (e.g., *drzewo* 'tree'), or in /-*e*/ (e.g. *pole* 'field'). Additionally, there is a small group of neuter nouns ending in /-*u*/, or in /-*mię*/ (e.g., *imię* 'name)'.

Furthermore, as pointed out by Fisiak et al. (1978), in Polish, adjectives, verbs, demonstrative pronouns, and numerals stand in an agreement relation with nouns in a sentence.

When comparing the grammatical systems of the two studied languages, it is important to note that one of the most noticeable differences between Spanish and Polish is the absence of articles in the latter language. For instance, 'the bike', and 'bike' would be both translated as *rower*. However, other parts of speech, such as pronouns, adjectives, and verbs, are informative regarding the grammatical gender of a noun (Maciuszek et al., 2019). For example, the masculine noun *rower* requires the demonstrative pronoun *ten* (*ten rower, '*this bike'), whereas the feminine noun *książka,'*book' requires the demonstrative pronoun *ta* (*ta książka,* 'this book'), and the neuter noun *drzewo* 'tree' requires the neuter version *to* (*to drzewo* 'this tree').

2.3. GENDER ACQUISITION

As noted by Popova (1973), research dedicated to studying a child's acquisition of the grammatical structure of language has often focused on the characteristics of the child's formation of grammatical generalizations of concrete object relations reflected in the grammar. In her study, Popova (1973: 280) presented data demonstrating that orientation to formal features of words appears very early in children – even before mastery of word meanings.

Regarding Janssen (2016), it is challenging to determine when the acquisition of gender in monolinguals is complete. When examining Polish-Dutch and Russian-Dutch gender acquisition among bilingual children, Janssen proposed that gender should be considered as acquired when it is correct in agreement when either a modifier or a past tense verb agrees with the noun (Janssen, 2016: 53).

Within the literature, scholars emphasize that the acquisition of gender in monolinguals can vary significantly, mainly due to differences in linguistic systems. For instance, as described by Janssen (2016), it is hypothesized that monolingual Polish children should in general be quicker and better at sorting out the gender system than Russian monolingual children. This results from the fact that the distinction between all three genders is transparent on the noun ending for Polish, but not for Russian (2016: 63). Therefore, it is estimated that children acquiring Slavic languages acquire gender and case relatively early on (2016: 3), although Slavic languages belong to the group of richer and more differentiated languages.

Another example of early gender acquisition concern Turkish monolingual children. Aksu-Koç and Slobin (1985: 845) found evidence that monolingual Turkish children acquire the basis of gender and case morphology at least by age 2. Interestingly, other studies showed that their

monolingual German peers do not acquire gender and case in German until age 6 (e.g. Dittmar, Abbot-Smith, Lieven & Tomasello, 2008).

As presented in this section, the age at which gender acquisition occurs varies among monolingual children, primarily due to differences in linguistic systems of the languages they are exposed to. In the subsequent sections, the literature on the acquisition of Spanish and Polish monolingual children will be presented. Following that, the focus will shift to exploring gender acquisition in bilingual children.

2.3.1. Acquisition of gender in Spanish

Several studies (e.g. Hernández-Pina, 1984; Pérez-Pereira, 1991) have shown similar results concerning the acquisition of the gender system by Spanish monolingual children. Hernández-Pina (1984) conducted a longitudinal study, suggesting that Spanish children can learn the marking of gender and gender agreement before the age of four. Later, Pérez-Pereira (1991) confirmed this finding, demonstrating that Spanish children acquire the gender system around the age of three. The delayed acquisition of the Spanish gender system (compared to, for instance, Turkish monolingual children) may be attributed to the presence of non-contrasting masculine and feminine nouns that both end in a consonant (Janssen, 2016: 4). Although the distribution of nouns over genders is transparent for most nouns, this group of non-transparent nouns may slow down the acquisition of grammatical gender and gender agreement (Mariscal, 2009).

As mentioned in Section 2.3, the gender system should be considered as acquired when it is correct in agreement (Janssen, 2016: 53). Building on this, and as found in several studies (e.g. Hernández-Pina, 1984; Mariscal, 1996), determiner-noun agreement in Spanish appears to be acquired by the age of three or even earlier.

2.3.2. Acquisition of gender in Polish

The acquisition of the Polish gender system by monolingual children is far from having been studied in detail, as noted by Brehmer & Rothweiler (2012). Nevertheless, there are a few studies that shed light on this topic. For instance, Smoczyńska (1985) presents one of the most comprehensive accounts of the acquisition of the gender system in Polish. Her study demonstrates that Polish children have acquired gender distinctions before the age of two.

Additionally, Olma (2007) and Janssen (2016) have provided data confirming that the distinction between feminine and masculine appears around the age of two. Janssen (2016: 231) also observed that neuter gender is acquired later. Both Smoczyńska (1985) and Janssen (2016) concluded that, in general, grammatical gender is acquired before the age of four. However, it is important to consider Smoczyńska's (1985: 625f) finding that even children at the age of four may have problems applying the correct declensional pattern for feminine nouns ending in a (historically) palatal consonant. According to her observations, children tend to avoid these nouns or treat them as masculine. Thus, despite the conducted studies that prove that generally support the notion that the Polish gender system is acquired before the age of four in monolingual children's production, it is crucial to acknowledge the finding provided by Smoczyńska (1984).

2.3.3. ACQUISITION OF GENDER IN BILINGUAL CHILDREN

According to several researchers (e.g. Idiazabal 1995, Müller 1994, 2000, Möhring 2001), the bilingual acquisition of gender system and gender agreement closely resembles the acquisition in monolinguals. These studies concur that gender is acquired rather early, as in monolingual L1 acquisition. Furthermore, they suggest that bilingual children develop each gender system independently.

To explore the acquisition of gender systems in bilingual children, several studies will be here discussed. Among others, Laskowski (2009) and Ringblom (2014) showed that 2-year-old bilinguals have no idea of gender distinctions. Laskowski (2009) studied gender acquisition in Polish of 5–15-year-old Polish-Swedish bilingual children in Sweden. As a result, Laskowski (2009) reported problems with grammatical gender and gender agreement, especially with the neuter form. He supported the finding by the fact that Swedish has a two-way gender system that does not include neuter (2009: 93-94).

Janssen (2016) conducted a study on gender acquisition in Polish and Russian and referred to relevant literature on the subject. The researcher indicated that the distinction between feminine and masculine genders in monolinguals generally emerges around the age of 2, whereas in bilinguals, it may occur at age 7. In the investigation of Polish-Dutch and Russian-Dutch children's production, Janssen (2016: 231) confirmed these findings. She observed that gender production in monolinguals is correct before the age of 2, and in some bilinguals, gender production is correct by age 4. However, as Janssen (2016: 231) found, in most cases, in

bilingual children's production, gender has not yet been fully acquired by age 6. This would mean that bilingual children at age 7 have not fully acquired the gender agreement system. As suggested by Janssen (2016: 56), referring to Russian-Dutch bilinguals, it seems that gender acquisition is especially challenging for bilinguals that acquire a language with a three-way gender system in combination with a language that does not have a gender distinction or has a more restricted system of genders.

2.4. Gender assignment in Mixed Nominal Constructions

2.4.1. Strategies

As mentioned earlier, the current study will focus on Spanish-Polish children's speech production. To detect CS patterns regarding gender assignment, the main findings on gender assignment strategies within mixed nominal constructions must be discussed.

In one of the best-known studies, i.e. Poplack, Pousada, and Sankoff (1981), the researchers investigated the factors which may contribute to gender assignment. The authors distinguished five possible elements: physiological gender/sex of the (animate) referent, phonological gender, analogical gender, homophony, and suffixal analogy (1981). Another factor discussed in the study refers to the discovery that the final grammatical gender preference would be the propensity of speakers to opt for the default gender of the dominant language (Poplack et al., 1981).

Later, Poplack, Pausada & Sankoff (1982) found that masculine gender is the most frequently used in the everyday speech of Spanish-English bilinguals. Afterwards, numerous researchers (Poplack & Meechan, 1998; Jake, Myers-Scotton & Gross, 2002; Valdés Kroff, 2016) have also reported that the masculine gender is used as a default in CS. This finding constitutes the first strategy, in which the bilinguals use masculine gender when assigning gender in mixed NPs.

The second strategy was proposed by Parafita Couto, Munarriz, Epelde, Deuchar & Oyharcabal (2016) when investigating gender assignment in Spanish-Basque mixed nominal constructions. It was found that the feminine gender would be the default gender in this language pair. The researchers found a phonological strategy because of the phonological property of the Basque determiner (a) suffixed to the Basque nouns (2016: 320). They showed that Basque nouns ending in /-*a*/, mostly trigger the feminine Spanish *la* as a determiner within code-switched noun phrases' constructions.

Furthermore, Liceras, Fernández Fuertes, Perales, Pérez-Tattam & Spradlon (2008) have found that the translation equivalent of the noun will determine the gender of the Spanish determiner in Spanish-English CS. This strategy (called the Translation equivalent strategy or the Analogical strategy) raises the issue of congruence, i.e. whether there is a match between the determiner and the translation equivalent of the noun.

Section 2.3. and 2.4. gave an overview of the previous findings regarding the acquisition of grammatical gender in monolingual and bilingual children's production. This was followed by a presentation of the main strategies used for gender assignment in mixed nominal constructions. These sections lead into the discussion on parental input which will be addressed in Section 2.5. And, finally, Section 2.6., will explain the importance of including children's perspectives in the context of this pilot study.

2.5. RESEARCH ON PARENTAL INPUT

The quality and quantity of input play an important role in the success of the acquisition of each of the two languages. Lanza (2007: 46-47) stated that the family constitutes an important sociolinguistic environment for acquiring language, and that the family should be considered as a 'community of practice', and as a 'social unit' that has its own norms for language use. De Houwer (1999) also noted that parental beliefs and attitudes about language and language learning play an important role in early bilingual development and are intrinsically tied to language use. This would mean that parents may have positive or negative attitudes towards bilingualism in general, or towards specific bilingual strategies, such as code-switching (Lanza, 2007: 52). Moreover, these parents who want their children to be able to speak fluently both languages are more likely to put more effort in raising their child bilingually, than parents who do not value bilingualism (De Houwer, 1999).

Sociocultural factors may also influence language acquisition. If parents consider a minority language as less prestigious, it is more likely that a child will not speak this language fluently. There is also a factor on which parents do not have much influence, but which is worth mentioning here, i.e. the sociolinguistic status of a language. This status plays an important role in bilingual acquisition. If a language is the majority language, there is usually more input in that language. And, if a language is acquired as a minority language (usually a home language situation), exposure to that language will usually decrease as soon as a child starts

attending school or day care (Ytsma, 1995). Of course, this dependence will be more or less accurate depending on the parents' ideologies that they share regarding bilingualism.

2.6. CHILDREN'S OPINION

Janssen (2016: 15) noted that if a child acquires two languages, a certain degree of interaction and transfer, both positive and negative, between those languages is to be expected. For instance, a positive transfer is expected for linguistic features that are realized in the same manner in both languages, whereas a negative transfer is expected in the case of language-specific differences between the languages (Verhoeven & Extra, 1994). This may reflect in a way that a bilingual child will use one language more willingly than the other language. Therefore, to obtain as accurate picture as possible of the sociolinguistic situation among the examined group of participants, it is useful to elicit children's views. One of the well-known methods to elicit children's opinions is the use of questionnaires. Several studies (e.g. Papapavlou, 1999; Land & Oxford, 2003; Nagy, 2009) proved that using a questionnaire is a valuable form to help us understand the child's motivation and positive/negative attitudes to the children's choices regarding the preferred language.

CHAPTER THREE. RESEARCH QUESTIONS AND HYPOTHESES

This chapter presents the research questions and hypotheses of the current pilot study. As this is exploratory research, the aim is not to draw broad generalizations, but rather to observe tendencies and identify directions for future research. The questions and hypotheses outlined below are grounded in the theoretical framework discussed in the previous chapters and are shaped by findings from earlier studies on gender acquisition and CS in bilingual children.

3.1. RESEARCH QUESTIONS

Based on the literature review concerning the acquisition of two gender systems by bilinguals, and taking into consideration previous findings on gender assignment strategies within mixed nominal constructions, the following research questions are formulated:

1. To what extent have the Spanish-Polish bilingual children acquired the Polish and Spanish gender systems?
2. What are the gender assignment strategies within mixed DPs used by Spanish-Polish bilingual children?
3. Do the Spanish-Polish bilingual children show a clear preference for one gender assignment strategy over the other(s)?

3.2. HYPOTHESES

As discussed earlier, several studies (e.g., Janssen, 2016; Laskowski, 2009) show that bilingual children's acquisition of grammatical gender depends heavily on the structure of each language's gender system and the quantity and timing of input. In particular, Janssen (2016) found that gender distinctions emerge later in bilinguals than in monolinguals and that acquisition is more difficult when one of the languages has a more complex or less familiar gender system.

Laskowski (2009) highlighted persistent difficulties with Polish gender, especially the neuter form, among Polish-Swedish bilinguals, suggesting that limited exposure to Polish may delay acquisition. In this study, simultaneous bilinguals are exposed to both languages from birth, and assuming greater input in Polish, thereby stronger acquisition in Polish is expected. For

sequential bilinguals who were exposed to Spanish exclusively in early childhood, better acquisition in Spanish is anticipated due to the earlier and more sustained input. Therefore, referring to the first research question, I hypothesize that simultaneous bilinguals will acquire grammatical gender to a greater extent in Polish than in Spanish, as the input in Polish is likely to be higher. For sequential bilinguals, the opposite is expected: better acquisition of grammatical gender in Spanish than in Polish.

Regarding the second question and building on previous findings concerning gender assignment in CS, I hypothesize that Spanish-Polish bilinguals will apply all three of the previously described strategies. More specifically, I expect to observe:

1. The use of masculine determiners, regardless of the gender of the Spanish translation equivalent (e.g., *el stół* 'table' – Pol: MASC., Spa: mesa – FEM.).
2. The use of analogical strategy, where the determiner is chosen based on the gender of the Spanish translation equivalent (e.g., *la stół* – Pol: MASC., Spa: mesa – FEM.).
3. The use of phonological strategy, where the noun's ending influences the gender assignment (e.g., *la tata* 'father' – Pol: MASC., Spa: padre – MASC., with /-*a*/ triggering the feminine article).

In response to the third research question, I do not expect to find a clear and consistent preference for any single gender assignment strategy. This expectation is based on the absence of prior studies on this language pair that point to the preferred strategy. Additionally, given the exploratory nature of this pilot study, it is unlikely that definite conclusions can be drawn. Nevertheless, any tendencies that emerge will serve as valuable groundwork for more extensive future research.

CHAPTER FOUR. METHODOLOGY

4.1. INTRODUCTION

This chapter provides an overview of the methods used to answer my research questions. It begins with a section on participants recruitment and profiles (Section 4.2.). Section 4.3. describes the research tools, including the Map Task and the questionnaires. Finally, Section 4.4 discusses the data collection procedures.

4.2. PARTICIPANTS

The bilingual Spanish-Polish children were recruited through the *friend-of-a-friend technique,* which is one of the most common methods for gaining access in ethnographic research (Podesva & Sharma, 2014: 201), as well as through different social media platforms. However, social media proved to be the most effective recruitment tool. To find bilingual children, whose partent(s) originate(s) from a Latin American country, I posted information about the upcoming study multiple times on multiple social media platforms. In total, fifteen Spanish-Polish bilingual children were recruited.

To initiate the study, families were contacted via e-mail. During the recruitment process, a document was created which contained both the number of participants, as well as their personal data. To ensure anonymity, unique codes were assigned to personal data. The participants were recruited in four cities in Poland: Lodz, Warsaw, Poznan, and Cracow. The first three bilingual families were recruited in Warsaw, of which nine children participated. In Lodz, one family with two children participated in the study. In both Poznan and Cracow, one family with two children were recruited.

The age range of participants spanned from 6 to 17 years old. Four children were born in Poland, while the remaining eleven were born in other countries, such as Costa Rica, Colombia, and the USA.

During the recruitment process, participants were categorized into three profiles based on their age and language acquisition patterns. The first group consists of six simultaneous bilinguals who were raised bilingually from birth (age: 6-13) The second group comprises sequential bilinguals, who began acquiring their first language, Spanish, from birth and started learning their second language, Polish, at the age of 7 or later. Since the age of acquisition varies among

these participants, they were further divided into early sequential bilinguals (6 participants, age: 7-14) and late sequential bilinguals (3 participants, age: 13-17).

4.3. TOOLS

As Pinter (2011: 218) suggests, in studies involving children as participants "*it is important to use a variety of different tools aiming to collect different sets of data from the same group of children*". Accordingly, this pilot study employed both an elicitation task and questionnaires for parents and children.

4.3.1. MAP TASK

For the purpose of the study, the elicitation Director-Matcher Task (Gullberg et al., 2009) was used. It is designed to elicited nominal constructions, and as Gullberg (2009: 37) suggests: the task is considered to be completely 'unconstrained'. In this way, the task is also useful when eliciting (naturalistic) code-switched nominal constructions. The task involved the interaction between the matcher, who must locate certain images/objects following the instructions of the other – the director.

When designing the stimuli, a similar number of nouns in Polish and their translation equivalents in Spanish were used. For instance, there were found the same amount of masculine-gendered Polish nouns were also masculine-gendered in Spanish translation equivalents. Resulting in sequence: masculine-gendered Polish nouns with Spanish feminine translation equivalents; feminine-gendered Polish nouns with Spanish masculine translation equivalents; feminine-gendered Polish nouns with Spanish feminine translation equivalents; neuter-gendered Polish nouns with Spanish masculine translation equivalents; and neuter-gendered Polish nouns with Spanish feminine translation equivalents.

The task was divided into three modes: the *mixing mode*; and the two *monolingual modes*: the Spanish mode, and the Polish mode. The monolingual modes were developed to obtain information on whether the bilingual children already acquired the gender systems in Spanish and Polish, and to what extent.

The images of the objects needed for the study were found on several websites with open-access stimuli. These images were then edited and adapted for the purpose of the study. Additionally, each name of the object was placed under each picture. This adjustment aimed

to ensure consistency in naming, as many Polish nouns have multiple synonyms. It also served to support children who may have forgotten a noun in a given language, making the task more accessible and less cognitively demanding.

The board on which the children were supposed to place the pictures, was designed in a digital version and then printed in a large format so that every image was readable for the participants of the study (see Appendix 1). When designing the study, the most important aspect was to create a playful, not complicated game for children. The instructions were prepared and later recorded in Spanish and Polish versions so that the child could decide which language of instructions he/she prefers.

4.3.2. QUESTIONNAIRES

Furthermore, the two types of questionnaires were designed to provide more background information on the grammatical gender acquisition process of the Spanish-Polish bilingual children. The first type of questionnaire contained questions on the parents' proficiency in both Spanish and Polish, as well as questions related to their communication with a child. It also included questions on the parents' language attitude towards each language (see Appendix 2). The second type of questionnaire was intended for the children. Therefore, the questions and the answers were simplified (see Appendix 3). All the prepared questionnaires were translated into English, Spanish and Polish; and subdivided according to the number of children in each family. Both parents and children had the opportunity to select the language of the questionnaire which also indicated their language preference.

4.4. DATA COLLECTION

4.4.1. PROCEDURE

Despite the pre-arranged data collection procedure, the study conducted with each family differed. This was conditioned by many factors, such as the age of the children, as well as the time of the appointment with the families. As it turned out, the task caused more difficulties for younger participants. Therefore, in such a situation the time devoted to the given instructions was longer. It turned out that the timing of the appointments with the children introduced another issue. When sessions were scheduled in the afternoon, after school activities, the children were often tired, making it difficult for them to concentrate on the task.

Interestingly, a common factor appeared, i.e. the children's willingness and curiosity regarding the task. To conduct the study, rooms in the public libraries were initially booked in each case. However, during the process of scheduling appointments, it became clear that the homes of recruited families were a more convenient option for the parents. In my view, this change had a positive impact on the course of the study, as the children felt more comfortable and secure in their familiar home environment.

First, the parents of children participating in the study were asked to read the information sheet and sign the consent form. Once their consent was obtained, the task was carried out. In the Director-Matcher Task, only children took part. This setup helped reduce feelings of self-consciousness, as the researcher was not directly involved. In fact, the participants were happy that they could do the task together with their brothers and/or sisters. This approach allowed me to elicit relatively natural and spontaneous conversations, while also reducing the likelihood of priming effects, which can be defined as the facilitation of a response to a target stimulus (Kinoshota & Lupker, 2004).

Later, the children could select the language of the instructions and ask additional questions if any part of the instructions was unclear. Nonetheless, in most cases, thanks to the example given in the instructions, the children knew that their goal is to assign a Spanish determiner to a Polish noun, which additionally was presented in the written form below the picture. At this point, the recording of the study began. After listening to the recording with the instructions, the children could begin the *mixing mode*. Afterwards, when all the pictures were arranged in the directions of the arrows on the board, the participants had to describe all the pictures again: first, in Spanish, with determiners (the *Spanish mode*), later, in Polish, with adjectives (the *Polish mode*). In the case of the *Polish mode,* the implementation of the adjectives was the easiest way to obtain information about the acquired gender of the noun, since in Polish determiners are not used. Thereby, for the *Spanish mode* - the monolingual DPs, and for the *Polish mode* - the monolingual NPs, were elicited.

After the Map Task was conducted in three modes, the children answered the questionnaires which were read to them by the researcher. During the study, a parent was always present in the room. In most cases, the parent filled out the questionnaire while the child was completing the task.

4.5. DATA EXTRACTION

In the study, all the map tasks performed by participants were recorded. The average length of the recordings amounts from approximately 10 to 12 minutes. To analyze the obtained data, each of the recordings were transcribed in Excel.

4.5.1. DATA EXTRACTION - MONOLINGUAL MODES

The transcription of the *monolingual modes* was carried out to investigate to what extent each participant acquired gender system in Polish and Spanish, and whether there is a dominant language indication. It is important to note that for the two *monolingual modes*, two different types of the nominal constructions were elicited. For the *Spanish mode* - the monolingual DPs, and for the *Polish mode* - the monolingual NPs. For the *Polish mode*, responses were divided into two categories: 'correct' and 'incorrect'. And, for the *Spanish mode*, responses were divided into three categories: 'correct', 'incorrect', and 'without a determiner'. This categorization facilitated to observe to what extent a participant acquired the gender system in each language. Additionally, the data was analyzed by dividing the participants into groups, i.e. simultaneous bilinguals, early sequential bilinguals, and late sequential bilinguals. Results obtained from these *monolingual modes* constitute supplementary data for the *mixing mode*, which is described in the following section. Together, these findings offer valuable insight and allow for a more in-depth examination of each case within the study.

4.5.2. DATA EXTRACTION - MIXING MODE

A separate Excel sheet was created for the analysis of the *mixing mode*. Table 1 presented below illustrates a fragment of the sheet. The first, second and fifth column consist of English, Polish, and Spanish translation equivalents. Next to the translation equivalents, their grammatical gender in Polish and Spanish, as well as the final phoneme for each of the stimuli, were presented. Subsequently, for each stimulus, the Spanish determiners produced by participants in mixed nominal constructions were transcribed. To analyze the data, for each participant, the number of valid responses, the number of answers where no determiner was assigned, and the number of 'other' responses, have been counted. Considering this research as a pilot study, I will focus on the 'valid' and 'invalid' responses that were obtained. The term 'valid response' refers to the case where the participant assigned a Spanish masculine or a feminine determiner to a Polish noun. In the cases where participants produced other responses

than '*el*' or '*la*', e.g. '*lo*', or they did not produce any determiner within mixed DPs are considered as 'invalid response'. This will provide an indication of the extent to which the pilot study was successful in generating valid responses. Furthermore, it will allow for a clearer interpretation of the results in relation to the CS strategies used by the participants.

Table 1. Mixing Mode Results - Fragment from the Data Analysis Excel Sheet

STIMULI							ALL PARTICIPANTS													
	POLISH			SPANISH			DETERMINERS in SPA													
ENGLISH	POL N equivalent	Gender POL	Final Phoneme POL	SPA N equivalent	Gender SPA	Final Phoneme SPA	P1a	P1b	P2a	P2b	P3a	P3b	P3c	P3d	P3e	P4a	P4b	P5a	P5b	P6a	P6b
photo	zdjęcie	NEUT	e	foto	FEM	o	lo	el	el	el	x	x	x	x	x	el	el	x	la	el	el
pigeon	gołąb	MASC	b	paloma	FEM	a	la	el	el	el	x	x	x	x	x	el	el	x	el	el	el
knife	nóż	MASC	ż	cuchillo	MASC	o	el	el	el	el	x	x	x	x	x	el	el	x	x	el	la
tree	drzewo	NEUT	o	árbol	MASC	l	el	el	x	x	x	x	x	x	x	el	el	x	el	el	la

CHAPTER FIVE. RESULTS

In this section, I will present the results obtained from both the *monolingual modes* and the *mixing mode*. First, I will explain the results acquired from the two *monolingual modes*, dividing this section into the results of simultaneous and sequential bilinguals. Following that, I will proceed to the results of the *mixing mode*. This part will address the question of how many valid and invalid responses were received in the pilot study, examining the results both in the individual context (per participant), and by analyzing the number of valid responses per stimulus.

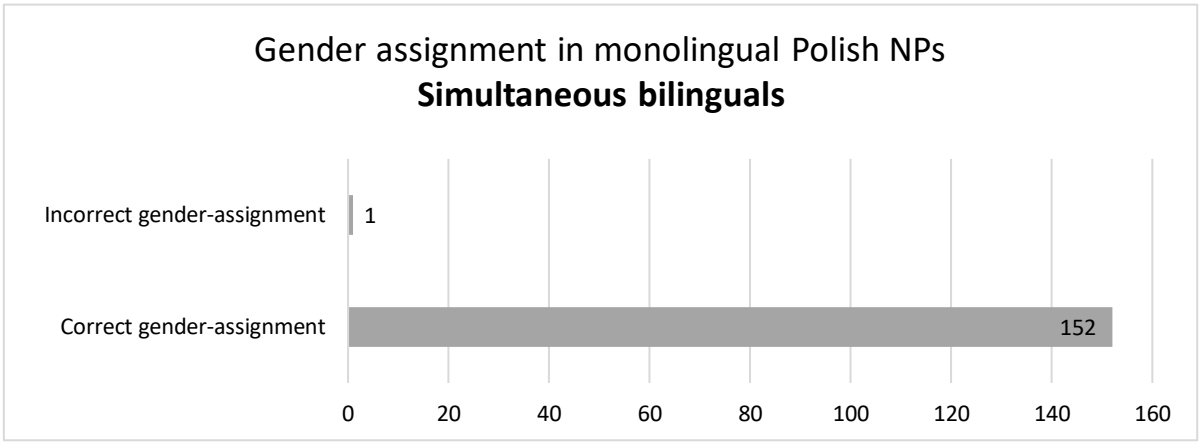
5.1. MONOLINGUAL MODES

5.1.1. SIMULTANEOUS BILINGUALS

Polish mode

The monolingual test, designed to examine closely how the six simultaneous bilinguals acquired the gender system in Polish, revealed that four of the participants performed the test correctly almost in 100% (P1a (age 12) – 100%, P2a (age 13) – 100%, P2b (age 8)– 100%, P6a (age 9) – 96,5%). Participant P6b (age 6) also showed a good knowledge of the Polish gender system, correctly assigning gender in 22 out of 29 cases. In the remaining responses, the child did not make any mistake but also did not assign a gender to the noun. While observing a high percentage of correct answers among most participants, I encountered one exception with participant P5a (age 7), who named and correctly assigned gender in only 15 cases (51.7%). For the remaining nouns in the task, the child did not provide any response. As a result, out of all the Polish noun phrases produced, the percentage of responses where the gender agreement between the noun and the adjective was correct is 99.3%, as also shown in the Figure 2 below.

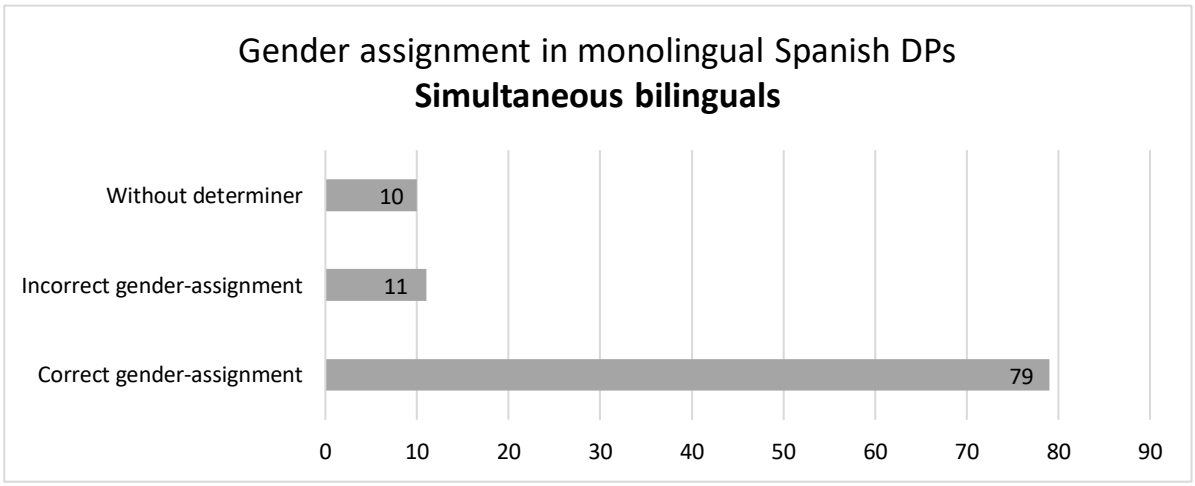
Figure 2. Monolingual Polish mode – Simultaneous bilinguals



Spanish mode

The monolingual Spanish test for this group of participants indicated that only two participants correctly assigned gender in more than 79% of cases (P1a (age 12) – 86%, P2a (age 13) – 79,3%). Another two participants, P2b (age 8), P6a (age 9), correctly named the pictures and assigned them the correct gender in 14 cases, which gives 48% of the total responses. Participant P6b (age 6) assigned gender correctly only in 3 cases, incorrectly in 4 cases, and did not respond in the remaining 22 cases. Participant P5a (age 7) did not name the pictures in 22 cases, and in only 7 cases he/she was able to name the stimuli in Spanish, without using any determiner. This implies that for this participant, there are no responses that might be qualified as 'correct'. Consequently, the bilinguals produced in total 100 Spanish DPs, in which the gender was correctly assigned in 79% of cases (see Figure 3 below).

Figure 3. Monolingual Spanish mode – Simultaneous bilinguals

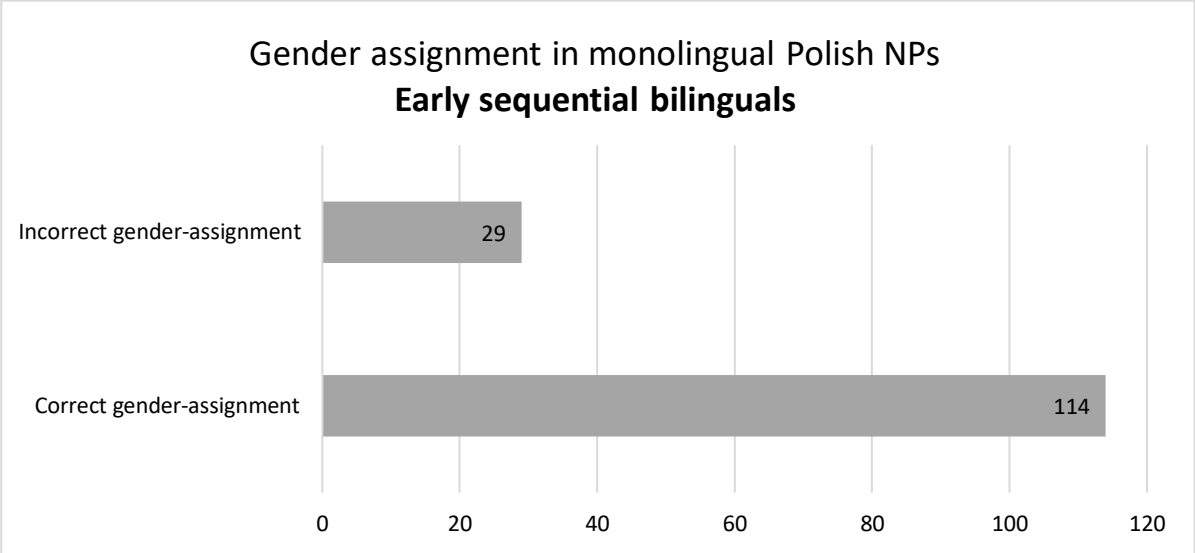


5.1.2. EARLY SEQUENTIAL BILINGUALS

Polish mode

The monolingual Polish mode showed that two out of six participants correctly assigned gender in more than 70% of cases (P4b (age 9) – 72,4%, P5b (age 10) – 89,6%). Two other participants, P1b (age 14), P4a (age 12), performed the test correctly with 100% accuracy. Furthermore, the lowest percentage of correct answers in this test were obtained by children P3b (age 7) - 62%, and P3d (age 9) - 41,3%. In total, the six early sequential bilinguals produced 143 Polish NPs, in which the gender was correctly assigned in 79,72% or 114 cases.

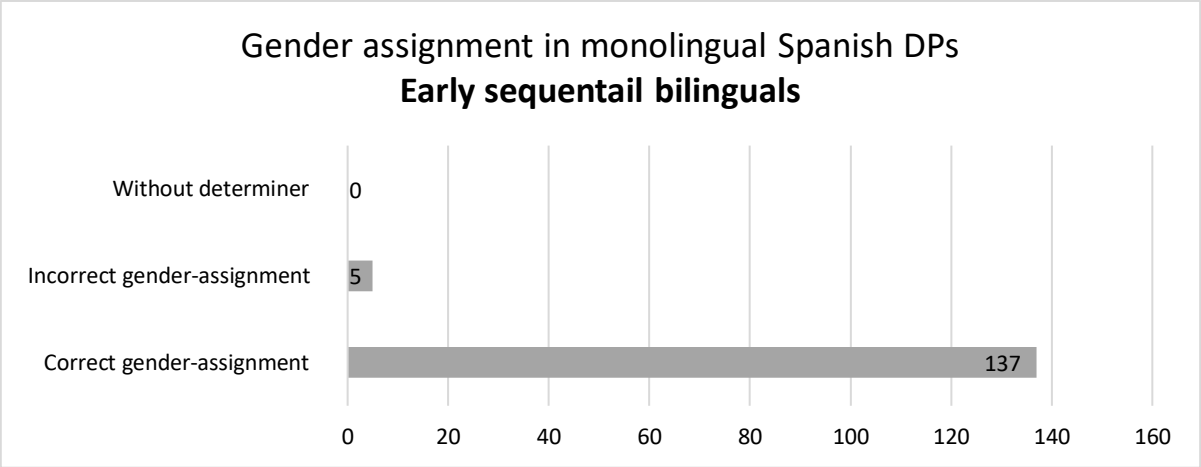
Figure 4. Monolingual Polish mode – Early sequential bilinguals



Spanish mode

The participants who obtained the lowest percentage of correct answers in the monolingual mode of Polish, P3b (age 7), P3d (age 9), showed the highest number of correctly assigned gender to Spanish nouns in the monolingual test (100%). Similarly, participant P1b (age 14) demonstrated a high number of correct responses. Participant P4a (age 12) assigned gender correctly in Spanish in 22 cases (75,8%), while participants P4b (age 9) produced 15 (51,7%) and P5b (age 10) only 13 cases (44,8%) of the DPs where gender was assigned correctly. The results of these two participants also show a high number of cases where no response was given. As a result, we can observe that these six early sequential bilinguals produced a total of 142 Spanish DPs, in which the gender was correctly assigned in 96,4% or 137 cases.

Figure 5. Monolingual Spanish mode – Early sequential bilinguals

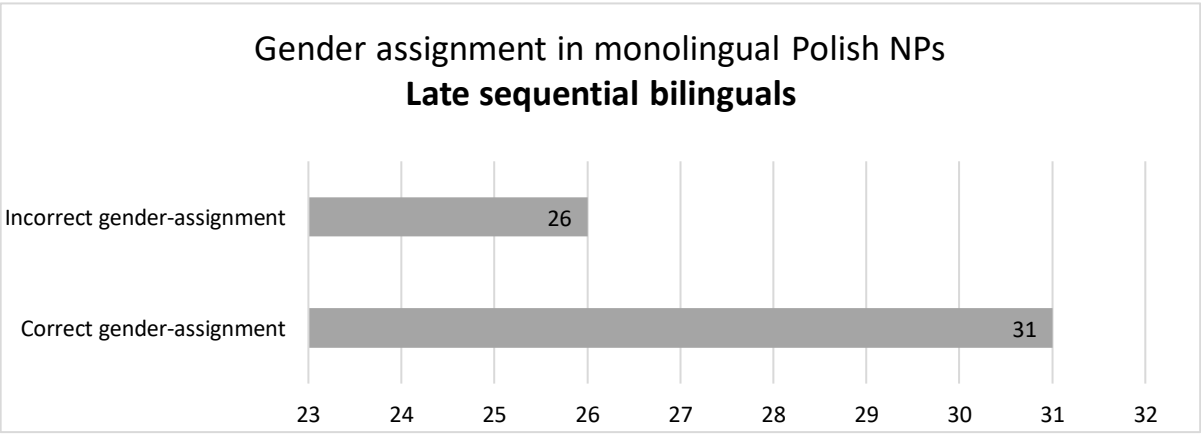


5.1.3. LATE SEQUENTIAL BILINGUALS

Polish mode

The three late sequential bilinguals who participated in the study demonstrated partial acquisition of the Polish gender system. Each participant in this group did not exceed 55% of correct answers. Specifically, participant P3a (age 15) assigned gender in Polish in 12 cases (41%), in 11 cases he/she assigned it incorrectly, and in 6 cases no response was given. Participant P3c (age 13) assigned gender to Polish nouns in 15 cases (51%), in 12 cases, the child assigned the gender incorrectly, and in one case no response was produced. The last participant of this group, P3e (age 17), produced 15 correct responses and incorrectly assigned gender in 14 cases. In total, 57 Polish NPs were produced, in which the gender of an adjective was correctly assigned to a noun only in 31 cases (54,3%).

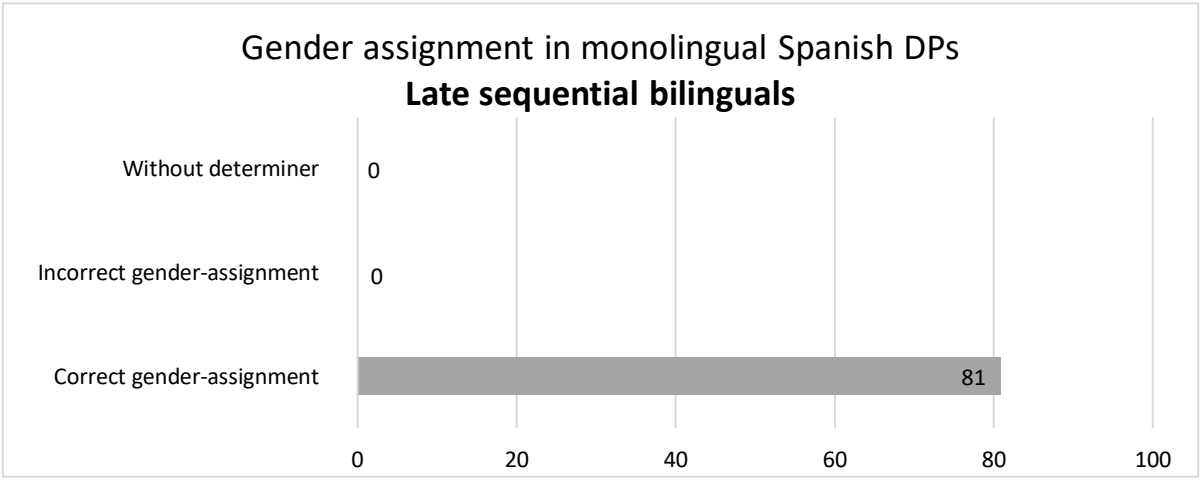
Figure 6. Monolingual Polish mode – Late sequential bilinguals



Spanish mode

The same participants demonstrated a good understanding of the gender system in Spanish. In this monolingual test, the participants assigned gender correctly as follows: P3a (age 15) – 28 cases (96,5%), P3c (age 13) – 24 cases (82,7%), and P3e (age 17) – 29 cases (100%). For participants P3a and P3c, gender was not incorrectly assigned in any other responses; instead, the participants either did not name or skipped it altogether. Consequently, we obtained a total of 81 Spanish DPs, in which the gender was correctly assigned in all cases.

Figure 7. Monolingual Spanish mode – Late sequential bilinguals



The results presented above indicate that simultaneous bilinguals assimilated grammatical gender in Polish better than in Spanish. For the early and the late sequential bilinguals who participated in the study, it can be observed that they assimilated the grammatical gender in Spanish better than in Polish. However, for early sequential bilinguals, the results of the *Polish mode* are only slightly lower than those of the monolingual *Spanish mode*, whereas for the late sequential bilinguals, the difference between the percentage of correct answers between the modes is rather significant.

Additionally, the data show that simultaneous bilinguals, despite being the same number as early sequential bilinguals (6 participants each), produced fewer total DPs in Spanish (100) compared to early sequential bilinguals (142), while producing significantly more NPs in Polish (153 vs. 143). In contrast, the late sequential bilinguals, although fewer in number (3 participants), produced a comparable number of DPs in Spanish (81) but far fewer Polish NPs (64), with a notable drop in accuracy. This suggests that while simultaneous bilinguals are more

balanced in both languages, early and late sequential bilinguals rely more heavily on Spanish, particularly in DP production.

Table 2. Monolingual Modes Results

Group of bilinguals	**Monolingual Polish Mode**			**Monolingual Spanish Mode**		
	Noun phrases with **correct** gender-assignment	Noun phrases with **incorrect** gender-assignment	No response given	Determiner phrases with **correct** gender-assignment	Determiner phrases with **incorrect** gender-assignment	Determiner phrases produced **without** determiner
Simultaneous bilinguals (6 participants)	152	1	0	79	11	10
Early sequential bilinguals (6 participants)	114	29	0	137	5	0
Late sequential bilinguals (3 participants)	31	26	7	81	0	0

5.2. MIXING MODE

5.2.1. SIMULTANEOUS BILINGUALS

The results of the *mixing mode* showed that five out of six simultaneous bilinguals produced a significant number of Spanish-Polish DPs (e.g. '*el kwiat*' or '*la kwiat'*), which are interpreted as valid responses. In the following paragraph, I will present the results i.e. the number of valid responses per participant, considering that each of the participants should produce a total of 29 mixed DPs within the Director-Matcher Task.

Participant P1a (age 12) produced a total of 26 valid responses, meaning that he/she assigned determiner '*el*' or '*la*' to Pol nouns in 89,6% of the total responses. The remaining 10,4% consisted of 3 responses where the participant assigned '*lo*' to Polish nouns, which was classified as an invalid response. In case of the participants P2a (age 13) and P2b (age 8), they did not exceed 50% in their valid responses. Participant P2a produced a total of 14 valid responses, which gives us 48,2%. Participant P2b produced 11 valid responses (37,9%). The rest of the responses classified as invalid were instances where no determiner was assigned to Polish nouns. Participants P6a (age 9) and P6b (age 6) similarly produced 28 (96,5%) and 27

(93,1%) of the valid responses. The other 3 cases consisted of the responses where no determiners were assigned. The last participant, P5a (age 7), from the simultaneous group of bilinguals, produced only 1 mixed DP. For the remaining 28 cases, no determiner was assigned.

In this group of bilinguals, it can be observed that three participants (P1a, P6a, P6b) showed a great number of valid responses, while for the two participants - P2a, P2b, it seems relatively unnatural to assign Spanish determiner to a Polish noun since they did not exceed 50% in their valid responses. An exceptionally low percentage of valid responses was also shown by the participant P5a, who produced only one mixed DP. This case indicates that there might be instances that differ significantly from the results shown by other participants in the same group. Given how this case varies from other cases in this group of bilinguals, it is necessary to refer to monolingual tests that the participant completed, and the questionnaire that the parent filled in. The results of monolingual tests of this participant indicate that the child did not acquire the Spanish gender system, and the Polish gender system was acquired only partially (see Section 5.1.1. where the results of monolingual tests are discussed in more detail). Referring to the questionnaire that was collected, English as a language that is daily used at home in this family might constitute a relevant factor for not acquiring Polish and Spanish gender systems to a high degree. Additionally, age and other linguistic factors that were not investigated within this study may have contributed to the obtained results.

5.2.2. EARLY SEQUENTIAL BILINGUALS

As mentioned above, six participants in this study were classified as early sequential bilinguals (P1b, P3b, P3d, P4a, P4b, P5b). Three of these participants produced a high number of valid responses in the task (P1b (age 12) - 29 cases or 100%; P4a (age 12) - 23 cases or 79,3%; P4b (age 9) - 26 cases or 89,6%). Participant P5b (age 10) assigned Spanish gender to the Polish nouns in 15 cases, which gives 51,7% of total valid responses, while another two participants produced significantly fewer valid responses, i.e. P3b (age 7) – 2 valid responses (6,8%), and P3d (age 9) – 6 valid responses (20%).

The results of this group of bilinguals indicate that producing Spanish-Polish DPs was rather natural for three out of six of the participants, considering the very high number of valid responses. On the contrary, for the participants P5b, P3b, and P3d. The reason why the participant P5b produced a significantly smaller number of mixed DPs may be that English is used equally as Spanish by this family, which may delay the acquisition of the gender system

in Spanish. This is also confirmed by the results of the *Spanish mode*, which indicates only partial acquisition of the Spanish gender system (see Section 5.1.2.). In the case of the participants P3b, P3d, even though they were classified as early sequential bilinguals, their linguistic background is different from other bilinguals' profiles within this group. This may be explained by their dominant language, Spanish, since both their parents are native speakers of Spanish. Moreover, the children had moved to Poland three years before the study was conducted, therefore their exposure to Polish is much shorter than for other early sequential bilinguals of the study.

5.2.3. LATE SEQUENTIAL BILINGUALS

Among the recruited participants, three of them (P3a, P3c, P3e) were classified as late sequential bilinguals. In the conducted study, the participants P3c (age 17) and P3e (age 15) did not produce any Spanish-Polish DPs, while the participant P3a (age 15) produced only 4 Spanish-Polish DPs, which is 13,7% of the total responses. These results indicate that for these children, it was highly unnatural to mix Spanish and Polish within determiner phrases. A possible explanation for this outcome would be the same as presented earlier for participants P3b, P3d. Their linguistic background, exposure to Spanish and limited contact with Polish are very similar as these participants are siblings. The only significant difference would be the age of the children. The low number of valid responses in the *mixing mode*, as well as the high amount of 'incorrect' or 'no response' cases within the monolingual *Polish mode*, only confirms that these participants did not acquire the Polish gender system completely (yet). This also explains why mixing between the languages for these children was so problematic and resulted in almost no valid responses.

5.2.4. RESULTS PER STIMULUS

In this section, the results of the *mixing mode* will be presented in terms of how many valid responses were obtained per stimulus by the participants. Table 2, presented below, displays Excel sheet containing the results.

Table 3. Mixing Mode Results - Full Data Analysis Excel Sheet

STIMULI							ALL PARTICIPANTS													
	POLISH			SPANISH			DETERMINERS in SPA													
ENGLISH	POL N equivalent	Gender POL	Final Phoneme POL	SPA N equivalent	Gender SPA	Final Phoneme SPA	P1a	P1b	P2a	P2b	P3a	P3b	P3c	P3d	P3e	P4a	P4b	P5a	P5b	P6a	P6b
photo	zdjęcie	NEUT	e	foto	FEM	o	lo	el	el	el	x	x	x	x	x	el	el	x	la	el	el
pigeon	gołąb	MASC	b	paloma	FEM	a	la	el	el	el	x	x	x	x	x	el	el	x	el	el	el
knife	nóż	MASC	ż	cuchillo	MASC	o	el	el	el	el	x	x	x	x	x	el	el	x	x	el	la
tree	drzewo	NEUT	o	árbol	MASC	l	el	el	x	x	x	x	x	x	x	el	el	x	el	el	la
father	tata	MASC	a	papa	MASC	a	el	el	x	x	x	x	x	x	x	el	el	x	el	el	la
lake	jezioro	NEUT	o	lago	MASC	o	la	el	x	x	x	x	x	x	x	el	el	x	x	el	el
window	okno	NEUT	o	ventana	FEM	a	el	el	el	la	x	x	x	el	x	el	el	x	x	la	el
driver	kierowca	MASC	a	conductor	MASC	r	el	el	x	x	x	x	x	x	x	x	x	x	x	el	la
apple	jabłko	NEUT	o	manzana	FEM	a	la	el	el	x	x	x	x	x	x	el	el	x	x	el	la
sun	słońce	NEUT	e	sol	MASC	l	la	el	el	x	x	x	x	x	x	el	el	x	x	el	la
shoe	but	MASC	t	zapato	MASC	o	la	el	x	el	x	x	x	x	x	el	el	x	x	el	la
heart	serce	NEUT	e	corazón	MASC	n	la	el	x	x	x	x	x	x	x	el	el	x	x	el	la
flower	kwiat	MASC	t	flor	FEM	r	la	el	x	el	el	x	x	x	x	la	el	x	x	el	la
moon	księżyc	MASC	c	luna	FEM	a	el	el	x	la	x	x	x	x	x	el	el	x	la	el	la
referee	sędzia	MASC	a	arbitro	MASC	o	el	el	x	x	la	x	x	x	x	el	el	x	la	la	x
egg	jajko	NEUT	o	huevo	MASC	o	la	el	x	x	x	x	x	la	x	el	el	x	x	el	la
bed	łóżko	NEUT	o	cama	FEM	a	lo	el	la	x	el	x	x	x	x	x	x	x	la	el	la
wheat	zboże	NEUT	e	trigo	MASC	o	lo	el	el	x	x	la	x	x	x	x	x	x	x	la	la
pig	świnia	FEM	a	cerdo	MASC	o	la	el	x	x	x	x	x	el	x	la	la	x	el	la	la
bone	kość	FEM	w	hueso	MASC	o	la	la	x	x	x	x	x	x	x	la	el	x	x	la	el
blood	krew	FEM	sz	sangre	FEM	e	la	la	la	x	x	x	x	x	x	x	el	x	la	la	el
mouse	mysz	FEM	a	ratón	MASC	n	la	el	x	x	x	x	x	la	x	la	la	x	el	x	la
cow	krowa	FEM	ć	vaca	FEM	a	la	el	la	la	x	x	x	x	x	la	el	x	x	la	la
monkey	małpa	FEM	a	mono	MASC	o	la	la	la	x	x	x	x	x	x	la	el	x	la	el	la
eyebrow	brew	FEM	w	ceja	FEM	a	la	la	la	la	x	x	x	x	x	la	el	x	x	la	x
book	książka	FEM	a	libro	MASC	o	la	la	x	x	x	el	x	x	x	la	la	x	la	la	la
shirt	koszula	FEM	a	camisa	FEM	a	la	el	x	la	x	x	x	la	x	la	la	x	la	la	la
star	gwiazda	FEM	a	estrella	FEM	a	la	la	el	la	la	x	x	x	x	x	la	x	la	la	la
mouth	usta	MASC	a	boca	FEM	a	la	la	la	x	x	x	x	la	x	x	la	la	la	la	la

To discuss the DPs (where the determiners come from Spanish and the nouns come from Polish) obtained in the *mixing* mode, I have divided them as follows:

1. Stimuli which in Polish are masculine gendered and end in a consonant
2. Stimuli which in Polish are masculine gendered and end in a vowel
3. Stimuli which in Polish are feminine gendered and end in a consonant
4. Stimuli which in Polish are feminine gendered and end in a vowel
5. Stimuli which in Polish are neuter gendered

1. Stimuli which in **Polish** are **masculine gendered** and **end in a consonant**

For the noun *gołąb* 'pigeon' (Pol: MASC., Spa: *paloma* – FEM.), 9 valid responses were produced out of 15 cases. Participants assigned determiner '*el*' in 8 cases and determiner '*la'* only in 1 case. For the noun *kwiat* 'flower' (Pol: MASC., Spa: *flor* – FEM.), eight participants produced valid responses, with the determiner '*el*' assigned in 5 cases, and the determiner '*la*' in 3 cases. In the case of the noun *księżyc* 'moon' (Pol: MASC., Spa: *luna* – FEM.), valid responses were produced in 8 cases, with masculine gender assigned in a total of 5 cases.

For the noun *nóż* ‘knife’ (Pol: MASC., Spa: *cuchillo* – MASC.), valid responses were produced in 8 cases, with masculine gender in Spanish assigned in 7 cases. In mixed DPs with the noun *but* ‘shoe’ (Pol: MASC., Spa: *zapato* – MASC.), valid responses were produced in 7 cases, in which masculine gender was assigned in 5 cases.

2. Stimuli which in **Polish** are **masculine gendered** and **end in a vowel**

For the noun *tata* ‘father’ (Pol: MASC., Spa: *papa* – MASC.), participants produced 7 valid responses, with masculine gender indicated in six of them. In the case of the noun *kierowca* ‘driver’ (Pol: MASC., Spa: *conductor* – MASC.), only 4 valid responses were obtained. Masculine gender was assigned in 3 cases, while feminine gender was assigned only in 1 case. For the noun *sędzia* ‘referee’ (Pol: MASC., Spa: *arbitro* – MASC.), seven participants produced valid responses, using the determiner ‘*el*’ in 4 cases and the determiner ‘*la*’ in 3 cases.

For the noun *usta* ‘mouth’ (Pol: MASC., Spa: *boca* – FEM.), valid responses were obtained in 9 cases, with the feminine gender assigned in each valid response.

3. Stimuli which in **Polish** are **feminine gendered** and **end in a consonant**

For the noun *krew* ‘blood’ (Pol: FEM., Spa: *sangre* – FEM.), participants provided a total of 7 cases in which determiners were assigned to the nouns. In 5 out of these responses, the feminine gender was used. In the case of the noun *brew* ‘eyebrow’ (Pol: FEM., Spa: *ceja* – FEM.) valid responses were obtained in 7 cases, among which only once masculine gender was assigned. In the rest of the cases, the feminine gender was assigned by the participants.

In total, for the noun *kość* ‘bone’ (Pol: FEM., Spa: *hueso* – MASC.,), gender was assigned in 6 cases, with the determiner ‘*la’* used in 4 cases. As for the noun *mysz* ‘mouse’ (Pol: FEM., Spa: *ratón* – MASC.), determiners were assigned to the nouns in 7 cases. The feminine gender was assigned in 5 of these responses.

4. Stimuli which in **Polish** are **feminine gendered** and **end in a vowel**

For the noun *krowa* ‘cow’ (Pol: FEM., Spa: *vaca* – FEM.), eight of the participants assigned a gender, resulting in total of 8 valid responses. Within these responses, feminine gender was assigned 6 times and masculine gender 2 times. The same participants produced a high number of valid responses for the noun *koszula* ‘shirt’ (Pol: FEM., Spa: *camisa* – FEM.) and the noun *gwiazda* ‘star’ (Pol: FEM., Spa: *estrella* – FEM.). In total, 9 valid responses were given, with feminine gender assigned in 8 cases.

A total of 8 valid responses were obtained for assigning gender to the noun *książka* 'book' (Pol: FEM., Spa: *libro* – MASC.). The participants assigned feminine gender in 7 cases. For the noun *małpa* 'monkey' (Pol: FEM., Spa: *mono* – MASC.), eight of the participants assigned a gender with feminine gender assigned 6 times. As for the noun *świnia* 'pig' (Pol: FEM., Spa: *cerdo* – MASC.), eight participants produced valid responses. The feminine gender was assigned in 5 of these cases.

5. Stimuli which in **Polish** are **neuter gendered**

Valid responses were obtained for the noun *drzewo* 'tree' (Pol: NEUT., Spa: *árbol* – MASC) in 7 cases, with masculine gender assigned in 6 cases. For the noun *jezioro* 'lake' (Pol: NEUT., Spa: *lago* – MASC.), only six participants produced valid responses, with determiner '*el*' assigned in 5 cases, and determiner '*la*' in 1 case. Regarding the noun *serce* 'heart' (Pol: NEUT., Spa: *corazón* – MASC.), valid responses were obtained only in 6 cases, with determiner '*el*' assigned in 4 cases. Additionally, participants did not assign any gender in 9 cases.

A total of 8 valid responses were obtained in mixed DPs where gender in Spanish was assigned to the Polish noun *zdjęcie* 'photo' (Pol: NEUT., Spa: *foto* – FEM.). In these responses, determiner '*el'* was produced 7 times, feminine gender was assigned in 1 case, and in 1 other case '*lo*' was produced. For the noun *okno* 'window' (Pol: NEUT., Spa: *ventana* – FEM.), a total of 9 valid responses were obtained, with masculine gender assigned in 7 cases.

In the following cases, it is evident that the number of valid responses given is lower than for the responses where gender was not assigned. For the noun *jajko* 'egg' (Pol: NEUT., Spa: *huevo* – MASC.), a total of 7 valid responses were provided (with masculine gender assigned in 4 cases). Regarding the noun *łóżko* 'bed' (Pol: NEUT., Spa: *cama* – FEM.), participants assigned gender in 6 cases, did not assign any gender in 8 cases, and in 1 case, another response as '*lo*' was given. Among the valid responses, an equal number of determiners '*el*' and '*la*' were produced. In the case of the noun *zboże* 'wheat' (Pol: NEUT., Spa: *trigo* – MASC.), gender was not assigned in 9 cases, and only in 5 cases participants gave valid responses, with feminine gender assigned 3 times and masculine gender assigned 2 times. Moreover, one participant produced the response '*lo*' instead of the correct determiner. Similarly, participants provided 7 valid responses for the noun *jabłko* 'apple' (Pol: NEUT., Spa: *manzana* – FEM.) and the noun *słońce* 'sun' (Pol: NEUT., Spa: *sol* – MASC.), with masculine gender used in 5 cases. In these cases, it can be observed that participants did not assign gender in 8 cases.

5.2. PARENTAL INPUT

For the purpose of this pilot study, three families were recruited, with mothers being Polish and fathers from Spanish-speaking country (participants: P1a, P1b, P2a, P2b, P5a, P5b); and two families (P4a, P4b, P6a, P6b), with mothers from Spanish-speaking country and fathers from Poland. In each family, both Spanish and Polish are used daily. The Polish-speaking parent speaks Polish to the children, while the Spanish-speaking parent communicates in Spanish with the children. There is only one exception, (P1a, P1b), where Polish mother speaks English to the children; however, the caretaker communicates with them in Polish. Additionally, in most of the cases, both parents are fluent in their spouse's native language and at least three other foreign languages. Regarding their attitudes towards languages, in three cases, parents characterized Spanish, Polish and English as highly influential, inspirational, and useful languages. In contrast, two other parents have described Polish language as average influential/inspiring or entirely non-influential and unfriendly. According to the responses, it is extremely important or very important for all parents of simultaneous bilinguals that their child knows both Spanish and Polish. Information from the questionnaires reveals that six out of eleven children have never lived in a Spanish-speaking country. Moreover, in three families, the children (P2a, P2b, P5a, P5b, P6a, P6b) communicate with the siblings in Polish; in one family, children (P1a, P1b) communicate with the siblings in English; and in one case (P4a, P4b), the parent described the siblings' language usage as mix of Polish and Spanish. Furthermore, these children more frequently watch Polish films/TV shows than their Spanish equivalents, and they also read books in Polish more often. While books in Spanish are also read, they are less frequently chosen. Additionally, as described by all parents, these bilinguals go visit Spanish-speaking countries for holidays every other year.

For participants: P3a, P3b, P3c, P3d, P3e, Spanish appears be their dominant language. Both parents are native Spanish speakers who moved to Poland in 2016. They exclusively speak Spanish to the children, as they do not speak any other language. The parents described their fluency in Polish as very basic. In terms of their attitudes towards language, the parent, who filled in the questionnaire characterized Spanish as a very influential, inspiring, and useful language, similarly to English. Polish was described as friendly, influential, inspiring, useful, and the most beautiful language among the two. According to the parent, it is extremely important that the child knows both Spanish and Polish.

Moreover, the children communicate with the siblings only in Spanish. They watch Spanish films/TV shows every day, while films/TV shows in Polish, are watched once a week. In addition to this, the children more frequently read books in Spanish than in Polish. It should also be noted that these participants go on holiday to Spanish-speaking countries twice a year.

5.3. CHILDREN VIEW

As proved by Papapavlou (1999), questionnaires constitute a valuable form of eliciting bilingual children's views. The responses provided by the participants in the present study have indicated that, overall, the children possess very positive attitudes towards both languages examined in this research. Particularly, the simultaneous bilinguals appeared to take great pride in their ability to speak Spanish, with Polish serving as the dominant language for these bilinguals.

As for the sequential bilinguals, they also exhibited a positive attitude towards both Spanish and Polish, however, although to a lesser extent toward Polish. Additionally, both groups of bilinguals reported that they often use Polish in combination with Spanish when communicating with their siblings.

CHAPTER SIX. DISCUSSION & CONCLUSION

6.1. DISCUSSION

6.1.1. MAIN FINDINGS

Conducting the study in both monolingual and bilingual contexts allowed for a more comprehensive understanding of how simultaneous and sequential Spanish-Polish bilingual children acquire grammatical gender in both languages, as well as how they code-switch within mixed DPs. This section presents the main findings from both the *monolingual* and the *mixing modes*. The results from the *mixing mode* are further analyzed in terms of the code-switching strategies that were found within the participants' bilingual production.

Monolingual modes

The monolingual tests among **simultaneous bilinguals** revealed that it is difficult to determine a dominant language. The results showed that these bilinguals acquired grammatical gender more accurately in Polish (99.3%) than in Spanish (79%). Although both results are relatively high, the participants demonstrated better assimilation of the Polish gender system. An exception was participant P5a, whose results indicated no acquisition of grammatical gender in Spanish and only 51.7% accuracy in Polish. Age appears to be a contributing factor, as this participant was one of the youngest in the group. However, comparing these results to those of participant P6b, who is of similar age but performed notably better in the Polish mode, which suggests that additional factors may be at play. One possible influence is the use of English at home, as the child's mother communicates in that language. This, along with other unexamined linguistic variables, may have contributed for the lower number of correct responses observed in this case.

The monolingual modes among **sequential bilinguals** revealed that early sequential bilinguals performed slightly better in the *Spanish mode* than in the *Polish mode*. Late sequential bilinguals showed a markedly higher performance in the Spanish language test, achieving only 54.3% accuracy in the *Polish mode.* This suggests a clear dominance of Spanish in their language acquisition.

The data also indicate that simultaneous bilinguals, despite being equal in number to early sequential bilinguals, used fewer Spanish DPs but more Polish NPs, suggesting greater language balance in Polish. Early sequential bilinguals favored Spanish, producing more DPs

in that language. Late sequential bilinguals, though fewer, showed a similar Spanish DP count but produced fewer and less accurate Polish NPs, highlighting a stronger reliance on Spanish overall.

Mixing mode

The results of the *mixing mode* indicate that noun-related characteristics seem to significantly influence children's choice when mixing within determiner phrases. This section discusses the main findings on the code-switching gender assignment strategies.

Analyzing the results, it was found that for the stimuli that were masculine gendered, and ended in a consonant in Polish, participants most naturally assigned masculine gender in Spanish to a Polish noun. This pattern was also observed when the Spanish translation equivalent of a noun was feminine (e.g. *el gołąb* - Pol: MASC., Spa: *paloma* – FEM). This finding suggests the usage of the strategy in which **masculine gender** is the **default**.

However, the pattern was less consistent in two cases involving masculine gendered nouns that end in a vowel. In the first case, for the noun *sędzia* 'referee' (Pol: MASC., Spa: *arbitro* – MASC.), participants assigned feminine gender in 3 cases and masculine gender in four. This shows that even though the noun was masculine gendered in both languages, the 3 participants decided to assign feminine gender to this noun. Moreover, the noun has biological masculine gender, indicating that its grammatical assignment should be unambiguous. One possible explanation may be that the ending /*-a*/ in *sędzia* triggered feminine determiner in gender assignment. However, as this was the only case in which masculine and feminine genders were nearly equally assigned, it is difficult to determine whether a **phonological strategy** was at play.

Another interesting case concerns the noun *usta* 'mouth' (Pol: MASC., Spa: *boca* – FEM.). In all valid responses, the feminine gender was assigned. One of the possible justifications for this result might be a fact that the ending /*-a*/ in *usta* triggers determiner '*la'* - a **phonological strategy**. A second explanation could be the **translation equivalent strategy**, since *usta* corresponds to a feminine noun in Spanish. However, as noted earlier, the limited number of stimuli of this type makes it difficult to draw definitive conclusions.

For the feminine gendered nouns in Polish ending in a consonant and have masculine translation equivalent in Spanish (e.g. *kość* 'bone' (Pol: FEM., Spa: *hueso* – MASC.); noun *mysz* 'mouse' (Pol: FEM., Spa: *ratón* – MASC.)), it was found that in more than 65% of responses, feminine gender was assigned in mixed DPs.

Analyzing the last group of the stimuli, it was found that in mixed DPs where Spanish determiner *el* was assigned to Polish neuter nouns, whose Spanish translation equivalents were masculine (e.g. *el drzewo* 'tree' (Pol: NEUT., Spa: *árbol* – MASC), it is unclear whether participants followed the **default masculine assignment** or the **translation equivalent strategy**. However, when the Spanish equivalents were feminine, such as in *el zdjęcie* 'photo' (Pol: NEUT., Spa: *foto* – FEM.); *el okno* 'window' (Pol: NEUT., Spa: *ventana* – FEM.); *el jabłko* 'apple' (Pol: NEUT., Spa: *manzana* – FEM.)), participants still assigned the masculine determiner *el*. This supports the interpretation that **masculine gender** was **used as a default** gender in these cases.

For further research, it would be interesting to examine two specific mixed DPs, i.e. '*la łóżko'* and '*la zboże'.* In case '*la łóżko'*, the feminine gender was assigned the equal number of times as the masculine gender to the noun *łóżko* (Pol: NEUT., Spa: *cama* – FEM.), possibly indicating a **translation equivalent strategy**. In contrast, *zboże* (Pol: NEUT., Spa: *trigo* – MASC.), was paired with the feminine determiner *la* more frequently than with *el*, which may suggest the feminine gender was used as a default in this case.

It is important to note, however, the low number of valid responses in these cases. The results suggest that it was rather difficult or unnatural to code-switch within DPs for these participants, particularly in a linguistic situation where neuter gender is absent in the second studied language. This would also prove the findings discussed by Laskowski (2009), mentioned earlier in this thesis.

Another notable finding was the production of the pronoun *lo* as a determiner by one participant when assigning gender in Spa to the nouns in Pol (e.g. *lo zdjęcie, lo łóżko).* In each of these cases, the Polish noun is neuter. This likely indicates that the participant was attempting to find a neuter equivalent in Spanish. This usage may reflect a gap in the participant's linguistic competence regarding Spanish gender system.

The final finding concerns the very low number of valid responses produced by six of the participants. This may suggest that those participants who failed to produce at least 25 percent

of the targeted number of mixed DPs should be excluded from the study. Additionally, five of these six participants had distinct linguistic profiles. Based on these findings, it would seem more appropriate to categorize late sequential bilinguals within the framework of second language acquisition.

6.1.2. STUDY LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Taking into account both *monolingual modes* and the number of valid responses received in the *mixing mode*, participants P3a, P3b, P3c, P3d, P3e and P5a should have been excluded from the study. As previously mentioned, participants with code number 3 also differed from the rest in terms of linguistic background and, also for that reason, should not have been included in the study. However, considering the overall small number of participants, I chose not to exclude these six participants from the analysis. Given that this is a pilot study, I believe all collected data is worth presenting and analyzing.

Further analysis also revealed that the number of stimuli used in this study was insufficient. More stimuli, especially those like *sędzia, usta* or *zboże* which showed interesting results, should have been selected for the purpose of this pilot study. A larger set of stimuli would also have made it easier to draw conclusions regarding the strategies participants used when code-switching within mixed DPs.

Acknowledging that the sample size was rather limited within this study, I still believe that these results helped to reveal useful patterns. As a recommendation for future research, I suggest increasing the number of participants with comparable linguistic profiles. Additionally, the inclusion of a larger and more balanced set of stimuli, sharing similar linguistic properties, would enhance the reliability and depth of the findings.

6.2. CONCLUSION

This thesis examined the language production of fifteen Spanish-Polish bilingual children. The primary aim of this pilot study was to investigate grammatical gender in Spanish and Polish within monolingual noun and determiner phrases, in order to assess the extent to which participants acquired both gender systems. The second objective was to explore gender assignment within mixed nominal constructions, with determiners in Spanish and nouns in

Polish. To investigate both objectives, the Director-Matcher Task (Gullberg et al., 2009) has been conducted in two *monolingual modes* and one *mixing mode*.

The results from the task showed several interesting findings. As hypothesized, in the *monolingual modes*, simultaneous bilinguals demonstrated higher accuracy in acquiring grammatical gender in Polish than in Spanish. In contrast, both early and late sequential bilinguals showed better performance in Spanish. For early sequential bilinguals, the difference between the two languages was relatively small, with only slightly lower scores in Polish. However, among late sequential bilinguals, the disparity was more pronounced, with significantly stronger results in Spanish. This highlights the extent to which the children acquired both gender systems and indicates which language allowed for easier production of monolingual nominal phrases.

In the *mixing mode*, participants with a different linguistic profile produced significantly fewer mixed DPs compared to other participants. The similar trend was observed among participants whose language spoken at home is different than Spanish and Polish. This suggests that CS felt rather unnatural for these participants. This mode also revealed a wide range of observations related to the stimuli. As discussed in the previous chapter, for some of the mixed DPs it was relatively easy to identify the CS strategy used. However, other stimuli were more difficult to evaluate, primarily due to the limited number of participants and stimuli.

In conclusion, despite several limitations, this pilot study offered valuable insights. It addressed both CS, as well as the separate acquisition of grammatical gender in Spanish and Polish. As a result, it provided a broad understanding of how bilingual children acquired Spanish and Polish gender systems independently, as well as how they constructed mixed DPs. Additionally, the parental and children's questionnaires provided valuable context that helped to further clarify the findings. Taken together, these results indicate that this pilot study provides a strong foundation for future research on bilingualism among the Spanish-Polish bilingual children.

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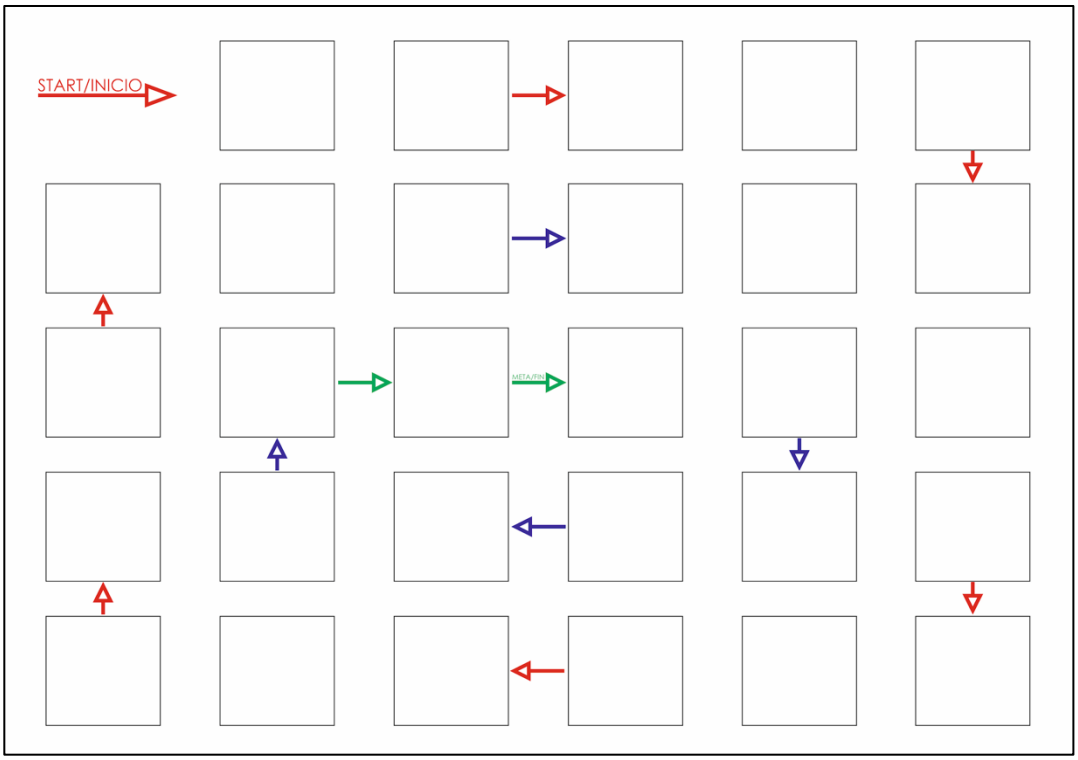
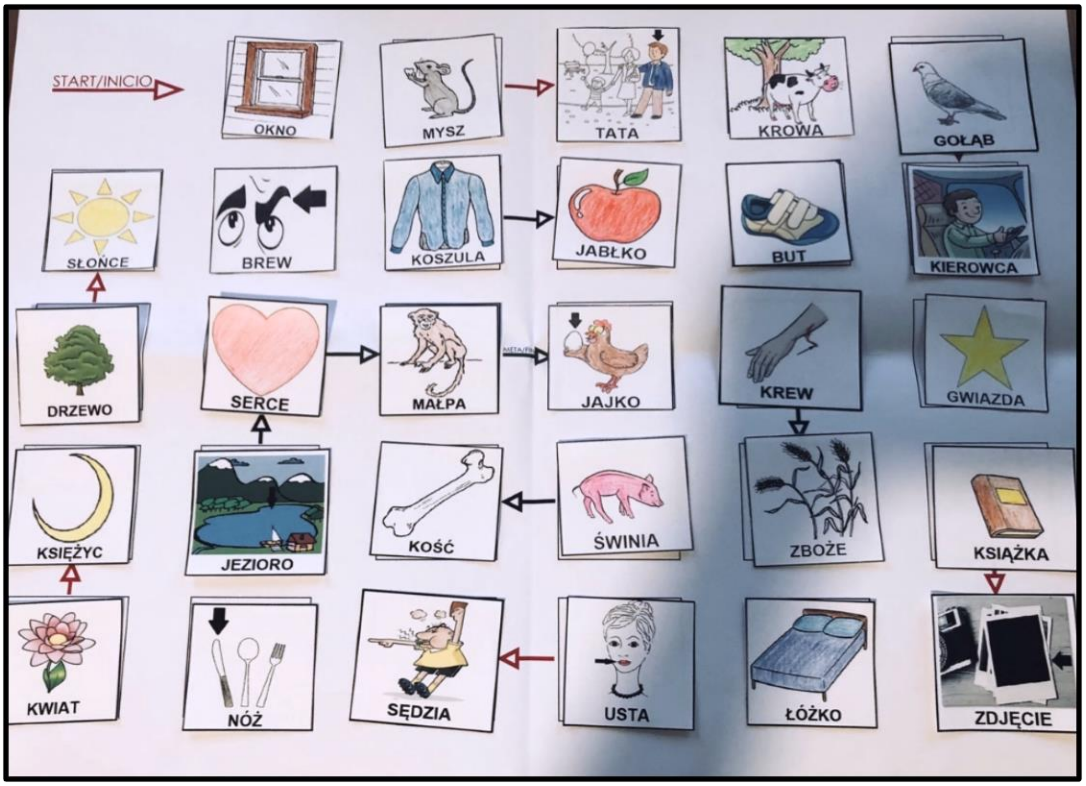
APPENDICES

APPENDIX 1: MAP TASK





APPENDIX 2: PARENT QUESTIONNAIRES

2.1. PARENT QUESTIONNAIRE IN SPANISH

……

CUESTIONARIO DE PADRES

Le estaría muy agradecido si me pudiera dar la siguiente información para ayudarme con mi estudio.

DATOS PERSONALES

1. ¿Es usted: Hombre ☐ Mujer ☐ ? 2. Fecha de nacimiento: ……

2. ¿Dónde naciste?

   Ciudad: ..... País: .....

3. ¿A qué se dedica actualmente (si está jubilado o desempleado, ¿cuál fue su último trabajo antes de retirarse o entrar en el paro?)?
   .....

4. Por favor, indique los sitios donde vivió durante periodos largos:

   e.g.: Lugar: *La Habana, Cuba* Fecha: *1975-93*

   Lugar: *New York City, US* Fecha: *1993-99*
   Lugar: *Melbourne, Australia* Fecha: *1999-2002*
   Lugar: *Miami, US* Fecha: *2002-05*

   Lugar: …… Fecha: ……
   Lugar: …… Fecha: ……
   Lugar: …… Fecha: ……
   Lugar: …… Fecha: ……

Lugar: …… Fecha: ……..……

Lugar: …… Fecha: ……..……

5. ¿Cuál es el grado o nivel más alto de educación que usted ha completado? *(Si actualmente está inscrito, el grado más alto recibido)*

   - ☐ Educación primaria o equivalente
   - ☐ Educación secundaria
   - ☐ Bachillerato
   - ☐ Licenciatura
   - ☐ Maestría
   - ☐ Doctorado o equivalente
   - ☐ Ninguno de los mencionados

ANTECEDENTES DE LA LENGUA/USO

6. ¿Qué lengua(s) utilizaste con tus padres cuando eras niño?
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Otro: …….

7. ¿Qué idiomas habla usted?
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Otro: …….

8. ¿Con qué frecuencia usa usted estos idiomas en un día?

	Nunca	Raramente	A veces	A menudo	Siempre
Español					
Polaco					
Inglés					
Otro: ……					

9. Indique qué fluido es usted y su cónyuge en Polaco:

Usted: ……..	1. En absoluto. No puedo ni entender ni hablar.
Cónyuge: …….	2. Entiendo un poco pero no puedo hablar.
	3. Entiendo y hablo un poco.
	4. Entiendo y hablo bien.
	5. Entiendo y hablo muy bien.
	6. Hablante nativo de Polaco.

10. Indique qué fluido es usted y su cónyuge en Español:

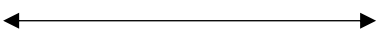
Usted: ……..	1. En absoluto. No puedo ni entender ni hablar.
Cónyuge: …….	2. Entiendo un poco pero no puedo hablar.
	3. Entiendo y hablo un poco.
	4. Entiendo y hablo bien.
	5. Entiendo y hablo muy bien.
	6. Hablante nativo de Polaco.

11. ¿Qué idioma usa usted para comunicarse con su cónyuge?
☐ Español ☐ Polaco ☐ Inglés ☐ Otro: ……..

PUNTO DE VISTA SOBRE LAS LANGUAS

12. ¿Cómo caracterizaría a las lenguas siguiendo una escala del 1 al 5 de acuerdo con las siguientes propiedades? Circule un número en cada línea.

a) Español



Antigua	1	2	3	4	5	Moderna
Desamigable	1	2	3	4	5	Amigable

No influyente	1	2	3	4	5	Influyente
No inspirante	1	2	3	4	5	Inspirante
Inútil	1	2	3	4	5	Útil
Fea	1	2	3	4	5	Bonita

b) Polaco

Antigua	1	2	3	4	5	Moderna
Desamigable	1	2	3	4	5	Amigable
No influyente	1	2	3	4	5	Influyente
No inspirante	1	2	3	4	5	Inspirante
Inútil	1	2	3	4	5	Útil
Fea	1	2	3	4	5	Bonita

c) Inglés

Antigua	1	2	3	4	5	Moderna
Desamigable	1	2	3	4	5	Amigable
No influyente	1	2	3	4	5	Influyente
No inspirante	1	2	3	4	5	Inspirante
Inútil	1	2	3	4	5	Útil
Fea	1	2	3	4	5	Bonita

13. ¿Qué importante es para usted que su hijo sepa **Español**?
    - ☐ Extremadamente importante
    - ☐ Muy importante
    - ☐ Importante
    - ☐ No es importante

14. ¿Qué importante es para usted que su hijo sepa **Polaco**?
    - ☐ Extremadamente importante
    - ☐ Muy importante
    - ☐ Importante
    - ☐ No es importante

INFORMACIÓN GENERAL

15. Su relación con el hijo:
    - ☐ Madre
    - ☐ Padre
    - ☐ Cuidador

16. El nombre de su hijo: .....

17. Edad de su hijo: .....

18. Lugar de nacimiento del hijo: .....

19. ¿Con qué frecuencia se comunica la madre con su hijo en su lengua materna?

Lengua materna: ……..

- ☐ Nunca
- ☐ Rara vez
- ☐ A veces
- ☐ A menudo
- ☐ Muy a menudo
- ☐ Siempre

20. ¿Con qué frecuencia se comunica el padre con su hijo en su lengua materna?

Lengua materna: ……..

- ☐ Nunca
- ☐ Rara vez
- ☐ A veces
- ☐ A menudo
- ☐ Muy a menudo
- ☐ Siempre

21. ¿Con qué frecuencia se comunica el cuidador con su hijo en su lengua materna? *(si es aplicable)*

Lengua materna: ……..

- ☐ Nunca
- ☐ Rara vez
- ☐ A veces
- ☐ A menudo
- ☐ Muy a menudo

☐ Siempre

22. ¿Ha vivido su hijo en un país de habla hispana?
    ☐ Si ☐ No

22a. Si es así, ¿por cuánto tiempo?

- ☐ 0-1 años
- ☐ 2-3 años
- ☐ 4-5 años
- ☐ más que 6 años

23. ¿Con qué frecuencia ve su hijo una película española o un programa de televisión en Español?
    - ☐ Diario
    - ☐ 2-3 veces a la semana
    - ☐ Semanal
    - ☐ Mensual
    - ☐ Nunca

24. ¿Con qué frecuencia ve su hijo una película polaca o un programa de televisión en Polaco?
    - ☐ Diario
    - ☐ 2-3 veces a la semana
    - ☐ Semanal
    - ☐ Mensual
    - ☐ Nunca

25. ¿Con qué frecuencia lee su hijo un libro en Español?
    - ☐ Diario
    - ☐ 2-3 veces a la semana
    - ☐ Semanal
    - ☐ Mensual
    - ☐ Nunca

26. ¿Con qué frecuencia lee su hijo un libro en Polaco?
    - ☐ Diario
    - ☐ 2-3 veces a la semana
    - ☐ Semanal
    - ☐ Mensual
    - ☐ Nunca

27. ¿Con qué frecuencia su hijo va de vacaciones al país de habla hispana?
    - ☐ Una vez al año
    - ☐ Dos veces al año
    - ☐ Tres veces al año
    - ☐ Cada otro año

Muchas gracias por su tiempo y colaboración.

2.2. PARENT QUESTIONNAIRE IN POLISH

……

KWESTIONARIUSZ DLA RODZICA

Byłabym wdzięczna, jeśli Pan/Pani mógł/a mi podać następujące informacje by pomóc w moim badaniu.

INFORMACJE PODSTAWOWE

1. Jesteś: Mężczyzną ☐ Kobietą ☐ ? 2. Data urodzenia: ……

3. Miejsce urodzenia:

   City: …… Country: ……..

4. Jaki jest Twój obecny zawód *(jeśli jesteś na emeryturze lub jesteś bezrobotny, jaki był twój ostatni zawód)*?

   .....

5. Proszę wskazać miejsca, w których mieszkałeś przez dłuższy czas:

   e.g.: Miejsce: *La Habana, Cuba* Data: *1975-93*

   Miejsce: *New York City, US* Data: *1993-99*

   Miejsce: *Melbourne, Australia* Data: *1999-02*

   Miejsce: *Miami, US* Data: *2002-05*

   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….
   Miejsce: …… Data: ……..…….

6. Jaki jest Twój najwyższy poziom ukończonej szkoły? *(Jeśli jesteś aktualnie zapisany, podaj otrzymany najwyższy stopień.)*
   a. Primary education
   b. Secondary education
   c. High school graduate, diploma or the equivalent
   d. Bachelor's degree
   e. Master's degree
   f. Doctorate degree

g. None of the above

PRZESZŁOŚĆ JĘZYKOWA/UŻYCIE

7. Którego z języków używałeś rozmawiając ze swoimi rodzicami, kiedy byłeś dzieckiem?

   ☐ Hiszpański
   ☐ Polski
   ☐ Angielski
   ☐ Inny: …….

8. Jakie znasz języki?

   ☐ Hiszpański
   ☐ Polski
   ☐ Angielski
   ☐ Inny: …….

9. Jak często posługujesz się tymi językami w ciągu dnia?

	Nigdy	Rzadko	Czasami	Często	Bardzo często	Zawsze
Hiszpański						
Polski						
Angielski						
Inny: ……						

10. Wskaż jak płynnie Ty i Twój małżonek/małżonka mówicie po **Polsku**?

    Ty: …….
    Małżonek: …….

    1. Wcale. Ani nie rozumiem, ani nie mówię w tym języku.
    2. Trochę rozumiem, ale nie potrafię rozmawiać w tym języku.
    3. Rozumiem I trochę mówię w tym języku.
    4. Rozumiem wszystko i dobrze mówię w tym języku.
    5. Rozumiem wszystko i mówię bardzo dobrze w tym języku.
    6. Moim ojczystym językiem jest Polski.

11. Wskaż jak płynnie Ty i Twój małżonek/małżonka mówicie po **Hiszpańsku**?

    Ty: …….
    Małżonek: …….

    1. Wcale. Ani nie rozumiem, ani nie mówię w tym języku.
    2. Trochę rozumiem, ale nie potrafię rozmawiać w tym języku.
    3. Rozumiem I trochę mówię w tym języku.
    4. Rozumiem wszystko i dobrze mówię w tym języku.
    5. Rozumiem wszystko i mówię bardzo dobrze w tym języku.
    6. Moim ojczystym językiem jest Polski.

12. Którego języka używasz komunikując się ze swoim małżonkiem/małżonką?

☐ Hiszpański ☐ Polski ☐ Angielski ☐ Inny: ……..

POGLĄDY NA JĘZYK

13. Jak scharakteryzowałbyś języki poniżej w skali od 1 do 5 według poniższych właściwości? Zakreśl numer w każdej linii.

a) Hiszpański

Stary	1	2	3	4	5	Nowoczesny
Nieprzyjazny	1	2	3	4	5	Przyjazny
Nie wpływowy	1	2	3	4	5	Wpływowy
Nie inspirujący	1	2	3	4	5	Inspirujący
Bezużyteczny	1	2	3	4	5	Przydatny
Brzydki	1	2	3	4	5	Piękny

b) Polski

Stary	1	2	3	4	5	Nowoczesny
Nieprzyjazny	1	2	3	4	5	Przyjazny
Nie wpływowy	1	2	3	4	5	Wpływowy
Nie inspirujący	1	2	3	4	5	Inspirujący
Bezużyteczny	1	2	3	4	5	Przydatny
Brzydki	1	2	3	4	5	Piękny

c) Angielski

Stary	1	2	3	4	5	Nowoczesny
Nieprzyjazny	1	2	3	4	5	Przyjazny
Nie wpływowy	1	2	3	4	5	Wpływowy
Nie inspirujący	1	2	3	4	5	Inspirujący
Bezużyteczny	1	2	3	4	5	Przydatny
Brzydki	1	2	3	4	5	Piękny

14. Jak ważne jest dla Ciebie by twoje dziecko znało **Hiszpański**?

☐ Najważniejsze
☐ Bardzo ważne
☐ Trochę ważne
☐ Nieważne

15. Jak ważne jest dla Ciebie by twoje dziecko znało **Polski**?

☐ Najważniejsze
☐ Bardzo ważne
☐ Trochę ważne
☐ Nieważne

INFORMACJE OGÓLNE

16. Twój związek **z dzieckiem**:

☐ Matka
☐ Ojciec
☐ Opiekun

17. Imię Twojego dziecka: ……..…….

18. Wiek Twojego dziecka: ……

19. Miejsce narodzin Twojego dziecka: ……..

20. Jak często matka porozumiewa się z dzieckiem w swoim języku ojczystym?

Ojczysty język: ……..

☐ Nigdy
☐ Rzadko
☐ Czasami
☐ Często
☐ Bardzo często
☐ Zawsze

21. Jak często ojciec porozumiewa się z dzieckiem w swoim języku ojczystym?

Ojczysty język: ……..

☐ Nigdy
☐ Rzadko
☐ Czasami
☐ Często
☐ Bardzo często
☐ Zawsze

22. Jak często opiekun porozumiewa się z dzieckiem w swoim języku ojczystym? *(jeśli dotyczy)*

Ojczysty język: ……..

☐ Nigdy
☐ Rzadko
☐ Czasami
☐ Często
☐ Bardzo często
☐ Zawsze

23. Czy twoje dziecko mieszkało kiedyś w kraju hiszpańskojęzyczny?

☐ Tak ☐ Nie

23a. Jeśli tak, jak długo?

☐ 0-1 roku
☐ 2-3 lat
☐ 4-5 lat
☐ więcej niż 6 lat

24. Jak często Twoje dziecko ogląda hiszpański film lub hiszpański program telewizyjny?

- ☐ Codziennie
- ☐ 2-3 razy w tygodniu
- ☐ Raz na tydzień
- ☐ Raz w miesiącu
- ☐ Nigdy

25. Jak często Twoje dziecko ogląda polski film lub polski program telewizyjny?

- ☐ Codziennie
- ☐ 2-3 razy w tygodniu
- ☐ Raz na tydzień
- ☐ Raz w miesiącu
- ☐ Nigdy

26. Jak często Twoje dziecko czyta książkę po hiszpańsku?

- ☐ Codziennie
- ☐ 2-3 razy w tygodniu
- ☐ Raz na tydzień
- ☐ Raz w miesiącu
- ☐ Nigdy

27. Jak często Twoje dziecko czyta książkę po polsku?

- ☐ Codziennie
- ☐ 2-3 razy w tygodniu
- ☐ Raz na tydzień
- ☐ Raz w miesiącu
- ☐ Nigdy

28. Jak często Twoje dziecko wyjeżdża na wakacje do kraju hiszpańskojęzycznego?

- ☐ Raz na rok
- ☐ Dwa razy do roku
- ☐ Trzy razy do roku
- ☐ Raz na parę lat

Dziękuję za poświęcony czas i współpracę.

2.3. PARENT QUESTIONNAIRE IN ENGLISH

……

PARENT QUESTIONNAIRE

I would be grateful if you could give me the following information to help me with my study.

BACKGROUND INFORMATION

1. Are you: Man ☐ Woman ☐ ? **2.** Date of birth: ……

2. Where were you born?
   City: …… Country: …….

3. What is your present occupation (if you are retired or unemployed, what was your last occupation?)?
   .....

4. Please, indicate the sites where you lived for long periods of time:

   e.g.: Place: *La Habana, Cuba* Date: *1975-93*

   Place: *New York City, US* Date: *1993-99*

   Place: *Melbourne, Australia* Date: *1999-02*

   Place: *Miami, US* Date: *2002-05*

   Place: …… Date: ……
   Place: …… Date: ……
   Place: …… Date: ……
   Place: …… Date: ……
   Place: …… Date: ……
   Place: …… Date: ……
   Place: …… Date: ……

5. What is the highest degree or level of school you have completed? (***If currently enrolled, highest degree received.***)

   ☐ Primary education
   ☐ Secondary education
   ☐ High school graduate, diploma or the equivalent
   ☐ Bachelor's degree
   ☐ Master's degree
   ☐ Doctorate degree
   ☐ None of the above

LANGUAGE BACKGROUND/USE

6. What language(s) did **you** speak to your parents when you were a child?

   ☐ Spanish
   ☐ Polish
   ☐ English
   ☐ Other: …….

7. What languages do **you** speak?

   ☐ Spanish
   ☐ Polish
   ☐ English
   ☐ Other: …….

8. How often do **you** speak these languages in a day?

	Never	Seldom	Sometimes	Often	Very often	Always
Spanish						
Polish						
English						
Other: ……						

9. Please indicate how fluent you and your spouse are in Polish:

   You: …….
   Spouse: …….

   1. Not at all. I can neither understand nor speak.
   2. I understand a little bit but I cannot speak,
   3. I understand and speak a little.
   4. I understand and speak well.
   5. I understand and speak very well.
   6. Native speaker of Polish.

10. Please indicate how fluent you and your spouse are in Spanish:

    You: …….
    Spouse: …….

    1. Not at all. I can neither understand nor speak.
    2. I understand a little bit but I cannot speak,
    3. I understand and speak a little.
    4. I understand and speak well.
    5. I understand and speak very well.
    6. Native speaker of Polish.

11. What language do <u>you</u> use to communicate with your spouse?

    ☐ Spanish ☐ Polish ☐ English ☐ Other: ……..

VIEWS ON LANGUAGE

12. How would you characterize languages below following a scale from 1 to 5 according to the following properties? Circulate a number on each line.

d) Spanish

Old	1	2	3	4	5	Modern
Unfriendly	1	2	3	4	5	Friendly
Non-influential	1	2	3	4	5	Influential
Non-inspiring	1	2	3	4	5	Inspiratory
Useless	1	2	3	4	5	Useful
Ugly	1	2	3	4	5	Beautiful

e) Polish

Old	1	2	3	4	5	Modern
Unfriendly	1	2	3	4	5	Friendly
Non-influential	1	2	3	4	5	Influential
Non-inspiring	1	2	3	4	5	Inspiratory
Useless	1	2	3	4	5	Useful
Ugly	1	2	3	4	5	Beautiful

f) English

Old	1	2	3	4	5	Modern
Unfriendly	1	2	3	4	5	Friendly
Non-influential	1	2	3	4	5	Influential
Non-inspiring	1	2	3	4	5	Inspiratory
Useless	1	2	3	4	5	Useful
Ugly	1	2	3	4	5	Beautiful

13. How important is it to you that your child know **Spanish?**

- ☐ Extremely important
- ☐ Very important
- ☐ Somewhat important
- ☐ Not important

14. How important is it to you that your child know **Polish?**

- ☐ Extremely important
- ☐ Very important
- ☐ Somewhat important
- ☐ Not important

GENERAL INFORMATION

15. Your relationship to **the child**:

- ☐ Mother

☐ Father
☐ Caretaker

16. Your child's name: …….

17. How old is your child: ……

18. Child's place of birth: ……..

19. How often does the mother communicate with her child in her mother tongue?

Mother tongue: ……..

☐ Never
☐ Seldom
☐ Sometimes
☐ Often
☐ Very often
☐ Always

20. How often does the father communicate with his child in his mother tongue?

Mother tongue: ……

☐ Never
☐ Seldom
☐ Sometimes
☐ Often
☐ Very often
☐ Always

21. How often does the caretaker communicate with the child in his/her mother tongue? *(if applicable)*

Mother tongue: ……

☐ Never
☐ Seldom
☐ Sometimes
☐ Often
☐ Very often
☐ Always

22. Has your child lived in Spanish speaking country?

☐ Yes ☐ No

22a. If yes, for how long?

☐ 0-1 years
☐ 2-3 years
☐ 4-5 years
☐ more than 6 years

23. How often does your child watch a Spanish film or a Spanish tv show?

- ☐ Daily
- ☐ 2-3 times a week
- ☐ Weekly
- ☐ Monthly
- ☐ Never

24. How often does your child watch a Polish film or a Polish tv show?

- ☐ Daily
- ☐ 2-3 times a week
- ☐ Weekly
- ☐ Monthly
- ☐ Never

25. How often does your child read a Spanish book?

- ☐ Daily
- ☐ 2-3 times a week
- ☐ Weekly
- ☐ Monthly
- ☐ Never

26. How often does your child read a Polish book?

- ☐ Daily
- ☐ 2-3 times a week
- ☐ Weekly
- ☐ Monthly
- ☐ Never

27. How often does your child go on holiday to Spanish speaking country?

- ☐ Once a year
- ☐ Twice a year
- ☐ Three times a year
- ☐ Every other year

Thank you very much for your time and co-operation.

APPENDIX 3: CHILDREN QUESTIONNAIRES

3.1. CHILDREN QUESTIONNAIRE IN SPANISH

..…….

CUESTIONARIO DE NIÑOS

Nombre del niño: ……..… Hombre ☐ Mujer ☐

Edad del niño: …….

Lugar de nacimiento del niño: ……..

IDIOMAS QUE HABLA EL NIÑO

1. ¿Qué idioma(s) hablas?
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Other: ……..

2. ¿Qué idioma(s) usas para hablar con tu madre?
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Other: ……..
   - ☐ Mezcla de las lenguas: …….

3. ¿Qué idioma(s) usas para hablar con tu padre?
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Other: ……..
   - ☐ Mezcla de las lenguas: …….

4. ¿Qué idioma(s) usas para hablar con tu cuidador? *(si es aplicable)*
   - ☐ Español
   - ☐ Polaco
   - ☐ Inglés
   - ☐ Other: ……..
   - ☐ Mezcla de las lenguas: …….

5. ¿Tienes hermanos? Si es así, ¿cuántos?

   ☐ Si, ……. ☐ No

6. ¿Qué idioma(s) usas para comunicarte con tus hermanos?

   ☐ Español ☐ Polaco ☐ Mezcla de las lenguas: ……..…… ☐ Other: ……..

7. ¿Qué idioma(s) usan los padres para comunicarse entre ellos?

   ☐ Español ☐ Polaco ☐ Mezcla de las languas: ……..…… ☐ Other: ……..

8. ¿Qué idioma(s) hablas en la escuela con tus amigos?

   ☐ Español ☐ Polaco ☐ Otro: ……

9. ¿Qué idioma usas para comunicarte con tu profesor?

   ☐ Español ☐ Polaco ☐ Other: ……..

10. ¿Te gusta hablar Español?

    ☐ Mucho ☐ Un poco ☐ No

11. ¿Te gusta hablar Polaco?

    ☐ Mucho ☐ Un poco ☐ No

Muchas gracias por su tiempo y colaboración.

3.2. CHILDREN QUESTIONNAIRE IN POLISH

..…….

KWESTIONARIUSZ DLA DZIECI

Imię dziecka: ……..… Mężczyzna ☐ Kobieta ☐

Wiek dziecka: …….

Miejsce urodzenia dziecka: ……..

LANGUAGES SPOKEN BY THE CHILD

1. Jakimi językami się posługujesz?
   - ☐ Hiszpański
   - ☐ Polski
   - ☐ Angielski
   - ☐ Inny: ……..

2. Którego z języków uważasz rozmawiając ze swoją mamą?
   - ☐ Hiszpański
   - ☐ Polski
   - ☐ Angielski
   - ☐ Inny: ……..
   - ☐ Mieszanka języków: …….

3. Którego z języków używasz rozmawiając ze swoim tatą?
   - ☐ Hiszpański
   - ☐ Polski
   - ☐ Angielski
   - ☐ Inny: ……..
   - ☐ Mieszanka języków: …….

4. Którego z języków używasz rozmawiając ze swoim opiekunem? *(jeśli dotyczy)*
   - ☐ Hiszpański
   - ☐ Polski
   - ☐ Angielski
   - ☐ Inny: ……..
   - ☐ Mieszanka języków: …….

5. Czy posiadasz rodzeństwo? Jeśli tak, ile?

   ☐ Tak, ……. ☐ Nie

6. Którego z języków używasz komunikując się ze swoim rodzeństwem?

   ☐ Hiszpański ☐ Polski ☐ Mieszanka języków: …… ☐ Inny: ……..

7. Którego z języków używają Twoi rodzice by komunikować się ze sobą?
8. ☐ Hiszpański ☐ Polski ☐ Mieszanka języków: …… ☐ Inny: ……..

9. Których z języków używasz w szkole rozmawiając ze swoimi kolegami?

   ☐ Hiszpański
   ☐ Polski
   ☐ Inny: ……

10. Których z języków używasz w szkole rozmawiając ze swoimi nauczycielami?

    ☐ Hiszpański
    ☐ Polski
    ☐ Inny: ……

11. Czy lubisz mówić po polsku?

    ☐ Bardzo ☐ Trochę ☐ Nie lubię

12. Czy lubisz mówić po hiszpańsku?

    ☐ Bardzo ☐ Trochę ☐ Nie lubię

Dziękuję bardzo za poświęcony czas i współpracę.

3.3. CHILDREN QUESTIONNAIRE IN ENGLISH

..…….

CHILDREN QUESTIONNAIRE

Child's Name: ……..… Man ☐ Woman ☐

Child's age: …….

Child's place of birth: ……..

LANGUAGES SPOKEN BY THE CHILD

1. What language(s) do you speak?
   - ☐ Spanish
   - ☐ Polish
   - ☐ English
   - ☐ Other: ……..

2. What language do you use to talk to your mother?
   - ☐ Spanish
   - ☐ Polish
   - ☐ English
   - ☐ Other: ……..
   - ☐ Mixture of languages: …….

3. What language do you use to talk to your father?
   - ☐ Spanish
   - ☐ Polish
   - ☐ English
   - ☐ Other: ……..
   - ☐ Mixture of languages: …….

4. What language do you use to talk to your caretaker? *(if applicable)*
   - ☐ Spanish
   - ☐ Polish
   - ☐ English
   - ☐ Other: ……..
   - ☐ Mixture of languages: …….

5. Do you have siblings? If yes, how many?

☐ Yes, ……. ☐ No

6. What language do you use to communicate with your siblings?

☐ Spanish ☐ Polish ☐ Mixture of languages: …… ☐ Other: ……..

7. What language do parents use to communicate with each other?

☐ Spanish ☐ Polish ☐ Mixture of languages: …… ☐ Other: ……..

8. What language(s) do you speak at school with you friends?

☐ Spanish
☐ Polish
☐ Other: ……

9. What language do you use to communicate with your teacher?

☐ Spanish ☐ Polish ☐ Other: ……..

10. Do you like speaking Polish?

☐ Very much ☐ A little bit ☐ Not at all

11. Do you like speaking Spanish?

☐ Very much ☐ A little bit ☐ Not at all

Thank you very much for your time and co-operation.

APPENDIX 4: CONSENT FORM

4.1. CONSENT FORM

Leiden University

Supervisor: Dr. M. Carmen Parafita Couto
Experimenter: M.A. Królikowska

Study title: A Pilot Study on Grammatical Gender in Spanish-Polish Bilingual Children

Consent

I confirm that:

- I had the purpose and nature of the study explained to me and I have had the opportunity to ask questions about the study
- I understand that all information I provide for this study will be treated confidentially
- I understand that in any report on the results of this research my identity will remain anonymous
- I agree to participate in the study

Your child/children is/are being asked to take part in a research study.

Date: …… Place: …….

Name: …… Signature: ……