South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments

by

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ABSTRACT

Background: Parents of children who have complex communication needs and require augmentative and alternative communication (AAC) are often faced with complex decisions about language choices and practices when their children are raised in multilingual contexts. Understanding parents' perception in this matter can assist AAC service providers in supporting them better in this process. This study aimed to investigate South African parents' perceptions on their language choices and practices with regard to their children aged 5-12 years who use AAC, and who are regularly exposed to multiple languages. Specifically, the study aimed to (i) to describe parents' current language choices and practices with their children who use AAC; (ii) to describe the factors that parents consider to be influencing their language choices and practices with their children who use AAC; and (iii) to describe parents' perceptions of the outcomes of their language choices and practices with their children who use AAC.

Methods: This study followed a qualitative design employing semi-structured interviews. Five parents, who fit the selection criteria, were recruited via an e-mail sent out to an e-mail list, to which they responded. The perceptions of these parents whose children use AAC and are raised in multilingual environments, were explored using open-ended interview questions, loosely guided by an interview guide. Data from the interviews were transcribed and thematically analysed using an inductive process to identify themes and subthemes.

Results: Four themes were identified, namely (a) language practices and choices; (b) influences on language practices and choices; (c) consequences of language practices and choices; and (d) feelings and beliefs. Parents were found to take many aspects into consideration when making language choices for their children in need of AAC. Factors mentioned related the child and to the environment. The child's disability played a distinct role in parents' decision making process, with an overriding perception that multilingualism would currently not be beneficial for the child; a perception seemingly reinforced by the advice of professionals.

Conclusion: The language choices and practices of parents of children in need of AAC growing up multilingually are influenced by a variety of factors. AAC service providers need to take cognizance of these factors in order to understand parents' decision-making and

support them in a way that is respectful of their wishes and ideals, as well as congruent with current research evidence.

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An estimate of more than 50% of the world's population is multilingual, that is, proficient in speaking at least two languages (Byrd, 2012; Crystal, 2018; Grosjean, 2010; Kohnert, 2013; Louw & Louw, 2007); making multilingualism the norm, instead of the exception internationally (Kay-Raining Bird, Trudeau, & Sutton, 2016). Louw and Louw (2007) state that most South Africans are at least bilingual; some even speak three or more languages. Based on census data, 53.2% of South Africans older than 15 years reported the use of at least two languages in their home in 2011 (Posel & Zeller, 2016). Raising children in multilingual contexts may lead parents to making a variety of decisions and implementing various practices around the language exposure their children receive at home and in educational contexts. These decisions may be influenced by a number of factors, including parents' beliefs about multilingualism, perceived educational and future economic benefits associated with certain languages, the language of instruction used at the educational institution their child attends or will attend in the future, and their own language proficiency, amongst other factors (De Klerk, 2002; Hampton, Rabagliati, Sorace, & Fletcher-Watson, 2017; Jegatheesan, 2011; Posel & Zeller, 2016; Yu, 2013). When a child has a severe communication disability, additional factors (such as perceived learning demands versus perceived child ability as well as availability of communication intervention in various languages) may come into play (Hampton, et al., 2017; Jegatheesan, 2011; Yu, 2013).

With recent studies focusing increasingly on the population of multilingual children with a variety of communication disorders, a growing body of evidence is emerging regarding the effect of exposure to multiple languages on communication development in this population (Drysdale, Meer, & Kagohara, 2015; Soto & Yu, 2014; Yu, 2013, 2018). To date, there is no evidence that children with communication disorders who are naturally exposed to multiple languages in their family environment are disadvantaged, compared to those who are monolingual (Drysdale et al., 2015; Uljarevic, Katsos, Hudry, & Gibson, 2016; Yu, 2013). At the same time, a lack of appropriate intervention services in their first language (L1), coupled with advice from professionals to use one language only (and preferably the majority language[1]), may lead families to change or refrain from using their L1, a practice that can

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[1] The term *majority language* does not necessarily refer to the most frequently spoken language or the home language of most people, but can also refer to the dominant language that carries the most weight in socioeconomic and political status (Grenoble, 2009; Ramaga, 1992). Within the South African context, English is seen as the majority language (Posel & Zeller, 2016).

have negative consequences for family cohesion and identity (Vivian de Klerk, 2002; Jegatheesan, 2011; Yu, 2013, 2018). At present, no study has investigated the language choices and practices of parents of South African children who are raised in multilingual environments, and who use augmentative and alternative communication (AAC).

Family-centred practice implies that service providers are able to build true partnerships with parents and commences with the ability of service providers to truly listen and seek to understand parents' point of view about their child's development and well-being, and the hopes, dreams and concerns they have in relation to their child (Farrell, 2010). Understanding parents' language choices and practices, the reasons for them, as well as parents' concerns and support needs around this topic can assist service providers in becoming sensitive to the issues parents and families face in this regard, thereby preventing the type of top-down professional model of service delivery that prescribes a course of action that may be incompatible with the family's values, needs and priorities. Stakeholder perspectives form one arm of the evidence-based practice (EBP) triangle, with the best current research evidence and clinical expertise forming the other two (Schlosser & Raghavendra, 2004). For this reason it would be important to investigate South African parents' perceptions on their language choices and practices with regard to their children who are raised in multilingual environments who use AAC.

In order to give a background to the study, a review of literature will be given pertaining to (1) multilingualism and the definitions and terms thereof; (2) the South African language context; (3) multilingualism and language development in children with and without communication disorders; (4) parents' perceptions and practices around multilingualism for children with communication disorders; and (5) the rationale for this study.

1.1   Multilingualism: Definitions and terms

In present times, most countries cannot be described as monolingual (Pickl, 2011), given that more than half of the world's population is known to be proficient in at least two languages (Byrd, 2012; Crystal, 2018; Grosjean, 2010; Kohnert, 2013; Louw & Louw, 2007), making these individuals bilingual/multilingual. The terms *bilingualism* and *multilingualism* are often used interchangeably in literature (Grosjean, 2010; Pickl, 2008; Uljarevic et al., 2016). Technically, however, the word *bilingualism* describes an ability to use two languages

proficiently (Chertkow et al., 2010; Lund, Kohlmeier, & Durán, 2017), while multilingualism refers to the ability to use two or more languages (Chertkow et al., 2010). However, Uljarvic, et al. (2016) express that in many clinical, research and educational settings a distinction between multilingualism and bilingualism is not warranted. Therefore, the term *multilingualism* will be used, as defined by Kay-Raining Bird, Genesee and Verhoeven (2016). For this study multilingualism refers to individuals who need or use two or more languages in their daily lives. The emphasis is further placed on language use and exposure, rather than language proficiency, while taking children with CCN into consideration. Table 1 sets out to describe the various terms used in this study.

Table 1 *Definitions of terms used in study*

Term	Definition
Monolingualism	The phenomenon of communicating in only one language.
Multilingualism	The phenomenon of regularly communicating using two or more languages (Chertkow et al., 2010).
Majority Language	The dominant language that carries the most weight in socioeconomic, and political status (Grenoble, 2009; Ramaga, 1992). Within the South African context, English is seen as the majority language (Posel & Zeller, 2016).
Minority Language	The language which is represented least in a community's socio-economic, cultural and political status, relative to the dominant language (Ramaga, 1992).
L1	Referring to the first language learnt, which is usually also the home language (Kay-Raining Bird, Genesee, et al., 2016).
L2	Referring to the second or additional language learnt (Kay-Raining Bird, Genesee, et al., 2016).
Language of Instruction (LoI)	The LoI is the language in an educational situation that is used for teaching. As stipulated by the Revised National Curriculum Statement, the learner's L1 should be used for learning and teaching if and when possible. It is specifically important in the foundation phase while children acquire reading and writing skills (Department of Basic Education, 2011; Kathard, Pascoe, Moonsamy, & Pottas, 2011). Moreover, the *Constitution of the*

Term	Definition
	Republic of South Africa (1996) affords individuals the right to be educated in any of the official languages of their choice, should it be reasonably practicable (De Klerk, 2002a; Evans & Cleghorn, 2014).
Simultaneous multilingualism	The phenomenon of being exposed to two or more languages before the age of three (Kay-Raining Bird, Trudeau, et al., 2016).
Sequential multilingualism	The phenomenon of being exposed to one or more additional language/s after the age of three (Kay-Raining Bird, Trudeau, et al., 2016).

1.2   The South African language context

Language practices in communities (and, by implication, within families) are influenced both by top-town factors (e.g. policy and law pertaining to official language use and language in education, and the allocation of resources to implement these policies) as well as by bottom-up factors (e.g. communities' beliefs about language status, and how they implement or resist language policies) (Webb, 2010). These factors can all play a role in the decisions that parents make with regard to the language practices they implement with their children. The availability of communication intervention and supports in various languages may be an additional consideration for parents of children with communication disorders. Therefore, a brief background of the South African language context (with particular focus on language in education and in communication rehabilitation) is provided here in order to situate the study.

South Africa is a country hallmarked by linguistic and cultural diversity, and South Africans have been described as the Rainbow Nation. During the post-apartheid era, South Africa adopted a language policy which gave official status to 11 languages (De Klerk, 2002a; Posel & Zeller, 2016; *The Constitution of the Republic of South Africa, Act 108 of 1996*, 1996). The African National Congress (ANC) released policy documents (1994) which emphasized that language is an important aspect of thinking and learning and therefore individuals should be afforded the opportunity to learn in the language that facilitates this purpose the best (ANC, 1994; De Klerk, 2002b). *The Constitution of the Republic of South Africa* (1996) furthermore affords individuals the right to be educated in any of the official

languages of their choice, should it be reasonably practicable (De Klerk, 2002a; Evans & Cleghorn, 2014) and constitutionally freed all South African parents to choose which school their child should attend (Evans & Cleghorn, 2014). However, in spite of these policies, English – the L1 of only 9.6% of the population according to the 2011 South African Census (Statistics South Africa, 2012) – is South Africa's majority language and dominates the educational and business spheres (Khokhlova, 2015). This statistic supports the statements by De Klerk (2002b) and Heugh (2001) made more than a decade ago, arguing that the aforementioned policies have done little to increase the status of especially African languages in South Africa in practice.

The majority of learners in the basic education system are educated in English, despite the fact that this is not their L1 (Department of Basic Education, 2011). Top-down factors (such as historical privilege, practicalities and policies on school level) as well as bottom-up factors (such as parental preferences) have been suggested to contribute to this situation (Webb, 2010). De Klerk (2002a) studied the reasons why parents from an isiXhosa language background chose to enrol their children at schools where English was the language of instruction (LoI), and found that they mentioned better education and employment opportunities, the prestige of English, social advantages and geographical proximity, while Evans and Cleghorn (2014) found that a school's reputation, basic resource availability, and offerings of extracurricular sport activities were contributing factors influencing parents from various non-English backgrounds to send their children to a primary school where English was the LoI. Whether or not factors such as these cause speakers to abandon their L1 in favour of English is a matter of debate (Coetzee-Van Rooy, 2012; Kamwangamalu, 2013). Although some authors have proposed that this type of language shift and language loss is observable (De Kadt, 2005; De Klerk, 2002a; Dyers, 2008), others argue that non-English languages are well maintained as spoken languages used in the home and the community, and that there is a rise in multilingualism in South Africa (Evans & Cleghorn, 2014).

1.3 Multilingualism and language development in children with and without communication disorders

Another factor that can influence parental decision-making around language practices with their children is their beliefs about the influence of using various languages on language

development. For this reason, research pertaining to the language development of children with and without communication disorders is briefly reviewed.

Children may be multilingual due to being exposed to more than one language in the home. Alternatively, they may learn additional languages outside of their monolingual home environment, for example, at school or in their community (Yu, 2013). Research has supported the notion of interdependence between the languages that the child learns, with transference of skills between two languages (Verhoeven, 1994). A factor that influences multilingual development is the timing of exposure (Kay-Raining Bird, Trudeau, et al., 2016; Owens, 2012). If a child has been exposed to two or more languages before the age of three, that child is considered to be a simultaneous multilingual, whereas a child exposed to one or more additional language/s after the age of three is considered as acquiring the languages sequentially (Kay-Raining Bird, Trudeau, et al., 2016). A child who is exposed simultaneously to two or more languages with recurrent and meaningful language learning opportunities will typically acquire better proficiency in the additional language/s than a child who is exposed sequentially (Kay-Raining Bird, Trudeau, et al., 2016). However, it is possible for children exposed sequentially to acquire the L2 to a degree of proficiency that is the same as monolingual speakers of that language.

For a child with complex communication needs (CCN), acquiring a second language comes with its own challenges, often different from those experienced by children with typical learning abilities and communication needs. There exists a concern that multilingual opportunities, access and support are limited for children with DD (Kay-Raining Bird, Genesee, et al., 2016). This statement was found to be true in Canada (Kay-Raining Bird, Genesee, et al., 2016; Willms, 2008), the United Kingdom, the Netherlands and the United States (Kay-Raining Bird, Genesee, et al., 2016), where children with DD [including children with specific language impairments (SLI), Autism Spectrum Disorder (ASD) and Down syndrome (DS)] were likely to have less bilingual opportunities. Despite popular belief, children with DD's development in their L1 is not compromised by the introduction of an L2, as found in studies comparing them to monolingual children with DD (de Valenzuela et al., 2016; Kay-Raining Bird, Genesee, et al., 2016; Paradis, 2016). However, service providers such as educators and speech-language therapists (SLTs) are very often unaware of children with DD's ability to become multilingual and consequently do not support multilingual environments for children with DD (de Valenzuela et al., 2016; Jegatheesan, 2011; Paradis,

2016; Yu, 2013). Due to the beliefs service providers may have, which are often not grounded in sound research evidence, they often advise parents to enforce a monolingual environment for their child. Parents trust service providers' advice and may attempt to create a monolingual environment for their child with DD.

Furthermore, it has been found that if a child with DD is exposed to additional languages sequentially, they may not develop their L2 to the same level of proficiency as their L1 (Cleave, Girolametto, Chen, & Johnson, 2010; Kay-Raining Bird, Trudeau, et al., 2016; Kohnert, 2013; Soto & Yu, 2014; Verhoeven, Steenge, & van Balkom, 2011). In addition, Hambly and Fombonne (2011) agree that although this argument holds truth, the timing of multilingual exposure, either sequentially or simultaneously, is not the ultimate factor that affects the multilingual child's L1 abilities. The more frequently a child with DD is exposed to a language, especially if it is the minority language of a multilingual child, the more proficient that child will be in a given language (de Valenzuela et al., 2016; Kay-Raining Bird, Trudeau, et al., 2016). Additionally, when intervention is provided, the best approach has been found to be bilingual intervention. This refers to therapy in which intervention is given in both the L1 and the L2 (Jordaan, 2008). This is especially important in the light of research that found that negligence of an L1 in intervention and education may lead to the weakening or even complete loss of the L1 while a child is acquiring the L2 as a school language (Jordaan, 2008).

The available local and international research focusing on multilingual AAC implementation is fairly limited (Kulkarni & Parmar, 2017; Soto & Yu, 2014; Tönsing, Van Niekerk, Schlünz, & Wilken, 2019), and mostly restricted to anecdotal and case study evidence (Tönsing, et al., 2019). The concern is that not much is known about AAC and multilingualism and how parents make language choices.

Many individuals who are in need of AAC come from diverse cultural and linguistic backgrounds (Soto & Yu, 2014), and the South African context is no exception (Tönsing, van Niekerk, Schlünz, & Wilken, 2018). Yet, not much is known about the provision of AAC services to the multilingual population (Soto & Yu, 2014; Tönsing et al., 2018). Using AAC often implies asymmetry in the input versus the output communication modality, and persons using AAC have been compared to those who are multilingual (Pickl, 2011). Notwithstanding, children who use AAC and who are raised in multilingual environments, may be viewed as multilingual; apart from the language/s used in their home, which may

differ from the language/s used at their schools, these children are faced with learning another mode in which they need to express themselves through AAC (Pickl, 2011). For a child who uses AAC to be able to truly participate and feel a sense of belonging, all languages within the child's environment should be supported by AAC (Soto & Yu, 2014). In a study conducted by (Pickl, 2008), it was found that speech-generating devices (SGDs) mostly made use of the language used at children's schools, regardless of situations where the families did not use the SGD's language naturally. This resulted in families not engaging with the child using their SGD. However, the same study found that using manual signs were more frequently congruent with the languages spoken by the families.

AAC decision making should occur as a collaborative and family-centred approach, whilst understanding the child's L1 communication system dynamics in planning education and intervention and making communication modes and aids recommendations (Pickl, 2011). However, the lack of appropriate AAC techniques and devices that are congruent with or represent the L1, as well as a lack of proficiency in the L1 by service providers (Tönsing et al., 2018) are factors that hinder the implementation of a family-centred approach.

1.4 Parents' perceptions and practices around multilingualism for children with communication disorders

In order to summarise existing literature on parental perspectives and practices around multilingualism in relation to their children who have CCN, a systematic search of the literature was conducted in August 2018 and again in July 2019 to obtain an overview of studies available on caregivers' perceptions on their children with CCN or who use AAC.

The search terms are portrayed in Figure 1

Population		**Issue**		**Outcome**
Caregiver* OR Parent* OR Father* OR Mother*		Multilingual* OR Bilingual*		Perception* OR Opinion* OR Attitude*
AND	**AND**		**AND**	
CCN OR Complex communication needs OR disability* OR Augmentative and alternative communication OR AAC				
NOT deaf*				
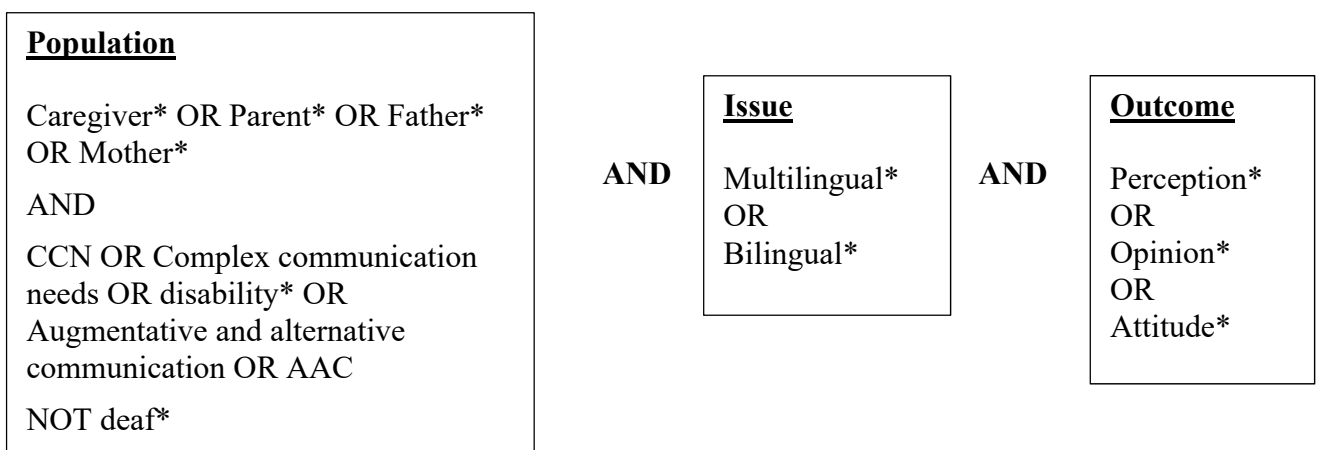
Figure 1 *Search terms*

The search terms were entered via Ebscohost into the following databases:

- Academic Search Complete
- CINAHL
- E-Journals
- ERIC
- Health Source: Consumer
- Health Source Nursing
- Humanities Source
- MasterFILE Premier
- MEDLINE
- PsycARTICLES
- PsycINFO

Limits were set in terms of date (only works between 2006-2019) and publication type (only peer-reviewed journals). The search resulted in 101 hits. After the removal of duplicates, 42 records remained. These were then screened for in- and exclusion according to the following criteria:

- Studies had to be published in English in a peer-reviewed journal between 2006 and 2019.
- Studies had to report on empirical data gathered with respect to the perceptions and practices of parents or caregivers around multilingualism in relation to their children with CCN.
- Excluded were studies about parents or caregivers whose children were deaf. Likewise, studies reporting on the perceptions of service providers (e.g., teachers or speech-language pathologists) were excluded, as were studies that looked at parental perceptions about multilingualism with respect to their children with typical development.
- Studies were not limited with respect to the methodology employed.

After the application of inclusion and exclusion criteria, four studies were found to meet inclusion criteria. A hand search of reference lists and forward citations yielded another two relevant records. All the included records are summarised in Table 2 below.

Table 2

Systematic Literature search results

Study	Main aim	Design	Participants	Procedure	Main Findings
Yu (2013)	To understand the language influences and the effect of the language choices made by mothers of children with ASD.	Qualitative – In depth phenomenological interviews	10 bilingual Chinese-English immigrant mothers whose children have been diagnosed with ASD.	In-depth phenomenological interviews using thematic and narrative analyses were employed.	Mothers perceived multilingualism as causing confusion, a belief often reinforced by service providers. When practices were the most sustainable aligned with families' preferences regarding language patterns.
Yu (2016)	To critically examine language and language use conceptual premises underlying the advice parents receive to speak one language with their children who has been diagnosed as having ASD.	Qualitative – mixed	One multilingual Chinese-English family of a six-year-old with ASD, whose family was committed to speak English with him.	Data collected over 22 visits. Field notes of participant observations, video recording of family interactions and an audio recording of an interview with the mother captured information.	The assumptions held by family members about multilingualism were often inconsistent with their language practices.
Pickl (2011)	To highlight the factors which facilitates communication intervention of children with severe disabilities' in communication development, by obtaining the perceptions of teachers and parents of children with CCN and measures they perceived as supportive.	Qualitative – grounded theory methodology	10 mothers, one father, one grandfather and 24 special education teachers of children with severe communication disorders form non-dominant language backgrunds	Data collection took place via class observations, informal personal conversations, semi-structured interviews, e-mail discussions and memos.	Quality of interactions between parents and teachers delineates effective communication intervention and use of communication aids that is culturally sensitive.
Hampton, Rabagliati, Sorace & Fletcher-Watson (2017)	To explore how multilingual parents of children with ASD and without ASD make decisions about their children's language environment.	Open-ended interview questions	18 multilingual parents with a typically developing child and 17 multilingual parents with a child with ASD.	Recordings of one semi-structured, open-ended interview lasting 60 -120 minutes conducted per parent. Thematic analysis of the data.	Parents expressed there would be potential benefits of multilingualism, but when their children were diagnosed with ASD, they were more often concerned that a multilingual environment would cause confusion.

Study	Main aim	Design	Participants	Procedure	Main Findings
Jegatheesan (2011)	To investigate parents' perspectives with regard to multilingualism of their children with ASD.	Qualitative interviews	Three multilingual South Asian Muslim American immigrant families	One-on-one interviews were conducted with three families	Parents viewed their children's language development differently than most service providers. These families viewed multilingualism as a normal way of life, to which it is essential for their children with ASD to adapt to.
Kay-Raining Bird, Lamond and Holden (2012)	To explore multilingualism in families with a child with ASD.	Quantitative – survey questionnaires with closed and open-ended questions	45 out of 49 responses were included of parents or guardians of children with ASD and who were members of a multilingual family.	A survey could be completed by e-mail, regular mail or through an internet link to an on-line survey. Responses were collected for two months.	Parents reported living in multilingual communities and believed that multilingualism would provide future opportunities. Parents were concerned about whether or not their children with ASD would be able to acquire two languages. It was reported that the children with ASD who were multilingual were acquiring their languages of exposure to different degrees.

Available studies on parents' perceptions regarding multilingualism of children with communication, speech and/or language disorders have largely focused on ASD. Hampton, et al. (2017) interviewed participants to study the perspectives and experiences of bilingual parents of children with and without ASD. They concluded that caregivers of children with ASD are more likely than caregivers of children without disabilities to demonstrate concerns about potential negative consequences of multilingualism; therefore tending to restrict their children's input to one language. It was stated that parents who participated in the study were immigrant families who tended to have been highly educated and were thus likely from a higher socio-economic group. Jegatheesan (2011) studied the perspectives of three South Asian Muslim immigrant parents whose children were diagnosed with ASD, in multilingual contexts. The findings demonstrated that parents believed that engaging in multilingual contexts assisted their children to enrich their relationships. Additionally, parents elaborated on their difficulties in receiving support from AAC service providers to maintain their L1. Yu (2013; 2016) reported on interviews conducted that studied the perspectives of minority-language, Chinese mothers of children with ASD. Yu (2013) studied 10 mothers' perspectives; while Yu (2016) studied the interaction between a monolingual six-year-old boy with ASD and his multilingual family, who mainly attempted to use only the majority language (English), instead of their L1 (Chinese) to interact with him. Pickl (2011) explored the factors which facilitate communication intervention of children with severe communication disabilities. This study explored the perceptions of 24 teachers and 12 parents, as well as the measures they viewed as supportive. It was reported that the quality of interactions between parents and teachers is a contributing factor to effective culturally sensitive communication intervention and use of communication aids. Kay-Raining Bird, Lamond and Holden (2012) explore multilingualism in families with a child with ASD. Parents of these families reported living in multilingual communities. They reported believing that multilingualism would provide future opportunities for their children with ASD. These parents often reported being concerned about whether or not their children with ASD would be able to acquire two languages. Parents whose children with ASD were raised as multilingual reported that their children were acquiring their languages of exposure to different degrees.

Despite their children's CCN, resulting from ASD, it was clear that the parents interviewed and surveyed in these studies wanted to see their children thrive in the future and

believed that language, usually the majority language, was the key. Regarding language choices and multilingualism, the parents in these studies did not all have the same views – some wanted their children to be raised only in one language (usually the dominant language of the environment) for fear of two languages being too difficult to acquire, while others believed their children should be raised multilingually to allow for more opportunities. Many of the parents in these studies only used a majority language with their children, while abstaining from their L1. Most frequently parents did so following professionals' advice, with a sense of agreement that it would be best for their children to use solely the majority language (Hampton et al., 2017; Jegatheesan, 2011; Kay-Raining Bird, Trudeau, et al., 2016; Kay Raining Bird, Lamond, & Holden, 2012; Yu, 2013, 2016). Kay-Raining Bird, et al. (2012), Soto and Yu (2014) and Yu (2013) further highlight parents' fear of acquiring two languages being more difficult than acquiring only one, consequentially delaying and interfering with the acquisition of not only the second language, but also the L1. The rationale behind this reasoning is often that learning two languages is more demanding than learning one, which then in turn could exceed the child with SLI's capacity for learning and cause further confusion and delays (Kohnert, 2013; Yu, 2016) when, in fact, no evidence supports this assumption (Soto & Yu, 2014). Parents have additionally expressed concerns that the majority of special education services are only available in the majority language (Yu, 2013).

A similar pattern could be seen in the various studies; in that parents reported feeling a sense of loss and shortcomings in their relationship and interactions when they chose to speak only the majority language to their children (Hampton et al., 2017; Jegatheesan, 2011; Yu, 2013, 2016). Many parents in these studies expressed feeling uncomfortable or incapable of speaking a different language than their L1 to their children and ultimately avoiding discussions with their children with CCN altogether. Concerns seem to be somewhat universal in that they felt that this restriction limited their child's social interactions with their family members, friends and the general community (De Klerk, 2002; Hambly & Fombonne, 2012; Hampton, et al., 2017; Jegatheesan, 2011; Kay-Raining Bird, Trudeau, et al., 2016; Kremer-Sadlik, 2004; Yu, 2013, 2016). Essentially, when parents stated the negative consequences of choosing to speak only the majority language, the concerns mainly pointed strongly to social isolation and detachment. Kremer-Sadlik (2004) additionally observed some children with CCN being excluded from family conversations being conducted in their L1 when the children no longer understood their L1. Parents seemed to view their children's

language development from a specific cultural point of view (Jegatheesan, 2011), emphasising the need to explore South African families' cultural perspectives while simultaneously discussing the additional perspectives when these children require AAC to communicate.

In line with the aforementioned, and the reasons stated above, Hambly and Fombonne (2011), Pickl (2011), Soto and Yu (2014) and Yu (2016) all agree on the importance of service providers to not discourage or oppose parents' decision to maintain multilingual environments or introduce an additional language. They further suggest that service providers should not recommend monolingualism or multilingualism without first exploring the family's dynamics. Yu (2016) further stressed that the mother she had interviewed for this particular study shared her distress, caused by service providers' advice and the power dynamic imbalance which existed between them and herself. The power dynamic between them played a role in her decision to choose monolingualism and thus employing the majority language with her son. Yu (2016) further highlights the importance of service providers to truly try to understand each family of a child with CCN as a whole and to explore their beliefs, priorities and concerns regarding language choice.

1.5   Rationale for the current study

This study aims to extend the research on parents' perspectives, focusing on the South African population, with emphasis on this country's unique language environment. The focus in this study will also be on children using AAC. Understanding how parents' language decisions are influenced in the South African context may aid in understanding how and why parents make certain decisions with regard to the language practices they implement with their children who use AAC. Ultimately, the aim is to shed some light on how AAC service providers could best support families from multilingual backgrounds with children who use AAC, from an EBP approach that takes the family perspective into account.

2. METHODOLOGY

2.1 Aims

2.1.1 Main aim

The main aim of the study was to investigate South African parents' perceptions on their language choices and practices with regard to their children aged 5-12 years who use AAC and who are regularly exposed to multiple languages.

2.1.2 Sub-aims

The sub-aims of the study build on those identified by Yu (2013) and Hampton et al. (2017) and are set out as follows:

i. To describe parents' current language choices and practices with their children who use AAC;
ii. To describe the factors that parents consider to be influencing their language choices and practices with their children who use AAC;
iii. To describe parents' perceptions of the outcomes of their language choices and practices with their children who use AAC.

2.2 Research design and phases

For this study, a qualitative design employing semi-structured interviews was used. Semi-structured interviews are a suitable approach to study individuals' perceptions on sensitive issues (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). The open-ended nature of semi-structured interviews allows for exploration of the topic, ultimately permitting the researcher to study, explore and understand the perspectives of the parents (McMillan & Schumacher, 2014; Yu, 2013). Similar to the interviews conducted by Yu (2013) and Hampton et al. (2017), interviews in this study had general themes and they were loosely guided by an interview guide (see Appendix A). In this way, the researcher was able to follow up on specific comments and contributions of the participants, remaining responsive to the topics they raised. This ensured that the perceptions of the participants were fully captured and reduced the interviewer's own influence on the data generated (McMillan & Schumacher, 2014). The phases of the study are illustrated in Figure 2.
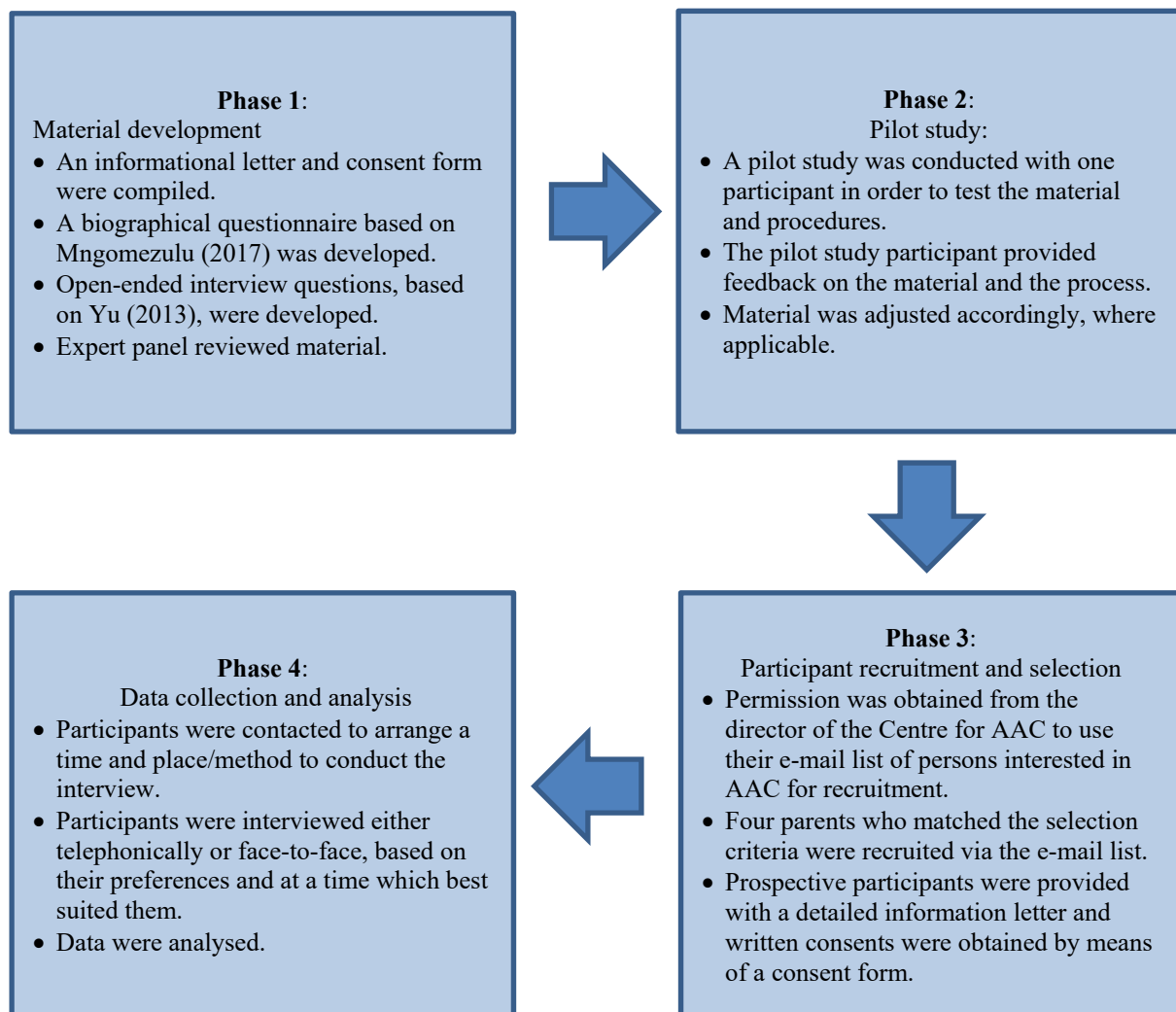
Figure 2 *Phases of the study.*

2.3 Pilot study

In order to test the suitability of the proposed procedures, one pilot interview was conducted. One parent, personally known to the researcher, was approached to request her participation. This parent completed all the selection criteria as stipulated for the main study (see Table 4). The parent was interviewed face-to-face at a private location, and the interviewer loosely followed the interview script. The interview was recorded using the Otter Voice Notes application[2] loaded onto a Samsung Galaxy S2 Tablet. An additional recording was made on the Audio Recorder application[3], loaded onto a Huawei P10 cell phone as a back-up. The Otter Voice Note application was used to make an automatic transcription of

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[2] Otter Voice Notes is a product of AISense Inc., 5150 W El Camino Real Suite A-22 Los Altos, CA 94022, www.aisense.com
[3] Audio Recorder application is a product of Splend Apps, www.splendapps.com

the interview, and the transcription accuracy was checked by the researcher by listening to the audio recording and comparing it with the generated transcript, making corrections where necessary. After the interview, the pilot participant was asked about the appropriateness of the questions asked and the procedures used, and whether any additional questions should be asked to fully explore the topic. The transcript was analysed using the proposed method (see Section 2.6.4).

Table 3 reflects the aims, materials used, procedures, results and subsequent recommendations of the pilot study.

Table 3

Pilot Study Aims, Materials, Procedures, Results and Recommendations

Aim	Materials	Procedures	Results	Recommendations
To determine if the parent information and consent letter were clear	Parent information and consent letter (see Appendix C)	The participant was asked to read the parent information letter and complete the consent form (see Appendix C). The participant was asked to provide feedback on both forms.	The participant reported being able to understand the information and consent letter and described it as being clear and easy to understand.	No changes required
To determine the clarity, appropriateness and comprehensiveness of the biographical questionnaire	Parent biographical questionnaire (see Appendix D)	The participant was asked to provide feedback and recommendations related to the biographical questionnaire after completing the questionnaire (see Appendix D).	The participant reported that the question about the languages other members of their household speak to their child was unclear. She was not sure whether they should include also employees and individuals who visit often.	The question was restructured to include an explanation of who might be included, namely people who regularly interact with their child during a typical week, outside of the school he/she attends. Examples were further listed to include parents, a nanny, brothers, sisters or grandparents.
To determine the completeness and appropriateness of the interview guide	Parent interview guide (see Appendix A)	The parent interview guide (see Appendix A) was used to guide the pilot interview, which was conducted with the pilot participant. Open-ended questions were asked, loosely guided by the interview guide. The participant was asked if she had recommendations or anything to add, and she was encouraged to add any information deemed necessary. After the interview, the participant was asked questions regarding the appropriateness and completeness of the interview guide.	The participant gave positive feedback on the interview and had no recommendations. The interview went seemingly smoothly and no areas of change seemed necessary.	No changes required.
To determine if the audio recorders used captured the interview effectively	Two Audio Recorders (cell phone applications)	Two devices with Audio Recording applications were used to record the interview. The first was the Otter Voice Notes application uploaded on a Samsung tablet and the second was the Audio	The Otter Voice Notes application was more successful in recording the researcher's voice than the participant's voice. When the Otter Voice Notes application did not record parts of the conversation	The devices should be directed more towards the participant during the interview to record their experiences with more accuracy. With the following interviews, the Otter Voice Notes and The Audio Recorder

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Aim	Materials	Procedures	Results	Recommendations
		Recorder application, which served as a back-up.	accurately, the Audio Recorder application was used to fill in the unclear parts successfully. The Transcribe Player was installed additionally and utilised which was very effective in the process of transcribing the data. The audio recording from the Audio Recorder application was exported to the Transcribe Player application to aid the transcription process.	application will be used to capture and transcribe data.
To determine if the Otter Voice Notes application is an effective tool to transcribe the recorded information	The Otter Voice Notes application, computer, earphones, flash drive	This application records speech as a sound file and also automatically transcribes English recordings into a text file on the application, which were exported into Word to be edited. The audio recordings and transcriptions were transferred via computer onto a flash drive. To ensure that the recording was transcribed correctly, the researcher listened to recordings using earphones and compared the recording to the transcription.	The application was more successful in transcribing the researcher's response, than the participant's.	Since the participant's message is of the highest importance, the devices will be placed slightly higher, with the microphone facing the participant's mouth optimal recording and transcribing accuracy. Each transcript will be fully checked for accuracy, before calculating the percentage of agreement.
To determine the reliability of the checked transcript	Computer with Microsoft Word, earphones, flash drive	A second transcriber listened to and transcribed a proportion (20%) of the recording into Word. The percentage of agreement of the second transcription, compared to the original, was calculated by dividing all agreements by the sum of agreements and disagreements (the latter were omissions, additions or differently transcribed words).	The percentage of agreement was calculated as 98.14%	The original transcription was deemed accurate. No changes required.
To determine whether the data collected are amenable to an inductive thematic	Printed text file, Microsoft Word, Microsoft Excel, computer	Thematic analysis was conducted using the first four of the six phases set out by Braun and Clarke (2006):	A thematic analysis was conducted, through which provisional codes and themes were captured.	No changes needed.

Aim	Materials	Procedures	Results	Recommendations
analysis that can lead to answering the research question		1. Rough perusal of data in printed text file format, while making notes of the initial ideas and impressions. 2. First coding cycle, by generating codes and identifying and interpreting key concepts. At the end of this process, the text portions and respective codes were transferred to an Excel sheet. 3. Rating codes in terms of relevance to the study and to identify themes which arise in attempting to explore the participant's perceptions. 4. Theme reviewing to establish the themes' quality and relevance. These steps were conducted independently by the student and the supervisor. A meeting was then held to discuss the coding and provisional themes and reach consensus.		

2.4 Participants

The participants were identified by using purposive sampling; participants with first-hand experience of the topic were selected, ensuring information-rich discussions. In order to be included in the study, participants had to meet the selection criteria as set out in Table 4.

Table 4

Participant Selection Criteria

Criterion	Justification	Measure used
Parent of a child who:		
• **is aged between 5-12 years**	Typically, children within this age range will have a fairly established mode of communication (Louw & Louw, 2007; Nelson, 2010; Owens, 2012). Parents would most likely have received advice about their language practices. Children in this age group are also supposed to start participating in formal education, although this is not always the case for children with severe disabilities (Human Rights Watch, 2015).	Recruitment e-mail and follow-up phone call
• **uses AAC**	The aim of the study was to investigate South African parents' perceptions on their language choices and practices with regard to their children who use AAC.	Recruitment e-mail and follow-up phone call
• **has been exposed regularly to more than one language in face-to-face interactions**	This study aimed to determine the perceptions of parents about language choices and practices, specifically in relation to their children who have been exposed regularly to multiple languages in face-to-face interactions.	Recruitment e-mail and follow-up phone call
Parent who is proficient in spoken English	The researcher conducted the interviews in English as this is a language she is proficient in.	Recruitment e-mail and follow-up phone call

Once the Ethics Board of the Faculty of Humanities, University of Pretoria had granted approval for the study to be conducted (see Appendix F), permission was sought from the Director of the Centre for AAC in writing to use an e-mail list (administrated by the Centre) for persons interested in AAC for recruitment of participants (see Appendix E). Once permission had been granted, a recruitment e-mail with basic information about the study was sent to the list (see Appendix C) with a link to more detailed information letter and consent form online on Google Forms (see Appendix D), as well as the opportunity to send a contact request to the researcher for more information. Consent forms were available as a Word document, as well as online on Google forms. Parents were able to choose which method would suit them the best. A biographical questionnaire was also provided for completion by all participants who consented to take part in the study (see Appendix D).

The term 'parent' rather than 'caregiver' was used, since caregivers (such as a grandmother, who may be a primary caregiver), in spite of spending a lot of time with the child, may not have specific decision-making power concerning the child's upbringing (Umemura, Jacobvitz, Messina, & Hazen, 2013).

A total of six prospective participants responded by completing the consent form for the main study as participants. However, only four of these matched the selection criteria (see Table 4). Additionally, the pilot study participant was included into the main study as the participant met the selection criteria and the data obtained were usable. In addition to meeting these selection criteria, additional biographical details of the parents and their children were collected via a biographical questionnaire for descriptive purposes. A description of all participants is provided in Table 5. All children were aged between 5-9 years.

Table 5

Description of Participants

	Participant description				Child's characteristics							
Parti-cipant ID	Level of education	Languages participant speaks	Parti-cipant's strongest language	Relation-ship to the child	Age, Gender and diagnosis	Child's methods of communi-cation	Language exposure of child at home[a]	Language of child's education or care facility	Language of child's at therapy services	Language exposed to on radio	Language exposed to on television	Language of electronic devices used by child
P1	Post-graduate degree	Afrikaans, English, Sepedi	Afrikaans	Mother	8 yrs; F Genetic Syndrome	Gestures, pointing, facial expressions, sounds, communication board, SGD, sign from sign language and idiosyncratic signs.	English, some Afrikaans	English	English	Afrikaans, English	English	English
P2	Tertiary degree	Afrikaans, English	Afrikaans	Mother	9 yrs; F Unknown genetic disorder	Gestures, pointing, facial expressions, sounds, signs from sign language and Grid player.	Afrikaans and English	English	Mostly English, some Afrikaans	English	English	English
P3	Tertiary degree	Afrikaans, English	Afrikaans	Father	7 yrs; F ASD	Gestures, pointing, facial expressions, eye pointing, sounds, signs from sign	English	English	English	Not applicable	English	English

	Participant description				Child's characteristics							
Parti-cipant ID	Level of education	Languages participant speaks	Parti-cipant's strongest language	Relation-ship to the child	Age, Gender and diagnosis	Child's methods of communi-cation	Language exposure of child at home[a]	Language of child's education or care facility	Language of child's at therapy services	Language exposed to on radio	Language exposed to on television	Language of electronic devices used by child
						language and Grid player.						
P4	Tertiary degree	Sepedi	Sepedi	Mother	5 yrs; ASD and Attention deficit and Hyper-activity Disorder (ADHD)	Gestures and pointing.	Sepedi and English	English	No therapy received	English	English	English
P5	Grade 12/ National Senior Certificate	English, Southern Sotho, Northern Sotho, Setswana	Southern Sotho	Father	8 yrs; Male ASD	Gestures, pointing, eye pointing and spoken words	English	English	English, Some Sotho	Child does not listen to radio	English	English

[a] The information is reported as per completed by the parent on the parent questionnaire. More nuanced information on this emerged during the interviews.

2.5   Materials and equipment

2.5.1 Materials used for providing information and obtaining consent

A letter of request (see Appendix E) was drafted to request permission from the Director of the Centre for AAC to utilise their e-mail list for the recruitment of participants. The letter of request stated the rationale, procedure, risk and benefits, and ethical principles of the study, as well as who would have access to the results of the study. The Director of the Centre for AAC granted permission and the data base was used to recruit prospective participants.

Upon receiving permission to utilise their e-mail list, recruitment e-mails were sent (see Appendix B) to prospective participants, with a link to an online information letter and consent form (see Appendix C). The information letter described the aim of the study, accompanied by a description of the procedure to the participants, as well as their rights and the potential benefits and risks of participation. The information and consent forms (see Appendix C) were compiled using the guidelines as set out in McMillan and Schumacher (2014). All documents and forms sent to prospective participants were compiled in English. English is regarded as the lingua franca in South Africa (Khokhlova, 2015), even though it is the L1 of only 9.6% of South Africans (Statistics South Africa, 2012). Since the language of communication used on the e-mail list is English, it is reasonable to assume that this method of recruitment only targeted parents who are literate in English.

2.5.2 Biographical Questionnaire

A biographical questionnaire was compiled in order to gather information about selection and descriptive criteria (see Appendix D). The biographical was compiled using the biographical questionnaire by Mngomezulu (2017) as a basis. Within the biographical questionnaire, questions regarding participants' qualifications and occupations were asked. Parents' educational and professional backgrounds may well influence their views about child development and, in particular, language development (Pace, Luo, Hirsh-Pasek, & Golinkoff, 2017). Therefore, these aspects were included in the questionnaire to describe the participant sample more comprehensively.

The biographical questionnaire was altered according to input received from an expert panel and the pilot study participant. Five experts in AAC (four SLTs and one parent of a child using AAC), all of which has experience in AAC and multilingualism, formed part of the expert panel. The members of the expert panel were each given a hard copy of the biographical questionnaire. They were asked to make suggestions, either written on the biographical questionnaire or verbally discussed. The expert panel suggested simplifying professional jargon words, whereas the pilot study participant suggested that two tables seemed to be similar. The biographical questionnaire was reviewed where all words viewed as jargon were simplified and the two tables were merged accordingly to form one comprehensive table (see Appendix D).

2.5.3 Semi-structured interview guide

The parent interview guide used in researching perspectives of minority-language mothers of children with ASD, developed by Yu (2013), was utilised as a starting point in compiling the open-ended interview questions (see Appendix A). Questions were amended with the South African population and context in mind. Questions were also reduced, since the current project is of a much smaller scale than that of Yu (2013). The research questions used in other studies concerned with the topic of parent's perspectives and experiences of bilingualism for children with developmental disabilities (Hampton et al., 2017) and the perspective of South Asian Muslim immigrant parents on raising a child with communication disorders in multilingual contexts (Jegatheesan, 2011) were also considered in the development of the interview guide. For additional trustworthiness of the interview guide, the same expert panel members who had reviewed the biographical questionnaire were asked to review the interview guide. Additionally, the pilot participant was also asked to provide input on the interview guide. The expert panel referred to words which could be simplified to aid understanding. All suggested words were amended. The pilot participants had no further suggestions.

2.5.4 Equipment

Two audio recorders (cell phone and tablet with specific applications) were used to record the face-to-face pilot interview. A Samsung Galaxy S2 Tablet had the Otter Voice Notes application loaded which was used as the main recorder. This application records speech as a sound file and also automatically transcribes (English) recordings into a text file.

The second device was a Huawei P10 cell phone that had the Audio Recorder application loaded which was used for an additional recording. The Otter Voice Notes application could not be used to record telephonic conversations. Upon testing this application, it was found that it could not capture what participants said over the phone. Therefore, for the remaining interviews, which were conducted telephonically, the Call Recorder application[4] was installed on the Huawei P10 cell phone and used during all telephonic interviews. This application records and saves all calls made automatically on the device used. As telephonic interviews cannot be recorded through two devices, only one recording could be made. After each call, the recording of each interview was saved on a flash drive. An HP 250 G5 Notebook PC laptop and a flash drive were used to listen to and store the audio recordings and checking and storing the transcriptions, as well as for processing the data using Microsoft Excel. Polaroid headphones were used to block out environmental sounds whilst transcribing data.

2.6 Procedures

2.6.1 General procedures

The University of Pretoria, Ethics Board of the Faculty of Humanities, granted approval for the study to be conducted (see Appendix F). The necessary permission to utilise the data base for the recruitment of participants was obtained from the Director of the Centre for AAC (see Appendix E).

2.6.2 Data collection

Prospective participants were sent an e-mail with basic information about the study, as well as a link to a more detailed information letter stating the rationale, procedures, benefits, risks and rights relating to the study. A consent form was also provided under the link, with a request to provided details of preferred methods and times during which the researcher could contact an interested parent. Prospective participants were provided with a biographical questionnaire (see Appendix D) via e-mail or via a link to an online form. They were asked to complete the questionnaire to ensure they meet all the selection criteria and also for gathering additional descriptive data. Once the questionnaire has been received back

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[4] The Call Recorder application, V1.9.6-201909201909

and ensuring that the potential participant meets all the selection criteria, the researcher contacted the participants to arrange a time and method (telephonic, face-to-face. Alternatively, she used an internet communication application/platform) that would suit them to conduct the interview, as well as answering any questions they may have had and providing additional relevant information.

Prior to the interviews, participants were reminded that they may choose to decline to answer any question and may withdraw from the study at any time, without explanation and without any negative consequences. The first (pilot) interview was conducted face-to-face (as described in Section 2.3). All remaining interviews were conducted telephonically. Apart from the communication method used, interviews conducted with the participants followed comparable procedures. Interviews took between 30 to 70 minutes to conduct. The interview was guided by a set of mostly open-ended questions (see Appendix A). During the face-to-face interview, two audio recordings were made – one as the main recording and the other as a backup. Only one recording could be made during telephonic interviews.

2.6.3 Data transcription and analysis

Data from the biographical questionnaires were coded and entered into Excel. Semi-structured interviews were transcribed, using either the Otter Voice Note application for the face-to-face pilot interview or transcribed verbatim by listening to the Call Recorder application recordings for telephonic interviews. Transcriptions were then checked for accuracy by the researcher. In this process all personal names mentioned in the recording were replaced by codes in the transcripts to keep participants' information confidential. To facilitate clarity of responses, interjections (such as 'hmmmm' and 'uhm'), fillers (such as 'you know') and false starts or word and part-word repetitions were removed. While doing this, it was ensured that the meaning remained the same. Italicised text was added in parentheses by the researcher to increase intelligibility or replace identifying information.

Inductive thematic analysis was used as it is most consistent with the exploratory and descriptive nature of this study. Thematic analysis further assisted finding similar themes which arose in the various interviews. The thematic analysis was guided by the six phases of thematic analysis as described in Braun and Clarke (2006) and Nowell, Norris, White and Moules (2017). In the first phase, the data were perused thoroughly. The transcripts were reread whilst making notes of the initial ideas and impressions. In the second phase, the first

coding cycle (Saldana, 2013) took place where codes were generated and key concepts were identified and interpreted. The third phase entailed rating the codes in terms of relevance to the study. Additionally they were used to identify themes which arose, attempting to explore parents' perceptions. A review of the themes was the fourth phase, establishing the themes' quality and relevance to the study. In the fifth phase, a specific contribution of each theme was identified to distinguish the themes from one another; attempting to refine the specifics of each theme and generating theme names and definitions. Using the provisional coding scheme, a second cycle of coding was conducted on the data by the researcher. The supervisor checked and made suggestions regarding amendments to the coding on all the transcripts. The researcher then made a final decision about the coding. The last phases entailed the final analysis. This assisted in relating the analysis to the research question and ensured the aims of the study has been met.

2.6.4 Trustworthiness

Several steps were taken to ensure the trustworthiness of the study. The open-ended interview questions were developed by using Yu's (2013) interview guide as a basis. Research questions set out by Hampton, et al. (2017) and Jegatheesan (2011) were considered additionally in developing the interview guide. Using these as guidelines, questions were slightly amended to reflect the South African context. Examples of the amendments made included removing immigration questions and converting question based on the United States of America to the South African context. In compiling the biographical questionnaire, the biographical questionnaire of Mngomezulu (2017) was used as a basis, adding educational and professional background questions, which allowed the opportunity to describe the participants' criteria more adequately in order to provide a better understanding of their answers and situation. In ensuring the trustworthiness of the interview guide and the biographical questionnaire, an expert panel also provided input, as did the pilot participant.

The initial aim was to audio recorded all interviews using two recorders, and also automatically transcribe them using the Otter Voice Note application. However, this was only done for the face-to-face interview (see Section 2.6.3); the telephonic interviews could only be recorded once and were transcribed by the researcher and research assistant. To ensure all recordings were transcribed correctly, the researcher listened to the recording using earphones and compared the recordings to the transcriptions. All recordings were checked after the initial transcriptions and errors had been corrected. After the researcher had

corrected the transcriptions, a proportion of 20% per recording was transcribed independently by a second transcriber, and the reliability of the transcriptions was estimated by calculating the percentage of agreement (McMillan & Schumacher, 2014). The following formula was utilised to calculate the percentage of word-by-word agreement:

$$\frac{\text{Agreements}}{\text{Agreements} + \text{disagreements (additions} + \text{omissions} + \text{differences)}} \times 100$$

The percentage of agreement was calculated to be 92.2%. All disagreements were examined, compared and corrected, where applicable.

Trustworthiness of the coding was enhanced by following the six phases as outlined by Braun and Clarke (2006) and Nowell, Norris, White, and Moules (2017). By using two cycles of coding interspersed with the development of preliminary themes, the rigor with which the coding was done was enhanced. Consultation with the supervisor during each phase also further enhanced the trustworthiness of the coding procedure (Saldana, 2013)

As an additional measure of trustworthiness, member checking formed part of the process (McMillan & Schumacher, 2014). Initially, the aim was that verbatim transcripts be sent to participants. However, Carlson (2010) warns of the traps of verbatim transcript member checking, where participants become so concerned with their grammar mistakes, interjections, pauses or answers that they became self-conscious, to the point where they may withdraw, self-correct their grammatical mistakes and change their answers up to the point where the content may no longer be the same. For this reason, synthesised member checking (SMC) was explored as a method of member checking.

Coded transcripts of each interview were summarised by using (SMC) as a method (Birt, Scott, Cavers, Campbell & Walter, 2016). SMC entails a sequenced five-step process. Step one includes preparing a synthesised summary from the emerging themes as well as including interview data quotes which exhibited the themes. Step two entailed ensuring participants were eligible to receive the SMC report in terms of health status and contact details; this ethically reduces participant's risk of harm. In this study, participants had good health conditions, and no concerns were noted. Participants were e-mailed using the e-mail addresses that they had listed and had been contacted on previously. Step three involved sending out the SMC report with a cover letter, asking the participants to read the summary and comment on whether it matches the participant's experience and to ask if they would like

to add, change or remove anything. Step four is the recording of the responses and added data. Three of the five participants responded. No changes were requested and participants expressed their satisfaction with the summary contents. The final step, step five, looks at integrating any additional finding and testing disconfirming cases. Step five was not necessary in this study.

2.7   Ethical issues

As this study conducted research on human participants, the study abided by ethical principles (McMillan & Schumacher, 2014).

The study provided full disclosure, without deception, to the participants prior to obtaining informed consent. Each potential participant was given an information letter providing an explanation of the study and they were informed that participation is voluntary and further reassured that no negative consequences will follow if they choose not to participate. Potential participants were informed that they had the right to decline answering questions and had the opportunity to terminate the participation at any time without any consequences to them and without providing a reason.

Letters were written in English equivalent to a 10th grade level of difficulty and only participants who provided written consent were included in the study. Within the information letter, all applicable informational points listed by Johnson and Christensen (2008) were included. The informational points aimed to describe: the purpose of the study; procedural description and estimated length of time needed; possible risks or discomforts that may have been encountered; research benefits; the extent of confidentiality; the names and numbers of people who may have been contacted regarding the study; and that participation was voluntary and that participants may refuse to participate at any time without any consequences.

Raw data will be stored as both hard copy and in electronic format at the University of Pretoria in the AAC Centre for 15 years and was used for research and writing a scientific paper. All results were made available for any interested participants. However, none of the participants' identities was or will be revealed. To protect the privacy of the participants, the identities of all participants were kept confidential. Pseudonyms were given to each participant to ensure their identity remains protected. Only the researcher, research assistant

and supervisor looked at the information given by participants during the interview and on the questionnaire.

The study did not benefit the participants directly, nor did it pose any risks to the participants. However, the study aimed to provide a better understanding of the South African parents' perceptions on their language choices and practices with regard to their children who make use of AAC and are raised in a multilingual environment. All participants were made aware that they may decline to answer any questions should they so wish. Participants were well informed according to the ethical guidelines as mentioned above.

3.   RESULTS

The results from the thematic analysis of the data are presented in this section. The circumstances of each participant differed; however, there were four themes central to the findings, namely (a) language practices and choices; (b) influences on language practices and choices; (c) consequences of language practices and choices; and (d) feelings and beliefs. To provide readers with an overview, the four themes with definitions as well as subthemes and examples of codes assigned are provided (see Appendix G).

3.1   Theme 1: Language practices and choices

In the first theme, all the participants discussed the languages the children were exposed to and used in the home, at school and in therapy, and the choices they as parents made in this regard. All participants contributed to this theme. Three subthemes were identified under this theme, namely (a) current practices; (b) change in practice; and (c) wishes and ideals.

3.1.1 Current practices

Four of the five participants who discussed their present-day situation decided to speak mainly or only English to their child, although this was not their strongest language. All the participants in this study spoke English as an additional language in addition to their L1, while only one participant's spouse grew up with English as her L1. Another participant's spouse grew up Irish, but after moving to South Africa several years ago he seldom spoke

Irish and spoke mostly English. One participant chose to raise her child bilingually in Afrikaans and English, although her and her spouse's L1 is Afrikaans. Although most participants changed the language spoken to the child with CCN to (mainly) English, the initial L1 was still spoken in all the households, for example, to other children and/or spouses.

> *So therefore, because (child's name) likes singing and signing I've started exposing her to Afrikaans as well, from a very young age. Uhm, like with Carike Keuzenkamp songs and videos, and also Apps that I've downloaded on my iPad. And then obviously my family's Afrikaans speaking. And so maybe Afrikaans songs, but it's predominantly English.* **[P1]**

The initial L1 of these families, prior to converting to English, included Afrikaans, Sepedi, Sesotho and Setswana. Parents also commented that language use in the home entailed code switching and code mixing.

> *But predominantly, that's how we now speak anywhere in the house and in the surrounding area, we always mix in English and Sesotho in a way.* **[P5]**

All participants stated that their children's schools were mostly English-medium schools; some had additional second-language exposure at school. Additional languages often came from teachers, facilitators and children speaking languages other than English.

> *Well we know it's an English medium school, so it's fine. But, there are a lot of children that speak maybe Sesotho or Afrikaans and some of the teachers can speak Afrikaans, so they're happy to speak to them Afrikaans if there's something they don't understand. I think the teaching, the medium of the teaching is obviously English.* **[P1]**

All participants, except one, were currently or had previously received speech-language therapy and/or AAC intervention. Of the participant's children who received these therapy services, all received therapy mostly in English, with only some additional language exposure.

> *And the first one (therapist) was an independent one, second one was at her first school, and the third one now at her new school. So, we continued with the continuity*

of keeping it English ... and there (at the school) she received language in English, everybody there was English ... she's never received any therapy in Afrikaans. The first speech therapy session was in English and it's been like that ever since. **[P3]**

3.1.2 Change in practice

During the interviews, it became apparent that parental choices and practices around language use were not immutable, but evolved and changed over time. The child's diagnosis was often the initial impetus for changing to English.

Yes, and she was raised Afrikaans up until the age of three, I would say, when she got her diagnosis of autism and we decided that we would uh, rather stick to English. **[P1]**

However, participants also mentioned that a complete change to English was in many cases too challenging to sustain. This led them to incorporating both the L1 and English.

We did in the beginning speak English only at home but we found that not possible. Uh, it's just not possible to speak English three o'clock in the morning when you're half groggy to your wife. **[P3]**

So I said I'll mix a little, instead of just speaking English. So I said I'll speak in English because we want to help him go to school. But when were at home, in an environment when you are relaxing at home, speak whatever language you want to speak. And then eventually he will adapt. **[P5]**

One participant observed that English was gradually used more and more in the home.

It's (English) actually slowly turning the language that we speak at home. **[P4]**

The parent raising her child bilingually noted that she gave progressively less scaffolding in Afrikaans.

If it's an English book we will have a look at the English book, and as I said when she was small I usually read through English but immediately translate the message or the story. Now I don't do that anymore. I just read the English if it's English and I read the Afrikaans when it's Afrikaans. **[P2]**

3.1.3 Wishes and ideals

Parents also expressed the wishes and ideals around language practices, including what they would ideally have wanted for their children or what they would want in the future. Three parents who had decided to go the English route did express that they would have liked to raise their children in the L1, or bilingually.

> *If we had all resources available in Afrikaans I think … it would've been nice for her to speak Afrikaans at home.* **[P3]**

> *I actually, myself, wanted (child's name) to learn in Sepedi.* **[P4]**

> *Like I said, special needs I wouldn't change anything but if she was typically developed I would have loved to raise her bilingually.* **[P1]**

In spite of these ideals, parents also expressed their beliefs that their choice for introducing English was justified and in their child's best interest. One parent added that she would have liked to stay in an English community to help her child learn English with more ease, without burdening him with the pressure of communicating with the community in another language than English.

> *Because the world is English,… we would've still stuck to English and raised her English.* **[P3]**

> *The only thing that he needs to be able to do is to communicate in the English language. So that is key for us.* **[P5]**

> *Because of the setting, the place we are staying now, and the community. So, me introducing English to children, I think it should've been me staying in an English community. So that they at least have the foundation of one language. Then they wouldn't have struggled through this whole process.* **[P4]**

The parent who chose to go the bilingual route indicated that this had been her goal all along, while also foregrounding the importance of English.

> *I've always said that although I am mainly an Afrikaans-speaking person and grew up being Afrikaans, I always said my kids will go the English route.* **[P2]**

Two parents expressed that they wished that their children could be bilingual in speaking their L1 as well as English in the future.

But yes for now, English all the way. Then the other languages. Maybe he can learn Sotho because of where he's from and he can learn other languages eventually. **[P5]**

… actually I prefer him understanding all the languages. **[P4]**

3.2 Theme 2: Influences on language practices and choices

This theme is concerned with factors that parents saw as influencing their language practices and choices. All participants contributed to this theme. A total of five subthemes were identified, namely (a) advice and information received; (c) availability of resources, services and support; (d) the child's disability; (e) future benefits; and (f) family and community language.

3.2.1 Advice and information received

Three parents received advice from AAC service providers, specifically teachers and SLTs. These three parents reported that some of the AAC service providers who had advised them leaned towards advising in favour of English, thus suggesting that parents speak English to their children with disabilities, instead of their L1.

She (SLT) once said to me, she believes that AAC is English. **[P1]**

Ok, at school they normally actually will advise you that at home, normally at home speak English to the children. [P4]

… so the one therapist said to us "stick to English only" … **[P4]**

One parent reported receiving more nuanced advice from some of the AAC service providers, ranging from a suggestion to choose English at home if the parents wanted to support the learning of English, to encouraging parents to maintain their L1.

And also, the other lady (SLT), the first lady we ever went to, said to us stick to English so that he can understand English but if you want you can speak your own language at home, it's perfect if you do that. She told us if you want to speed it up, speak English. **[P5]**

We went to two other therapists, the one at the government the lady was a Sotho lady, she said "No, speak English but speak your home language that you speak at home because you need to be comfortable. Most of the time they'll catch on to what you're speaking inside the house. He will catch on to what you are speaking inside the house, so speak whatever language you are speaking, Mix it up. Ideally, you are making him to communicate to you." **[P5]**

Advice given by a neighbour only came up once. One participant received advice from a neighbour that a child should first learn to speak one language before attempting to learn another. This participant commented how the neighbour's child (who was the same age as her child with ASD was communicating very well in the L1.

One lady, actually next door, told me that it's better for the children to start actually a day care in Sepedi. Understand Sepedi and talk Sepedi as a foundation and then from there then they can go maybe learn English or go to an English medium (school). **[P4]**

One participant had read an article stating that becoming multilingual takes a long time and this also influenced her decision to go the monolingual route.

I've just once read an article about bilingualism. And they said … it takes between the ages of five, for a typically developing child, between the ages five and seven, they start distinguishing between the languages, and they don't mix it. So, I mean that's quite a long time … to develop or be confident in two languages. So imagine an intellectual (intellectually) disabled child. So, that made me decide, "No, I'm going to stick to one language." **[P1]**

3.2.2 Availability of resources, services and support

Parents often mentioned the availability (or lack) of resources, services and support (for example schooling, therapy services, devices or apps) as a contributing factor or influence on the choices and decisions they made with regard to their children's language learning. Some parents specifically mentioned the availability of material being the reason of choosing English to become their L1.

… we decided that we would rather stick to English because of the availability of the material. **[P3]**

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All parents mentioned the appropriate schools in their environments being English. It was often expressed that there was a lack of schools using a non-English language of instruction which would cater to their children's needs.

… all the schools that were available to her were also English … **[P4]**

… because she went (to an) English school that's why … and books are mostly in English … so there was no specific ask (question) to say which specific preference do you have. I just took on what was available at the point and where she was finding herself. **[P2]**

Participants also mentioned that therapists available to help them tended to be English.

And a lot of therapists are English speaking, I've found that where I'm from. There aren't many Afrikaans speaking therapists where I am from. **[P1]**

Participants also mentioned that not only their children's devices, but also other leisure and educational material were mostly available in English.

Electronic devices obviously is English. Most of the programmes we download for (child's name) are English. **[P4]**

One parent mentioned that he felt that, in general, options for support in the L1 were not there.

The options for Afrikaans in the greatest scheme of things is (are) not there. **[P3]**

3.2.3 Child's disability

Parents expressed concern that their child's disability complicated language learning. This influenced their language decisions and choices, and many expressed that they thought it would be better for their child to be raised monolingually. Somewhat ironically, this led some parents to introduce another language into the home, since they felt that the best option for their children with disability would be English, rather than their L1.

I wanted to give her the advantage of maybe just raising in one … I thought no, maybe to benefit this child it's maybe better to stick to one language … So, that made me

decide, "no I'm going to stick to one language" … so that this child of mine can benefit. And I don't confuse her. … It's just to give her all the support to be able to help her with language development. **[P1]**

And knowing that autism is a communication deficit, sticking to one language would be ideal and I think English will then kind of be the answer. **[P3]**

So the reason for that (choosing English) was because he had a problem speaking any language whatsoever, we decided we're going to stick to … the familiar language that he is going to use, and if he's going to school most of the time it would be in the English language so we decided then let's all (of) us speak English … that he can catch up faster in terms of his speech development. **[P5]**

3.2.4 Future benefits

Participants had various reasons for choosing to speak English instead of, or in addition to their L1. Most had future benefits in mind when choosing English, believing it would open doors to educational opportunities, employment opportunities, access to residential facilities for adults with dishabilles, sheltered living and global mobility.

So that's the choice for us that he speaks English because anybody in South Africa and overseas, wherever he goes will be able to understand the English language better. If he can command it that's better. **[P5]**

Obviously, English being the mode of communication, it's going to be used at work and school, his education. **[P4]**

I think if she is going to become more verbal, I always think of when we're not there anymore and where she lands up she should be able to speak English more than Afrikaans. **[P2]**

I think because she is speaking English, we chose the language that would benefit her the most in the future, theoretically on the job market or if she goes to a home and if we have to move to another country, then she would not have to struggle with the language that's natively spoken there. **[P3]**

Besides the future benefits of competence in English, one parent also highlighted future benefits of multilingualism.

> *… the more languages you can speak the more social you will be and the better your chances are of getting anything in business like jobs anywhere if you are multilingual. A lot of doors (will open) for him. It makes it very versatile ... If he can learn those five languages (English, Afrikaans, French, Mandarin and Portuguese) he can go into the rest of the world.* **[P5]**

3.2.5 Family and community language

Languages spoken by immediate and extended family members as well as in communities also influenced some participants' decisions. One parents expressed that the L1 remained part of who one is and how one communicates with family. This mother had decided to raise her child bilingually, partly due to family dynamics.

> *… but (child's name) should be able to understand Afrikaans ... because of her family. That (Afrikaans) is our cultural language. You won't get rid of it.* **[P2]**

Another participant highlighted the importance of being able to communicate in the language of the family and the community.

> *Yet again, we got a language that we speak at home, and then also in the community around us is Sepedi and the children have to understand that language, too ...* **[P4]**

The language proficiencies (the ability or inability to speak certain languages) of the parents were also mentioned as influencing factors. Parents expressed both ends of the spectrum; being comfortable and uncomfortable with speaking English as well as how they perceived their own English language skills. The first parent quoted here expressed her struggle to learn English when she had to change during the last few years of high school to a school where English was the language of instruction. This then led her to want to introduce English earlier to her child.

I … struggled with English at school. Because I was in a Sepedi school. Started doing Matric, ok Standard⁵ 9 or 8, 9 and 10 at an English medium school and what happened was, me switching between the two, actually I struggled and (it) actually caused me to repeat one grade, I think that was Grade 8 when I got there, because my English was not on par. **[P4]**

Another participant explained that due to her husband's language proficiency, they decided to stick to English only. This participant is able to speak Afrikaans and English, but her husband speaks English and Irish.

He speaks Irish, so he's been in the country for 35 years. So, he can't really speak Afrikaans, but he understands, some of it. So, that's also one of the reasons why we've chosen to be English. **[P1]**

One parent expressed that both he and his wife are fluent in speaking English, and given their proficiency, they never felt intimidated by speaking English at home and to their child.

It is purely because my English is good, it wasn't an issue for me to go over to English, and my wife was raised English when she was young so English is also not an issue for her. **[P3]**

3.3 Theme 3: Consequences of language practices and choices

This theme entails the perceived effects of the language practices/choices on these families. Four subthemes were identified, namely (a) the child's language proficiency; (b) family reactions; (c) family and community interaction; and (d) culture, traditions and language maintenance versus loss.

3.3.1 Child language proficiency

This subtheme deals with the languages the child does or does not learn or use. One parent reported that due to the language choices made, their child could only understand one language. Two parents reported that their child was able to understand two languages and the

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⁵ In South Africa, Matric refers to the final year of school, which is also referred to as Grade 12 or Standard 10. In previous years, standards were used; however, it has since changed to grades. Furthermore, Grade 11 is equivalent to Standard 9, Grade 10 is equivalent to Standard 8, etcetera.

remaining two reported thinking that their children possibly understood two languages, but they were not completely sure to what extent.

> *… around the family, we are talking in Sotho and English and sometimes I think he understands some of the times we speak to him. He does understand, he just can't respond.* **[P5]**

> *So I see her as fully bilingual in both languages. Yes, so she fully understands from a speech perspective.* **[P2]**

Others expressed that their children did not understand or respond to their L1 when spoken.

> *When you start saying chicken or* 'kgogo' *in Sepedi, they start "Ok, what is that?" They don't know. The language (home language) it's been killed, bit by bit, at home. Like we want to say chicken. Because when we say 'kgogo' they don't even understand what you're talking about either.* **[P4]**

> *No. I tried last night. I used the phrases that I use in English within Afrikaans. I didn't get any response or reciprocation from her.* **[P3]**

Two participants explicitly expressed that they felt that multilingual exposure confused their children, rather than helped them.

> *The only issue I can think of is a bit of confusion because of the language differences, because her grandparents will speak Afrikaans, we'll speak Afrikaans and then again, all T.V. and that is in English so with two languages I just think that that is confusing for her.* **[P3]**

> *… at school then there is English, at home there is Sepedi, and they are trying to actually learn two things at the same time … I think that is what is delaying their communication and them actually talking late.* **[P4]**

3.3.2 Family reactions

Some reported that families, usually grandmothers, were not always happy with the choice made not to speak the L1.

But the grandparents were not (happy) … particularly my mother. She was very upset by the idea. Because it has to be an Afrikaans child, it's very old school. Because then the idea is that we have an Afrikaans child, and they're normal and will go to a Model C school, will get a good public education, all of those things where if you speak English, the quality of the education it has to be private for it to be quality, all of those preconceived notions from the grandmother that come through. **[P3]**

It's the granny who will always complain. "You (reporting what the granny says to the parent) have to teach the children Sepedi ... I am getting a difficulty of actually communicating with them all the time and talk to them about something that they don't know. What kind of a language do you speak at home?" **[P4]**

Some stated positive and supportive reactions from extended family, feeling that their families respected the choices they had made to assist their children the best.

Well the family portion is very supportive actually. When they initially realized he couldn't really speak much, I went to my father and I said, "Listen, you are going to have to learn to speak in English" and my father was ok with that, he didn't complain. Most of my family … accommodate him and support him as much as possible … they don't try to make him feel out, they don't try to speak Sotho, they only are speaking in English to make him understand. So they are very supportive … They always follow what we ask them to do. Most of the time. And they try to assist as much as possible. So for them, I think the choices made, they don't really bother that much or give us any type of flack regarding languages. They have actually applauded the fact that we saying he must only speak English because they are saying that English is an international language so he should be ok. **[P5]**

3.3.3 Family and community interaction

A consequence that was reported was that some children who were not able to speak or understand the L1 were excluded from family interactions to some extent.

So if you change the language you actually exclude the child … if (the) family for instance speaks Afrikaans and you only speak English to the child … you sort of exclude the child from the rest of the family because you've changed the language. **[P1]**

But my mum is also now at the stage where she feels like my six-year-old is speaking better English, now she feels a bit self-confidence (self-conscious) because she doesn't think her English is good ... I think it will affect her interaction because she might not speak to her or interact with her the way she would like to. **[P1]**

I think we are lucky in the sense that everybody in our house is multilingual but I can surely see if we had to go visit relatives, that aren't as well equipped, it would be very difficult for them to communicate with her. We don't, fortunately, see extended family that are from the Free State and from the lowland. So I think that if that was the situation, they would really struggle to interact with her. **[P3]**

Two participants spoke about the interaction with the community. It became clear that they had different perspectives due to different experiences. One participant expressed how the lack of proficiency in multiple languages and particularly the home and community language made things difficult.

It is rather very difficult to say that I can speak English to them all the way and going out there we still gonna, streetwise, have problems because of not understanding what other people are saying. **[P4]**

Another participant explained that although the complex they stayed in had many children from many different backgrounds, most of them communicated in English. This was therefore a good fit for the language choices he had made for his child.

In the complex we are staying in it is quite different, we have a lot of kids. They actually speak English all of them, most of them. Because most of them are from different areas ... **[P5]**

3.3.4 Culture, traditions and language maintenance versus loss

Most parents did not feel that their language choices had a major influence on their values, cultures or traditions. Some felt that, since their children had disabilities leading to language and cognitive delays, they did not understand cultural concepts.

I don't really think it (not learning the home language) changed much in the way for her culturally, because (child's name) isn't, let's face it, she's a child without a little culture. She doesn't fit in the norms of choosing a culture. Her culture is autism. **[P3]**

Some participants felt that values, cultures and traditions were not bound only to the language they spoke.

> *We practise some of those cultures and traditions regardless of what language you speak, those are still there. Even if you're still speaking English or whatever, it doesn't take away from your culture.* **[P5]**

Some children still used correct terms of address to show respect in the L1 when speaking to people (like 'uncle' or 'aunt' or 'granny') even though they spoke English. However, one parent felt that people gave up their culture when changing to a different language. One parent stated that the use of English replaced other languages, causing other languages to die.

> *Yes, we can be introduced to our L1. But, yet, I'd say English is actually going to kill all languages. English is stealing our L1.* **[P4]**

3.4 Theme 4: Feelings and beliefs

All parents also spoke about their feelings and beliefs, specifically in relation to three aspects (which formed the three subthemes), namely (a) about the advice and reactions they received; (b) about the language choices they made and the practices they follow; and (c) about the degree of agency they believe they had in making language-related decisions.

3.4.1 Advice and reactions received

One parent felt that English was more convenient for educators, but described it as being hard to implement at home.

> *Well, from that point of view I actually understand why they say that (that parents should use English only at home). It becomes simple for them to teach a child in English … but from a home setting, it is very difficult.* **[P4]**

Another parent felt that advice given was biased as it was based on the therapist's own language. This parent also reported being advised to speak two languages by a different therapist, which he strongly agreed with.

The first therapist I was not really happy, because … there was an Afrikaans women that I used to go there with, Rose. Her child used to struggle as well. And then for me I felt that a bit odd because she told Rose (to) speak English for school and then continue in Afrikaans. And when it came to me she said speak English only and I thought "no, you can't do that". So, that's why I left. **[P5]**

Regarding feelings concerning reactions received from families upon choosing monolingualism, one participant felt that it was not helpful receiving negative reactions. The participant reported feeling hurt by the negative reaction, stating it a being insensitive towards their situation.

It (grandmother's responses) does hurt somewhat … it would have been best if the advice was more supportive of the situation or try something at least. Go find a school that gives Makaton classes in Afrikaans, find an Afrikaans school with therapy. But then she'll say that English is not ideal and that this is a bad situation on top of a bad situation. It doesn't help any of us so it just creates resentment. **[P3]**

3.4.2 Language practices and choices

Regarding parents' feeling about their language practices and choices, two parents expressed feeling a sense of loss as their children did not speak their L1.

Look in the ideal world I would've loved her to speak the same mother tongue as I do because … language is a very intimate thing and a lot of feeling gets transferred with it. Each language has its pro's and its cons. Afrikaans is known for being a fast and effective and official language, it gets to the point but it, English, for example, is better for diplomacy and speaking eloquently. So each language has its positives and in the ideal world I would prefer for her to speak Afrikaans because the words are shorter quicker and to the point. But apart from that, I don't think anything else … Look it's a mutual feeling of disappointment not speaking the language. **[P3]**

I would like him to learn Sesotho because I can dilate (converse) in Sesotho, I can write, read write, in Sesotho extremely well, and him, he is completely different from me … Initially it was hard … **[P5]**

Additionally, many parents stated that speaking a different language than their L1 at home was strange or uncomfortable. Two mentioned that it became easier with time and increasingly natural.

> *… if I'm going to go speak English only in the house it won't be as comfortable for me, it would feel like we're in a foreign place at all times.* **[P5]**

> *It is funny speaking a different language in your own home.* **[P3]**

> *Yes, and it's also funny we've become so used to it (speaking English to the child). I tried last night, I can't speak Afrikaans to my daughter. You just immediately speak English to her, it's become natural.* **[P3]**

Although parents felt a sense of loss and also felt that speaking a different language in the home was strange, at least initially, they also mentioned that they accepted their situation and made the best of it. As Participant 5 expressed, although his son was 'different' from him as he could not speak Sepedi, "you learn to live with it."

> *Well, this is our situation. Like I said, we had to change from what we originally wanted (regarding language choices). And this is just, you accept it and carry on.* **[P1]**

> *I think it's just the situation is a bit bigger than choosing the language for us. So we haven't given it that much thought or felt sorry for the situation. It was one of those five minute conversations where we said "okay, we'll just have to stick it out in English and that's it".* **[P3]**

Parents also mentioned that language choices were secondary to the child being able to communicate.

> *… in my mind for my child … it doesn't matter how she approach this mixing or speaking it clearly in English or Afrikaans, just as long as I can understand her. [P2]*

> *For me let him be able to speak able to articulate himself … Doesn't matter what language he uses … As long as he's comfortable. I think what we are trying to do, we are trying to build him up to somebody independent and it doesn't matter what he expresses himself in.* **[P5]**

3.4.3 Parent agency

This subtheme dealt with the degree to which parents felt they could, should or wanted to make decisions related to languages. Choosing a language was described as a big responsibility by one parent, one that many parents often did not give much thought.

> *I think both my wife and I have a large portion of it because we literally had to choose the language she could speak. Not a lot of parents choose the languages their child speaks, they choose the inherited. So we had to choose and that is a big responsibility choosing a language. It is a large life choice.* **[P3]**

One parent stated that it was more important to accommodate his child, rather than pushing what the parent wanted.

> *I think I can try and guide him in a certain way but I prefer to see what he is comfortable with, I prefer to put things on the table that he is comfortable with like English, because it's on the TV, it's at school, it's outside, it's everywhere. So then I just make the best of that. I don't try to lead him or try to make him or influence him in any way. I just try to see what he is comfortable with and try to rather focus on that and go that route, just to make him more comfortable.* **[P5]**

One parent stated that she blamed herself for the choice she had made and believed the language choices she had made caused difficulties for the child.

> *… sometimes me as a parent, I actually blame myself … I say ok, them saying autism is a (disorder affecting) development of the language, communication barriers … but I'm just looking at it from my point of view saying, okay, maybe it is because I instilled two languages. And it was very difficult, maybe I shouldn't have done that? Maybe I should have had let him start in Sepedi and then further maybe at an English school? I don't know.* **[P4]**

This parent also expressed, however, that circumstances and her situation led to her choices, as was also expressed by other parents.

> *But, once again I cannot say I blame myself. I'd say it's the situation that actually put me here. I cannot afford to buy a house in Silverton (historically white suburb). I cannot go and afford to buy a house in Equestria where there's only English people*

staying there. I can only afford to buy house in Mamelodi (historically black township) … And sometimes you reassess the situation that has put you there, and I have nothing to say about it … I do feel that I have an influence on that. But sometimes, because our home setting and the way we live our lives, it is very difficult for one to, to actually say, "I could've changed the situation". **[P4]**

One parents expressed that she believed that parents in general made language decisions with their child's best interests at heart.

And everybody's situation's different. You can't judge. So, at the end of the day, parents do what they can. **[P1]**

4.   DISCUSSION

With emphasis on this country's unique language environment, this study aimed to explore South African parent's perceptions on their language choices and practices with regard to their children who make use of AAC and are raised in multilingual environments. Findings revealed that, although parents had somewhat varying perceptions of their language choices and practices with regard to their children who make use of AAC and are raised in multilingual environments, they have an overriding motivation to do what they believe would best help their children achieve success in life. These findings were largely consistent with other studies on parental language choices and practices, such as those conducted by Yu (2013), Hampton, et al. (2017) and Jegatheesan (2011). Despite their children's CCN and use of AAC, it was clear that the parents interviewed for this study wanted the same thing as the parents interviewed in the mentioned studies, and that was to see their children thrive in the future. Language choices were made with this aim in mind.

Four themes were identified during data analysis, namely (a) language practices and choices; (b) influences on language practices/choices; (c) consequences of language practices/choices; and (d) feelings and beliefs. Within the first theme, participants reported on their children's language usage at home, school and within therapy services as well as the choices parents made in this regard, usually expressing that their current language practices were often not what they had initially planned for their children. The second theme looked at factors influencing language practices and choices. Parents discussed what had led them to making specific choices, and referred to current circumstances as well as the future benefits they foresaw. The third theme concerned parent's discussions around the effects that the language practices and choices have had, including the effects on the child and the family. Parents' feelings and beliefs emerged as the fourth theme. Parents expressed their feeling and beliefs about the language choices they had made and practices they follow. They also spoke about how they felt about the advice received in this regard. They also alluded to the degree of agency they felt they had in the process of making language choices for their children.

Three aspects related to the results will be highlighted in this discussion. Firstly, parents' decisions about mono-versus multilingual language exposure for their children will be discussed. Secondly, the emphasis that parents placed on English proficiency will be

highlighted. Lastly, some of the tensions inherent in parents' language choices will be discussed. Reference will be made to relevant literature throughout.

4.1   Monolingualism versus multilingualism for children with communication disorders

Similar to the results reported by Hampton, et al. (2017), Jegatheesan (2011) and Yu (2013; 2016), four of the five parents felt that multilingualism would be challenging, as well as potentially harmful for their children who uses AAC. These parents therefore expressed that they aimed to limit the language exposure of their children to one language, as far as possible, in an attempt to support their children's communication and language development. Despite these parents' real fear of multilingualism potentially being harmful to their children's communication and language development, this belief is not supported by research findings. To date, there has been no evidence that children with communication disorders (including children with developmental disabilities such as DS and ASD), who are naturally exposed to multiple languages in their family environments, are disadvantaged in comparison to those who are monolingual (Drysdale, Meer, & Kagohara, 2015; Hambly & Fombonne, 2012; Hampton, et al., 2017; Lund, Kohlmeier, & Durán, 2017; Ohashi, et al., 2012; Soto & Yu, 2014; Uljarević, Katsos, Hudry, & Gibson, 2016; Yu, 2013, 2018). In fact, there exists a high probability that multilingualism could improve social and communication skills in children (Valicenti-McDermott et al., 2013). Thus far, research focusing on multilingual AAC implementation continues to be scarce (Kulkarni & Parmar, 2017; Soto & Yu, 2014; Tönsing, et al., 2019); and studies are seemingly limited to anecdotal and case study evidence (Tönsing, et al., 2019). Moreover, Tönsing, et al. (2018) state that when applying evidence from children with DD to children using AAC one needs to apply caution. The authors pointed to the fact that learning to speak one language may not pose the same demands as learning to use an AAC system, which allows expressing oneself in more than one language.

In highly multilingual contexts, such as South Africa, individuals (including those using AAC) often have to become multilingual to communicate adequately within their community and with their familiar communication partners, such as friends, family and teachers (Kay-Raining Bird, Trudeau, et al., 2016).

Much like in previous studies conducted on parents' perspectives on multilingualism for their child with CCNs, it seemed that parents often received advice from AAC service

providers that it would be best for their children to be somewhat exclusively exposed to the majority language, namely English (Hampton, et al., 2017; Jegatheesan, 2011; Kay-Raining Bird, Trudeau, et al., 2016; Yu, 2013, 2016, 2018). It is concerning that the notion of multilingualism being undesirable for children with communication disorders is still so prevalent amongst service providers such as teachers and speech-language therapists (Kay Raining Bird, Lamond, & Holden, 2012; Marinova-Todd, et al., 2016; Yu, 2013; Yu, 2018). Parents in the current study reported different reactions to professional advice. It seemed that some accepted this advice, as it seemed to be in line with their own convictions about the challenges of multilingualism for their children. Others reported that changing their home language in order to limit language exposure of the child to English did not come without challenges and that it was not possible to convert completely to a different language in the home environment. Furthermore, advice seemed to be based on therapists' own language skills and preferences. In this regard, Hambly and Fombonne (2011), Yu (2016; 2018) and Soto and Yu (2014) propose the importance of service providers not to discourage parents from maintaining multilingual environments or introducing an additional language. The authors further suggest that service providers should not recommend monolingualism or multilingualism without first exploring the family's dynamics, feelings and ideals. In addition, Yu (2016; 2018) emphasized the importance of service providers to truly attempt to view and understand each family of a child with CCN as a whole and to explore their beliefs, ideals, priorities, concerns and potential challenges regarding language choices.

In contrast to the other four parents, one parent chose to raise her child bilingually Afrikaans and English. This parent expressed being content with the decision she made. She furthermore expressed that she felt her child was bilingual, in that she could understand both languages, despite her expressive difficulties. This finding is in line with previous studies that found that children with developmental or communicative disabilities can and do become multilingual (Kay-Raining Bird, Trudeau, et al., 2016; Yu, 2018). Her beliefs echoed the notion that the ability to communicate in more than one language is a benefit especially in contexts that are linguistically diverse (Kay-Raining Bird, Genesee, et al., 2016), such as in South Africa.

Of the four parents who had chosen the predominantly monolingual route, two expressed the hope that their children would become multilingual in the future, acknowledging the advantages that multilingualism could hold a brighter future for their

children. Similar findings were documented by Jegatheesan (2011), who found that parents believed that multilingualism increased their children with ASD's linguistic, social and emotional competence, a finding which is also supported by Valicenti-McDermott (2013). However, both parents in the current study felt that the L2 should be taught sequentially, being introduced once the children had a grounding in the L1. Various available studies mention that the timing of multilingual development is seen as a factor that may improve the acquisition of an additional language (Kay-Raining Bird, Trudeau, et al., 2016; Owens, 2012). According to research, it is possible for children, exposed simultaneously, to acquire the L2 to a degree of proficiency that is equivalent to that of monolingual speakers of that language (Kay-Raining Bird, Genesee, et al., 2016; Kay-Raining Bird, Trudeau, et al., 2016) .

Advice from other family members or lay persons is often given from the point of personal views and experiences. Therefore, such advice should be received with an open mind. However, when parents receive advice from AAC service providers, it should be based on evidence (Schlosser & Raghavendra, 2004; Thistle, Wilkinson, Thistle, & Wilkinson, 2015). Even though the evidence regarding the use of multiple languages with children in need of AAC is still emerging, AAC decision making should take evidence into account and occur as a collaborative and family-`centred approach (Pickl, 2011).

4.2   Emphasis on English proficiency

It became clear that all the parents placed emphasis on English proficiency as the ultimate desirable outcome for their children. Four parents chose to speak only or mainly English to the child. For all of these parents, English was not their L1; two parents spoke Afrikaans, while their spouses came from an English-Irish and English background, respectively; one parent and his wife spoke Southern Sotho; and another spoke Sepedi, as did her husband. These parents chose to raise their children in English only, rather than bilingually (although the latter was often the original wish). The fifth parent, who chose to raise her child bilingually, chose to add English to the home environment, although this was not her or her spouse's L1. Within the South African context, English is seen as the majority language (Posel & Zeller, 2016); this seemed to be the underlying reason for parents to choose English.

South Africa is known to be a linguistically and culturally diverse country (De Klerk, 2002; Posel & Zeller, 2016; *The Constitution of the Republic of South Africa, Act 108 of 1996*,

1996), in which learners in the basic education system are frequently educated in English, despite it not being their L1 (Department of Basic Education, 2011). This was often seen in the reasoning of why parents opted to raise their children bilingually. In line with factors mentioned by the parents of this study, practicalities, policies on school level, parental preferences, perceived social, educational and employment advantages and geographical proximity have been suggested as contributors to parents choosing to have their children educated in English (Webb, 2010; De Klerk, 2002a; Evans & Cleghorn, 2014). It has been long debated whether or not factors such as these are causing speakers to abandon their L1 in favour of English (Coetzee-Van Rooy, 2012; Kamwangamalu, 2013). The results of this study pointed to a language shift that has also been previously argued in literature (De Kadt, 2005; De Klerk, 2002a; Dyers, 2008). In contrast, others argue that non-English languages are well maintained as spoken L1 in addition to English, and that there is a rise in multilingualism in diverse countries such as South Africa (Evans & Cleghorn, 2014), which is in line with the response of one participant. It seems some South Africa parents may be trading in their non-English L1 for English as part of following advice from others and their own convictions, asking themselves how their children with language delays could possibly acquire a second and third language, if they are already struggling with the first. For these parents answers seem to be clear; that by changing to one language it would be best for their child who uses AAC. Most parents opted for English – the language which dominates educational and business spheres (Khokhlova, 2015) – since that was what advice, resources and future opportunities led them to believe would be the best for their children. They did not necessarily view monolingualism as an ideal, as expressed by most participants, but it became part of their current practice and they felt that there was not much of a choice.

4.3   Tensions inherent in language choices and practices

Except for the parent who chose to follow the bilingual route, all parents mentioned or implied that their language choices for their children entailed some kind of compromise, and that there was a cost associated with their choices. Parents reported feeling a sense of loss and regret when they chose to only speak the majority language and did not transmit their L1 to their children (De Klerk, 2002; Hampton, et al., 2017; Jegatheesan, 2011; Yu, 2013, 2016). These feelings highlight the link between language and identity (Hampton, et al., 2017; Tönsing, et al., 2019; Tönsing, et al., 2018; Yu, 2013, 2018). Feelings of loss also seemed to be experienced by extended family members, particularly grandmothers. The grandmothers'

criticism of parents' choices seemed to lead to tension within the family at times similar to the outcomes explained by De Klerk (2002). As in De Klerk (2002), grandparents felt their grandchildren had to be able to speak their language, even if it was just the basics. In De Klerk (2002), cultural heritage came forth as a reason for the importance of being able to speak the same language as the grandparents, whereas parents in this study expressed that due to their children's disabilities, culture had little or no impact and meaning for their children. Parents also mentioned that their choices sometimes affected family and community inclusion negatively, as also mentioned in other studies (Yu, 2013; 2016; 2018; Hampton, et al., 2017). It was expressed that if a child is unable to speak the familial language or the language spoken in their community, they will be excluded from these groups, resulting in isolation.

It is therefore clear that parents' choices entailed trade-offs, and that they were well aware of the tensions and costs inherent in their choices. Although most parents ultimately seemed to foreground that they believed that the choices they had made did serve their child's best interests, given the child's needs, abilities, and the support and services available to the parents, Parent 4 seemed more conflicted about her choices, with an underlying theme of self-doubt and self-blame subtly running through the interview. This once again highlights the need for AAC service providers to make time to elicit parents' perspectives fully, with all the nuances and tensions inherent to these perspectives (Yu, 2016). Likewise, professionals too, need to acknowledge these tensions and not make blanket recommendations without considering all the influences at play.

5. CONCLUSION

In this study, the perceptions of South African parents' on their language choices and practices with regard to their children who make use of AAC and are raised in multilingual environments were investigated. Specifically, this study aimed to investigate and understand how and why parents make certain decisions with regard to the language practices they implement with their children aged 5-12 years, who use AAC. Sub-aims set out to describe (i) parents' current language choices and practices with their children who use AAC; (ii) factors that parents consider to be influencing their language choices and practices with their children who use AAC; and (iii) parents' perceptions of the outcomes of their language choices and practices with their children who use AAC. This research study was conducted by interviewing five participants on the topic at hand. A summary of the main findings is presented in the section following, whereafter this study is critically evaluated. Finally, implications for practice and recommendations for future research are presented.

5.1 Summary of main findings

From the interviews, four overarching themes related to the sub aims of the study emerged. Parents spoke about (a) language practices and choices; (b) influences on language practices and choices; (c) consequences of language practices and choices; and (d) feelings and beliefs. It became clear that parents took many aspects into consideration when making language choices for their children in need of AAC. These included factors related the child (e.g., the parent's perception of the child's abilities) as well as factors related to the environment (e.g., the availability of schooling options and the hegemonic position of English in South Africa). Factors related to the child's disability played a distinct role in parents' decisions, with the predominant perception that multilingualism would currently not be beneficial for the child. This perception seemed to be reinforced by the advice of AAC service providers. An emphasis on English seemed to be prompted both by the availability of resources and supports in this language (e.g., educational opportunities, therapy and AAC systems) as well as a perception of the future utility of English for their children. It was clear that parents did not make decisions about language use easily, and in most cases tensions emerged, including feelings of loss of the L1, negative reactions by extended family members and concerns about family and community integration.

5.2   Strengths

This study is the first to have attempted to explore parent's perceptions on their language choices and practices with regard to their children who make use of AAC and who are raised in multilingual environments, not only within the South African context, but internationally. Understanding parents' perspectives on this topic can assist AAC service providers to understand parents' concerns, considerations, and how they arrive at the decisions that they believe will best serve their children.

Given the open-ended nature of the interviews, any statements made by participants could be clarified and further explored where and when necessary. The nature of this study allowed for explorative, and thus information-rich discussions. The interview questions seemed to be easily understandable by parents, and parents freely discussed their views, showing an investment in the topic.

The joint coding process brought in a measure of rigor that increases the trustworthiness of the procedure. By using two cycles of coding interspersed with the development of preliminary themes, the rigor with which the coding was done was enhanced.

Member checking was conducted as an additional measure. A summary of the findings were e-mailed to each participant. Three of the five participants responded positively and agreed with the summary of the findings. Two participants did not respond further.

5.3   Limitations

Several limitations to this study should be acknowledged. The small sample size of five participants limits the generalizability of the results. The specificity of the inclusion criteria may be one reason for the small number of participants. In spite of the small number of participants, recurring themes across the interviews could be identified, and a measure of data saturation was achieved. However, some aspects (e.g. bilingual language practices) were only mentioned by one participant – in these instances, data saturation was not achieved.

The participants selected constituted a very specific subset of the population of parents of children using AAC, as (1) only parents who are literate and could read were approached; (2) only parents who have access to e-mails were recruited; and (3) all parents in

this study were well educated with at least a National Senior Certificate,[6] Grade 12 education status. The sample was therefore likely to be biased towards parents from middle and higher income groups, with parents from low income groups not represented.

All necessary precautions were taken to limit bias; however, given that this study was based on interviews and bearing in mind the qualitative nature of this study, researcher bias may also be seen as a weakness of this study. Participants might have answered questions in a way that they felt was socially desirable and the researcher may have influenced some results when asking the questions and interpreting data.

Lastly, this study relied on interviews to obtain information on language practices of these families. Observations of the families' actual language practices were not conducted. The reported practices may not always completely reflect parents' actual day-to-day language practices with their children, similar to the limitation expressed by Yu's (2013) study.

5.4   Implications for practice

The findings show the multitude of factors that parents of children who use AAC and are raised in multilingual environments consider in their language practices and choices. In order to truly engage in family-centred practice and incorporate the stakeholders' views into practice, AAC service providers, such as speech-language therapists, need to listen to the perspectives, opinions and feelings of parents on the topic of language choices and practices (Yu, 2016). They should allow parents to talk about not only about what they want, but also about some of their fears, concerns and tensions they experience in making language choices.

The parents' experiences of AAC service provider advice clearly shows that service providers still give blanket recommendations to follow a monolingual approach that is incompatible with current evidence and is also not sensitive towards parents' situations and needs. It is concerning that such practices still persist in spite of the existing evidence base that shows that multilingualism does not disadvantage children with communication disorders (Cleave et al., 2010; Kay-Raining Bird, Trudeau, et al., 2016; Kohnert, 2013; Soto & Yu, 2014; Verhoeven et al., 2011). Questions must be raised as to what keeps the monolingual focus amongst service providers so firmly in place. The overall bias in the field of

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[6] In South Africa, the National Senior Certificate (NSC) refers to the final year of school, which is also referred to as Matric, grade 12 or standard 10.

communication disorders towards monolingual populations could be an underlying reason (Yu, 2018). A realignment in focus towards the multilingual majority of the population is urgently required (Kathard et al., 2011)

This study hopes to raise sensitivity of AAC service providers towards the parental perspectives around AAC and multilingualism, and potentially guide AAC service providers when advising parents on language practices for children who use AAC and are raised in multilingual environments, not only within the South African context. Enhancing service equity means serving more and more multilingual populations, and thus such sensitivity is needed for all service providers who are likely to support children in need of AAC from multilingual backgrounds and their families.

Furthermore, this study hopes to encourage AAC service providers to become aware of systemic barriers to multilingualism, and to encourage the development of resources, such as AAC systems, in different languages (Tönsing, et al., 2019). Moreover, this study especially hopes to encourage AAC service providers to take up an advocacy role in order to enhance access to appropriate education and intervention options. In order to achieve EBP for this population (Schlosser & Raghavendra, 2004; Thistle et al., 2015), options for additive multilingualism need to be there.

The interview guide, adapted from Yu (2013), used in this study could be adapted and used by AAC service providers who work in the field of AAC and are approached by multilingual families to obtain a clearer understanding of their language situation and circumstances. The information obtained could further be used to address current strengths and challenges as well as establishing the family's ideals and wishes to personalise treatment plans and advice.

5.5   Recommendations for further studies

Further studies are desperately needed to advance the understanding AAC service providers have and to improve practices. Additionally, investigation in this area is needed with regard to the development of strategies to facilitate language for multilingual children who use AAC. It is important to understand the influences which promote and restrict skill generalization both within and amongst languages (Soto & Yu, 2014).

More in-depth exploration of AAC service providers' practices and their acceptability is needed. Additionally, barriers and facilitators to optimal multilingual AAC service provision require further investigation (Tönsing et al., 2018).

It is recommended that this study is replicated on a greater scale to improve the data saturation. Various methods of recruitment could also be explored to reach a greater amount of people from varied socio-economic status and educational backgrounds.

The evidence base attending to the AAC needs of multilingual children and families is limited. Studies focusing on the effect of AAC interventions that support all the languages a child are exposed are also needed urgently.

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Appendix A

Parent Interview Guide

Parent Interview Guide

Adapted fromYu. (2013). Issues in bilingualism and heritage language maintenance:
Perspectives of minority-language mothers of children with autism spectrum disorders.
American Journal of Speech-Language Pathology, 22(1), 10-24.

The following questions are to serve as a guideline during the interview and will not
necessarily be asked in the same order and in the exact manner. They will serve to guide the
researcher to develop a discussion between the participant and the researcher.

General:

- What is a typical day for your child?

- What are your main priorities for your child currently?

- What services (therapies and educational services) is your child receiving now?

- Please tell me a little more about your child's communication intervention.

- Tell me a bit more about your child's current communication – the methods that
  he/she uses to communicate and the languages he/she uses in a typical day.

Communication and language decisions and practices

- Did you make specific decisions about your child's language learning? If so, what
  influenced those decisions?

- How do you think these decisions influenced your child and your family?

- Have you had any advice from therapists, teachers, or other people about your child
  learning different languages? If so, what was that advice? How do you feel about that
  advice?

- What role do you feel you play in your child's learning of language?

- What role do you feel therapists and teachers play?

- How do you feel about the languages that you child currently uses and is exposed to
  (at home, at school, in therapy)? Is there anything you would like to change?

- Does it matter to you what language(s) your child uses in the future?

- What do you think would be the benefits of your child using those language(s)?

- What do you think would be the ideal language situation for your child?

Appendix B

Recruitment e-mail

Recruitment e-mail

Dear All,

My name is Natalien van Dalen. I am a Master's student at the Centre for AAC. As part of my studies, I am planning to conduct a small-scale research project. I aim to investigate the language choices and practices of South African parents whose children are raised in multilingual environments and whouse AAC.

So, if:

- you are the parent of a child aged between 6 and 12 years who uses AAC (i.e., the child's speech is too limited or difficult to understand and the child uses other methods of communication, such as signs from sign language or a communication board);
- your child who uses AAC has been exposed to more than one language (for example, two languages are used in the home; or the child's school uses a different language than the home language; or your family used one language when speaking to the child before but is now using another language);
- you are comfortable being interviewed in English;

I would like to invite you to participate in this study.

Should you be interested in participating in this study, please click on this link (link inserted) for more information and an opportunity to indicate your willingness to take part.

Kind regards

Natalien van Dalen

Appendix C

Parent information and consent letter

Dear Parent

Participation in a research study about AAC and multilingualism

My name is Natalien van Dalen. I am a student at the University of Pretoria and I am currently enrolled for a Master's degree in Augmentative and Alternative Communication (AAC) at the Centre for AAC at the University of Pretoria. I would like to invite you to participate in a research study.

Name of the study:

The title of the study is: *South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments.*

Why is this study important?

Presently, no study has investigated the language choices and practices of South African parents whose children are raised in multilingual environments and use AAC. In order to provide family-centred services, professionals need to acknowledge the perceptions of parents whose children use AAC regarding language practices and choices. With this pilot project, I would like to start exploring the language practices and choices of parents with regard to their children who use AAC.

What will be expected of you if you choose to take part in the study?

The study is aimed at parents of children who use AAC who are (or have been) exposed to more than one language. Should you wish to participate, you will be asked to complete short questionnaire that will be sent to you via e-mail. I will then contact you via e-mail and/or telephone and arrange for a suitable time for an interview with you, where I will ask you questions related to your language choices and practices with your child who uses AAC.

You may choose to be interviewed face-to-face at a location of your choice where possible, or opt for an interview via telephone and/or video calling where more convenient and practical. The interview is expected to take about 60 minutes. The interview will be audio-recorded. I will then transcribe the interview and interpret what you have told me. In order to ensure I have done this in a way that accurately represents your view, I may send you the transcript and ask you to check my interpretations.

What are your rights?

You have a free choice as to whether or not you want to take part in the study. There will be no negative consequences to you or your child if you do not want to take part. You can also stop being part of the study at any point in time. Should you wish to stop your participation, all data collected from you will be immediately destroyed. Any identifying information will be removed from the data before it is published or presented in any format, so that your privacy is at all times protected.

What are the risks and the benefits?
There is no risk to you – whether you take part or not. The benefits of the study are that the information can help professionals to understand what your perceptions are as a parent in terms of language choices and practices with regard to your child who make use of AAC and is raised in a multilingual environment.

What will data be used for?
Only I, a research assistant and my supervisor, Prof Kerstin Tönsing (employed by the University of Pretoria) will have access to the information you give in the interview and on the questionnaire. This information will be processed, summarised, and analysed by us. The data will be used to write a mini-dissertation and may also be used to write articles for scholarly journals and/or for conference presentations. A copy of the results of the study will be made available to you should you be interested. All identifying information will be removed from all publications/presentations. The original recordings and questionnaires will be stored securely in both hard copy and in electronic format at the University of Pretoria in the AAC Centre for 15 years.

Do you want to take part?
If you would like to take part in the study, kindly indicate your response by clicking here.
If you have any questions about the study before deciding if you want to take part, you can contact me or my supervisor on the e-mail or telephone numbers provided below, or leave a contact request by clicking here.

I look forward to your response.

Kind regards

_____
Natalien van Dalen
natalienmdl@gmail.com
082 922 2027

_____
Prof Kerstin Tönsing
Centre for Augmentative and Alternative Communication
kerstin.tonsing@up.ac.za
012 420 4729

Informed Consent: Reply Slip

Name of Parent: _____

Project title: South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments.

Researcher: Natalien van Dalen   **Supervisor:** Dr Kerstin Tönsing
                Master's Student
                Centre for AAC
                Cell: 082 922 2027

I, _____,
                       Name and surname

(please tick box that applies)

☐   give consent to participate in the study titled *South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments* conducted by Natalien van Dalen, under the supervision of Dr Kerstin Tönsing. My consent is voluntary and I understand that I may withdraw my participation from the study at any time. I understand that the interviews will be audio-recorded. I understand that the data will be stored at the CAAC for 15 years and that all data will be treated confidentially.

                OR

☐   do not give consent to participate in this study.

_____   _____
Participant Signature   Date

If you gave consent, kindly indicate how I may contact you:

Telephone: _____ Hours convenient for me to call: _____

E-mail: _____

Appendix D

Biographical

Questionnaire

Centre of AAC

Biographical questionnaire

Information about yourself:

Your highest
qualification:

	Lower than Grade 12
	Grade 12 / Senior national Certificate (NSC)
	Tertiary education (diploma, undergraduate degree)
	Postgraduate degree

Current occupation: _____

Which language(s) do you speak? _____

_____

_____

Which language is your strongest language –

(the one you speak and understand the best)?_____

Please indicate which language(s) you use when speaking to your child who uses augmentative and alternative communication (AAC).

_____

___

Information about your child who uses AAC:

What is your child's name?:

_____

What is your child's date of birth?

_____

What is your child's gender?   Male ☐   Female ☐

Does your child have any specific diagnosis?   Yes ☐   No ☐

(e.g. Autism Spectrum disorder, ADHD, Communication disorders, etc.)

If yes, please state the diagnosis:

_____

Which method(s) does your child use to communicate with you and others? You can tick more than one.

☐	gestures and pointing
☐	facial expressions (e.g. smiling)
☐	eye pointing (e.g., using their eyes to show you what they want)
☐	sounds
☐	spoken words
☐	communication board or book with pictures
☐	speech generating device (device that 'speaks out loud')
☐	signs from sign language
☐	other ways (please describe): _____
☐	_____

Below, please indicate which languages other people (who regularly interact with your child during a typical week, **outside of the school he/she attends)** speak to him/her. This could include your spouse, a nanny, brothers, sisters or grandparents. Please indicate the language(s) they speak to the child.

Relationship of person to your child (e.g., father)	Language this person uses when speaking to your child

Does your child listen to the radio?   Yes ☐   No ☐

If yes, to which language is he/she mostly exposed on the radio?

_____

Does your child watch television?   Yes ☐   No ☐

If yes, to which language is he/she mostly exposed on the television?

_____

Does your child use a computer, tablet or cell phone?   Yes ☐   No ☐

If yes, to which language is he/she mostly exposed on these devices?

_____

Does your child attend an educational or care facility?   Yes ☐   No ☐

If yes, which language is used in the facility?

_____

Has your child received therapy (for example speech therapy or augmentative and alternative communication services) to help him/her with communication? Yes ☐   No ☐

If yes, which language was used in therapy?

_____

Thank you very much for taking the time to complete this questionnaire.

Appendix E

Letter of request to utilise AAC database

Prof J. Bornman
The Director of the Centre of AAC

Dear Prof Bornman

<p align="center">**<u>Request to utilise the AACSA data base for the recruitment of participants</u>**</p>

My name is Natalien van Dalen. I am a student at the University of Pretoria and I am currently enrolled for a Master's degree in Augmentative and Alternative Communication (AAC) (course work) at the Centre for AAC at the University of Pretoria. As part of my studies, I plan to conduct a research project *entitled South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments.* The project is conducted under the supervision of Dr Kerstin Tönsing I would like to request permission to utilise the AACSA data base for the recruitment of participants.

Rationale for the study
Presently, no study has investigated the language choices and practices of South African parents whose children are raised in multilingual environments who use AAC. In order to provide family-centred services, professionals need to acknowledge the perceptions of parents whose children use AAC regarding language practices and choices. With this pilot project, I would like to start exploring the language practices and choices of parents with regard to their children who use AAC.

Proposed procedures
I would like to send an e-mail (see draft attached) to the AACSA e-mail data base in order to request parents interested in the study to contact me. If participants have indicated interest, I will send them an information letter and consent form (see draft attached). Should they consent to participate, they will be requested to complete a short biographical questionnaire, and arrangements will be made with them to conduct an interview. Interviews will be conducted face-to-face where possible, but options such as telephone and/or video calling will be used where face-to-face interviews are not possible due to travel distance and/or logistics. The participants will be given the option to choose the most convenient location and time which suits their preferences and schedules. The interviews will be conducted by myself in English and are expected to last 60-90 minutes. The interviews will be recorded and thematically analysed.

The following ethical principles will be upheld within this study:
As this study will conduct research on human participants, the study will abide by ethical principles (McMillan & Schumacher, 2014).

- Ethical clearance has been applied for.
- Written consent from all participants' will be obtained prior to conducting the study
- All participants will be made aware that participation in the study is voluntary and of their right to withdraw from the study at any point in time without any negative consequences to themselves.
- The recordings which are made during the study will be accessed only by the researcher, research assistant, and the supervisor.
- All information will be kept confidential from those external to the study.

- Any identifying information will be removed from the transcription (e.g. names of people and places will not be transcribed). No individual names will be mentioned in any published data.

Who will have access to the results of the study?
The data will be stored in both hard copy and electronic format at the University of Pretoria in the Centre for Augmentative and Alternative Communication for 15 years. The data obtained from the research will be used for writing a Master's mini-dissertation, writing scientific papers and for presentation at professional conferences and seminars. A summary of the results will be made available for any interested parents. Transcriptions (from which all identifying information has been removed) and voice recording may be used for secondary data analysis if consent from the participants has been obtained.

What are the risks and the benefits?
At no time during the participation in the research will the participants be at risk of any harm. Potential benefits of this study may include extending research within the field of AAC and providing empirical evidence to help guide practitioners when planning treatment for multilingual children who use AAC.

Please feel free to contact me or my supervisor if you have any questions about this study. I look forward to receiving your response.

Kind regards

_____   _____
Natalien van Dalen   Date
natalienml@gmail.com
082 922 2027

_____   _____
Dr Kerstin Tönsing   Date
Centre for Augmentative and Alternative Communication
kerstin.Tönsing@up.ac.za
012 420 4729

Permission to utilise AACSA data base: Reply Slip

Name of director: _____

Project title: South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments.

Researcher: Natalien van Dalen   **Supervisor:** Dr Kerstin Tönsing
Master's Student
Centre for AAC
Cell: 082 922 2027

I,

_____

,

(Name and surname)

☐   give permission for the use of the AACSA data base to recruit participants for the study titled *South African parents' perceptions on their language choices and practices with regard to their children who make use of augmentative and alternative communication (AAC) and are raised in multilingual environments* conducted by Natalien van Dalen, under the supervision of Dr Kerstin Tönsing. My permission is voluntary and I understand that I may withdraw my permission from the study prior to the recruitment e-mails being sent out. I understand that the interviews with participants will be audio-recorded. I understand that the data will be stored at the CAAC for 15 years and that all data will be treated confidentially.

                    OR

☐   do not give consent for the use of the AACSA data base to recruit participants for this study.

_____
Director's Signature

_____
Date

Department's stamp

Appendix F

Ethical Clearance

Faculty of Humanities
Research Ethics Committee

30 November 2018

Dear Ms van Dalen

Project:	**South African parents' perceptions on their language choices and practices with regard to their children who makes use of augmentative and alternative communication (AAC) and are raised in multilingual environments**
Researcher:	**NM van Dalen**
Supervisors:	**Dr KM Tőnsing**
Department:	**Centre for Augmentative and Alternative Communication**
Reference number:	**10592483 (GW20181117HS)**

Thank you for the application that was submitted for ethical consideration.

I am pleased to inform you that the above application was **approved** by the **Research Ethics Committee** at a meeting held on 29 November 2018. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely

Prof Maxi Schoeman
Deputy Dean: Postgraduate Studies and Ethics
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail:tracey.andrew@up.ac.za

CC: Dr Km Tőnsing (Supervisor)   Prof J Bornman (HoD)

Appendix G

Coding Scheme

CODING SCHEME

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
Language practices and choices (languages child is exposed to and uses in home, school and therapy and the choices parents make in this regard)	Current practices (describing present-day situation)	English mostly with some 2nd-language exposure	So therefore, because (child's name) likes singing and signing I've started exposing her to Afrikaans as well, from a very young age. Uhm, like with Carike Keuzenkamp songs and videos, and also Apps that I've downloaded on my iPad. And then obviously my family's Afrikaans speaking. And so maybe Afrikaans songs, but it's predominantly English. [P1]
		Parent mixes	But predominantly, that's how we now speak anywhere in the house and in the surrounding area, we always mix in English and Sesotho in a way. [P5]
		School: Mostly English	Well we know it's an English medium school, so it's fine. But, there are a lot of children that speak maybe Sesotho or Afrikaans and some of the teachers can speak Afrikaans, so they're happy to speak to them Afrikaans if there's something they don't understand. I think the teaching, the medium of the teaching is obviously English. [P1]
		Therapy: English	And the first one (therapist) was an independent one, second one was at her first school, and the third one now at her new school. So, we continued with the continuity of keeping it English… and there (at the school) she received language in English, everybody there was English … she's never received any therapy in Afrikaans. The first speech therapy session was in English and it's been like that ever since. [P3]
	Change in practice (describing how practices and choices changed)	Home language only to English only	Yes, and she was raised Afrikaans up until the age of three, I would say, when she got her diagnosis of autism and we decided that we would uh, rather stick to English ... [P1]
		English only to English mostly but also home language	We did in the beginning speak English only at home but we found that not possible. Uh, it's just not possible to speak English three o'clock in the morning when you're half groggy to your wife. [P3]
			So I said I'll mix a little, instead of just speaking English. So I said I'll speak in English because we want to help him go to school. But when were at home, in an environment when you are relaxing at home, speak whatever language you want to speak. And then eventually he will adapt. [P5]
		Increased use of English	If it's an English book we will have a look at the English book, and as I said when she was small I usually read through English but immediately translate the message or the story. Now I don't do that anymore. I just read the English if it's English and I read the Afrikaans when it's Afrikaans. [P2]
			It's (English) actually slowly turning the language that we speak at home. [P4]
	Wishes and ideals (what parents would have ideally wanted for their children or what	Bilingual or multilingual	Like I said, special needs I wouldn't change anything but if she was typically developed I would have loved to raise her bilingually. [P1]
			… actually I prefer him understanding all the languages. [P4]
		English	Because the world is English, … we would've still stuck to English and raised her English. [P3]
			I've always said that although I am mainly an Afrikaans-speaking person and grew up being Afrikaans, I always said my kids will go the English route. [P2]
			The only thing that he needs to be able to do is to communicate in the English language. So that is key for us. [P5]

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
	they would want in the future)		Because of the setting, the place we are staying now, and the community. So, me introducing English to children, I think it should've been me staying in an English community. So that they at least have the foundation of one language. Then they wouldn't have struggled through this whole process. [P4]
		Home language	If we had all resources available in Afrikaans I think. Ja, it would've been nice for her to speak Afrikaans at home. [P3]
			I actually, myself, *wanted (child's name)* to learn in Sepedi. [P4]
		Sequential bilingualism: English first	But yes for now, English all the way. Then the other languages. Maybe he can learn Sotho because of where he's from and he can learn other languages eventually. [P5]
Influences on language practices and choices (factors that – potentially – influenced the language practices and choices)	Advice and information received (by professionals or others)	Establish home language foundation	One lady, actually next door, told me that it's better for the children to start actually a day care in Sepedi. Understand Sepedi and talk Sepedi as a foundation and then from there then they can go maybe learn English or go to an English medium *(school)*. [P4]
		English only	Ok, at school they normally actually will advise you that at home, normally at home speak English to the children. [P4]
			… so the one therapist said to us "stick to English only" … [P5]
		Mostly monolingual English	And also, the other lady *(Speech-Language therapist),* the first lady we ever went to, said to us stick to English so that he can understand English but if you want you can speak your own language at home. It's perfect if you do that. She told us if you want to speed it up, speak English. [P5]
		Multilingual	We went to two other therapists, the one at the government the lady was a Sotho lady, she said "no, speak English but speak your home language that you speak at home because you need to be comfortable. Most of the time they'll catch on to what you're speaking inside the house. He will catch on to what you are speaking inside the house, so speak whatever language you are speaking, Mix it up. Ideally, you are making him to communicate to you." [P5]
	Availability of resources, services and support (e.g., schooling, therapy services, devices and applications, etcetera.)	Language of material	… we decided that we would rather stick to English because of the availability of the material. [P3]
			… because she went *(to an)* English school that's why… and books are mostly in English … so there was no specific ask *(question)* to say which specific preference do you have. I just took on what was available at the point and where she was finding herself. [P2]
		Language of school	…all the schools that were available to her were also English… [P4]
		Language of applications and devices	Electronic devices obviously is English. Most of the programmes we download for *(child's name)* are English. [P4]
		Language of Therapists	And a lot of therapists are English speaking I've found that where I'm from. There aren't many Afrikaans speaking therapists where I am from. [P1]

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Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
Influences on language practices and choices (factors that – potentially – influenced the language practices and choices) (cont.)		No option for second language	The options for Afrikaans in the greatest scheme of things is not there. [P3]
	Child disability (how the fact that the child has a disability directly influenced the parent's decisions and choices)	Monolingualism better for child	I wanted to give her the advantage of maybe just raising in one ... I thought no, maybe to benefit this child it's maybe better to stick to one language … So, that made me decide, "no I'm going to stick to one language" … so that this child of mine can benefit. And I don't confuse her … It's just to give her all the support to be able to help her with language development. [P1]
			So the reason for that *(choosing English)* was because he had a problem speaking any language whatsoever, we decided we're going to stick to … the familiar language that he is going to use, and if he's going to school most of the time it would be in the English language so we decided then let's all *(of)* us speak English … that he can catch up faster in terms of his speech development. [P5]
			And knowing that autism is a communication deficit, sticking to one language would be ideal and I think English will then kind of be the answer. [P3]
	Future benefits (e.g., in homes, sheltered living, employment opportunities, educational opportunities, global mobility)	English will give opportunities	So that's the choice for us that he speaks English because anybody in South Africa and overseas, wherever he goes will be able to understand the English language better. If he can command it that's better. [P5]
			Obviously, English being the mode of communication, it's going to be used at work and school, his education. [P4]
			I think if she is going to become more verbal, I might want her to go in, I always think of when we're not there anymore and where she lands up she should be able to speak English more than Afrikaans. [P2]
			I think because she is speaking English, we chose the language that would benefit her the most in the future, theoretically on the job market or if she goes to a home and if we have to move to another country, then she would not have to struggle with the language that's natively spoken there. [P3]
		Multilingualism will open doors	… the more languages you can speak the more social you will be and the better your chances are of getting anything in business like jobs anywhere if you are multilingual. A lot of doors (will open) for him. It makes it very versatile ... If he can learn those five languages (English, Afrikaans, French, Mandarin and Portugese) he can go into the rest of the world. [P5]
	Family and community language (Parents' and community's language ability or inability to speak certain languages	Have to use family language and use and understand community language	… but *(child's name)* should be able to understand Afrikaans … because of her family. That *(Afrikaans)* is our cultural language. You won't get rid of it. [P2]
			Yet again, we got a language that we speak at home, and then also in the community around us is Sepedi and the children have to understand that language, too… [P4]
		Father cannot speak Afrikaans	He speaks Irish, so he's been in the country for 35 years. So, he can't really speak Afrikaans, but he understands, some of it. So, that's also one of the reasons why we've chosen to be English. [P1]
		Parent can speak English	It is purely because my English is good, it wasn't an issue for me to go over to English, and my wife was raised English when she was young so English is also not an issue for her. [P3]
		Parent struggled to learn English	I …struggled with English at school. Because I was in a Sepedi school. Started doing Matric, ok, Standard 9 or 8, 9 and 10 at an English-medium school and what happened was, me switching between the two, actually I struggled and

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
			(it) actually caused me to repeat one grade, I think that was Grade 8 when I got there, because my English was not on par. [P4]
Consequences of language practices and choices (effects that the language practices and choices have had)	Child language proficiency (languages the child does or does not learn or use)	Child unable to understand home language	When you start saying chicken or 'kgogo' in Sepedi, they start "Ok, what is that?" They don't know. The language *(home language)* it's been killed, bit by bit, at home. Like we want to say chicken. Because when we say 'kgogo' they don't even understand what you're talking about either. [P4]
		Receptively bilingual	… around the family, we are talking in Sotho and English and sometimes, he actually, I think he understands some of the times we speak to him. He does understand, he just can't respond. [P5]
			So I see her as fully bilingual in both languages. Yes, so she fully understands from a speech perspective. [P2]
		Simultaneous bilingualism to blame for poor language skills	… at school then there is English, at home there is Sepedi, and they are trying to actually learn two things at the same time … I think that is what is delaying their communication and them actually talking late. [P4]
		Multilingual exposure confuses the child	The only issue I can think of is a bit of confusion because of the language differences, because her grandparents will speak Afrikaans, we'll speak Afrikaans and then again, all T.V. and that is in English so with two languages I just think that that is confusing for her. [P3]
	Family reaction	Negative reaction from extended family	But the grandparents were not *(happy)* … particularly my mother. She was very upset by the idea. Because it has to be an Afrikaans child, it's very old school. Because then the idea is that we have an Afrikaans child, and they're normal and will go to a Model C school, will get a good public education, all of those things where if you speak English, the quality of the education it has to be private for it to be quality, all of those preconceived notions from the grandmother that come through. [P3]
			It's the granny who will always complain. "You *(reporting what the granny says to the parent)* have to teach the children Sepedi... I am getting a difficulty of actually communicating with them all the time and talk to them about something that they don't know. What kind of a language do you speak at home?" [P4]
		Supportive reaction from extended family	Well the family portion is very supportive actually. When they initially realized he couldn't really speak much, I went to my father and I said, "Listen, you are going to have to learn to speak in English" and my father was ok with that, he didn't complain. Most of my family … accommodate him and support him as much as possible … they don't try to make him feel out, they don't try to speak Sotho, they only are speaking in English to make him understand. So they are very supportive … They always follow what we ask them to do. Most of the time. And they try to assist as much as possible. So for them, I think the choices made, they don't really bother that much or give us any type of flack regarding languages. They have actually applauded the fact that we saying he must only speak English because they are saying that English is an international language so he should be ok. [P5]

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
Consequences of language practices and choices (effects that the language practices and choices have had) (cont.)	Family and community interaction	Bonding and interaction with extended family	I think we are lucky in the sense that everybody in our house is multilingual but I can surely see if we had to go visit relatives, that aren't as well equipped, it would be very difficult for them to communicate with her. We don't, fortunately, see extended family that are from the Free State and from the lowland. So I think that if that was the situation, they would really struggle to interact with her. [P3]
			But my mums also now at the stage where she feels like my six-year-old is speaking better English, now she feels a bit self-confidence *(self-conscious)* because she doesn't think her English is good ... I think it will affect her interaction because she might not speak to her or interact with her the way she would like to. [P1]
		Lack of community inclusion	It is rather very difficult to say that I can speak English to them all the way and going out there we still gonna, streetwise, have problems because of not understanding what other people are saying. [P4]
		Exclusion	So if you change the language you actually exclude the child… if *(the)* family for instance speaks Afrikaans and you only speak English to the child … you sort of exclude the child from the rest of the family because you've changed the language. [P1]
		Good because all kids speak English	In the complex we are staying in it is quite different, we have a lot of kids. They actually speak English all of them, most of them. Because most of them are from different areas… [P5]
	Culture, traditions, and language maintenance versus loss	Culture and language loss	Yes, we can be introduced to our home language. But, yet, I'd say English is actually going to kill all languages. English is stealing our home language. [P4]
		Not applicable to child because of disability	I don't really think it *(not learning the home language)* changed much in the way for her culturally, because *(child's name)* isn't, let's face it, she's a child without a little culture. She doesn't fit in the norms of choosing a culture. Her culture is autism. [P3]
		Culture is not language specific	We practice some of those cultures and traditions regardless of what language you speak, those are still there. Even if you're still speaking English or whatever, it doesn't take away from your culture. [P5]
Feeling and beliefs (about language choices and practices, the advice they received, and the degree of	About the advice and reactions received	English only is convenient for professional but hard at home	Well, from that point of view I actually understand why they say that (that parents should use English only at home). It becomes simple for them to teach a child in English … but from a home setting, it is very difficult. [P4]
		Advice to use English only biased based on languages	The first therapist I was not really happy, because … there was an Afrikaans women that I used to go there with, Rose. Her child used to struggle as well. And then for me I felt that a bit odd because she told Rose *(to)* speak English for school and then continue in Afrikaans. And when it came to me she said speak English only and I thought "no, you can't do that". So, that's why I left. [P5]

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
agency they believe they have in making language-related decisions) Feeling and beliefs (about language choices and practices, the advice they received, and the degree of agency they believe they have in making language-related decisions) (cont.)		Negative family reaction unhelpful	It *(grandmother's responses)* does hurt somewhat … it would have been best if the advice was more supportive of the situation or try something at least. Go find a school that gives Makaton classes in Afrikaans, find an Afrikaans school with therapy. But then she'll say that English is not ideal and that this is a bad situation on top of a bad situation. It doesn't help any of us so it just creates resentment. [P3]
	About language practices and choices	Acceptance of 'less than ideal'	Well, this is our situation. Like I said, we had to change from what we originally wanted *(regarding language choices)*. And this is just, you accept it and carry on. [P1]
			I think it's just the situation is a bit bigger than choosing the language for us. So we haven't given it that much thought or felt sorry for the situation. It was one of those five minute conversations where we said "okay, we'll just have to stick it out in English and that's it". [P3]
		Language practices and choices are secondary to communication success	… in my mind for my child … it doesn't matter how she approach this mixing or speaking it clearly in English or Afrikaans, just as long as I can understand her. [P2]
			For me let him be able to speak able to articulate himself … Doesn't matter what language he uses … As long as he's comfortable. I think what we are trying to do, we are trying to build him up to somebody independent and it doesn't matter what he expresses himself in. [P5]
		Sense of loss due to child not speaking home language	Look in the ideal world I would've loved her to speak the same mother tongue as I do because… language is a very intimate thing and a lot of feeling gets transferred with it. Each language has its pro's and its cons. Afrikaans is known for being a fast and effective and official language, it gets to the point but it, English, for example, is better for diplomacy and speaking eloquently. So each language has its positives and in the ideal world I would prefer for her to speak Afrikaans because the words are shorter quicker and to the point. But apart from that, I don't think anything else … Look it's a mutual feeling of disappointment not speaking the language. [P3]
			I would like him to learn Sesotho because I can dilate *(converse)* in Sesotho, I can write, read write, in Sesotho extremely well, and him, he is completely different from me ... Initially it was hard … [P5]
		Speaking a different language in the home	It is funny speaking a different language in your own home. [P3]
			It is also funny we've become so used to it *(speaking English to the child)*. I tried last night, I can't speak Afrikaans to my daughter. You just immediately speak English to her, it's become natural … It's completely foreign to speak to her in Afrikaans. It feels, wrong. [P3]
			… if I'm going to go speak English only in the house it won't be as comfortable for me, it would feel like we're in a foreign place at all times. [P5]
	Parent agency (degree to which parents can, want to and should make decisions	Choosing a language for child with disability is a big responsibility	I think both my wife and I have a large portion of it because we literally had to choose the language she could speak. Not a lot of parents choose the languages their child speaks, they choose the inherited. So we had to choose and that is a big responsibility choosing a language. It is a large life choice. [P3]
		Limited by circumstances	But, once again I cannot say I blame myself. I'd say it's the situation that actually put me here. I cannot afford to buy a house in Silverton *(historically white suburb)*. I cannot go and afford to buy a house in Equestria where there's only

Theme (definition)	Subthemes	Codes (examples)	Examples of quotes
Feeling and beliefs (about language choices and practices, the advice they received, and the degree of agency they believe they have in making language-related decisions) (cont.)	related to languages)		English people staying there. I can only afford to buy house in Mamelodi *(historically black township)* ... And sometimes you reassess the situation that has put you there, and I have nothing to say about it... I do feel that I have an influence on that. But sometimes, because our home setting and the way we live our lives, it is very difficult for one to, to actually say, "I could've changed the situation". [P4]
	Parent agency (degree to which parents can, want to and should make decisions related to languages) (cont.).	Parent follows the child's lead	I think I can try and guide him in a certain way but I prefer to see what he is comfortable with, I prefer to put things on the table that he is comfortable with like English, because it on the TV, it's at school, it's outside, it's everywhere. So then I just make the best of that. I don't try to lead him or try to make him or influence him in any way. I just try to see what he is comfortable with and try to rather focus on that and go that route, just to make him more comfortable. [P5]
		Parents (should) have a choice	And everybody's situation's different. You can't judge. So, at the end of the day, parents do what they can. [P1]
		Self-blame	... sometimes me as a parent, I actually blame myself ... I say ok, them saying autism is a *(disorder affecting)* development of the language, communication barriers ... but I'm just looking at it from my point of view saying, okay, maybe it is because I instilled two languages. And it was very difficult, maybe I shouldn't have done that? Maybe I should have had let him start in Sepedi and then further maybe at an English school? I don't know. [P4]

Appendix H

Declaration of Originality

UNIVERSITY OF PRETORIA

DECLARATION OF ORIGINALITY

This document must be signed and submitted with every

essay, report, project, assignment, dissertation and/or thesis.

Full names of student: **Natalien Michelle van Dalen**

Student number: **11021765**

Declaration

1.   I understand what plagiarism is and am aware of the University's policy in this regard.

2.   I declare that this **mini-dissertation** is my own original work. Where other people's work has been used (either from a printed source, Internet or any other source), this has been properly acknowledged and referenced in accordance with departmental requirements.

3.   I have not used work previously produced by another student or any other person to hand in as my own.

4.   I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

SIGNATURE OF STUDENT:

Appendix I

Statement by Language Editor

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6 August 2019

TO WHOM IT MAY CONCERN

Herewith I, **Cornelia Geldenhuys (ID 521114 0083 088)** declare that I am a qualified, accredited language practitioner and that I have edited the following mini-dissertation:

SOUTH AFRICAN PARENTS' PERCEPTIONS ON THEIR LANGUAGE CHOICES AND PRACTICES WITH REGARD TO THEIR CHILDREN WHO MAKE USE OF AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC) AND ARE RAISED IN MULTILINGUAL ENVIRONMENTS

by

NATALIEN MICHELLE VAN DALEN
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All changes were indicated by track changes and comments <u>for the author to verify, correct and finalise</u>.

The undersigned takes no responsibility for any changes to the document after submission of this certificate.

C.Gu————

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MA (LIN – *cum laude*), MA (Mus), HED, Postgraduate Dipl, Library Science, UTLM