

## **Should Parents be Discouraged from Raising Their Autistic Children to Be Bilingual?**

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Due to increased diversity in British classrooms there is an upsurge of parents struggling to decide whether to speak one or two languages with their autistic children. Some practitioners advise parents to limit language use to English, even if this is not their first language. Even when practitioners advise that dual-language exposure is not problematic, some parents feel there is not enough information and are worried about the implications of their choice.

Parents have reported concerns that dual-language exposure will further delay language development or would be too confusing for their autistic child. This essay evaluates the growing body of research in the area in relation to these concerns. The essay concludes that the current evidence-base suggests that being bilingual, is at the very least, not harmful for most autistic children. This essay also discusses possible social and cultural implications of limiting language exposure. It is argued that parents should not be discouraged from raising their autistic child bilingual, rather educational psychologists (EPs) should provide a clear synopsis of the research so that parents can make an informed decision. Possible explanations for the discrepancy between the literature and practitioner advice are explored, as are recommendations for future research and how EPs can support families making the complex and personal decision.

In the UK the prevalence of both autism and multilingualism are increasing (Department for Education, 2020; McConkey, 2020). This increased diversity in British classrooms has led to a growing number of bilingual parents grappling with the decision of whether to speak one or two languages in the home with their autistic children. Parents have reported receiving conflicting recommendations from practitioners and are often told to only speak English with their children, despite this not being their first language (Hampton et al., 2017; Howard et al., 2020; Trelles & Castro, 2019; Yu, 2016). Following these recommendations can leave parents with feelings of guilt and regret (Howard et al., 2020; Yu, 2016). Some parents have reported frustration at the lack of information about the effects of bilingualism on autism, despite the growing body of research in the area (Hampton et al., 2017).

Qualitative studies have explored factors in parental decisions about bilingualism. It is a complex and multi-faceted decision, however by looking at parental concerns, practitioners are

well placed to provide evidence-informed advice. In this essay, research examining two main concerns from parents will be critically evaluated. The first concern is that dual-language exposure will exacerbate difficulties with language development. This assumption makes practical sense due to threshold hypothesis and the impact social difficulties can have on language development. However, there is evidence that shows that this hypothesis is not supported. The second concern is that exposing a second language to an autistic child would be too confusing. While it could be thought that difficulties with cognitive flexibility would make using two languages challenging, some exploratory research has found that being bilingual is related to improved executive functioning. Possible social and cultural effects of limiting language exposure and their implications will be highlighted as an important part of practitioner recommendations. These include loss of cultural identity, disrupted parent/child communication and missed

opportunities for socialising. Throughout the essay it will be argued that the research, despite its limitations, suggests that dual-language exposure is, at the very least, not harmful for many autistic children. Possible reasons for the discrepancy between the literature and the advice of some practitioners will be explored. It will ultimately be argued that parents should not be discouraged from raising their autistic child bilingual, rather should be given easy to access information so they can make an informed decision.

Autism Spectrum Disorder (ASD) is a lifelong developmental disorder which is categorised by deficits in social communication and interaction, and repetitive and restrictive interests (American Psychiatric Association, 2013). The severity of these deficits varies for each person and that is why autism is described as a spectrum (National Autistic Society, n.d.). In this essay I will use identity-first language when referring to autistic people as this has been expressed as the preference of a large proportion of the autistic community (Bottema-Beutel et al., 2020). The prevalence of autism is increasing at an accelerated rate. The number of children with a formal diagnosis of autism in the UK has more than doubled in the last decade and is around 2% (McConkey, 2020).

Bilingualism describes people who need to use more than one language in their daily lives (Grosjean, 2010). This is a comprehensive term that covers a range of levels of proficiency and frequency of use (Luk & Bialystok, 2013). The amount of British students who have English as an additional language is increasing and currently represents over 1/5 of students in British primary schools, that is over one million children (Department for Education, 2020). There are two types of bilingualism simultaneous is when a person is exposed to two languages from birth, and sequential is when the second language is introduced after the age of three (Lund et al., 2017). Despite some contention, it is now generally considered that being bilingual is not harmful for typically developing children and celebrations of first language are encouraged (Department for Education and Skills, 2005). There is some evidence of a bilingual advantage, with research finding that bilingual children score better than their monolingual peers in cognitive reasoning and executive functioning

skills (Carlson & Meltzoff, 2008; Kovács, 2009). There is still a question about whether this phenomenon applies to autistic bilingual community, and this question will now be explore.

### **Impact on language development**

Parents have reported fears that exposing their autistic child to more than one language could increase any existing difficulties with language development and pragmatic use (Kay-Raining Bird et al., 2012). Language development is often impaired in autistic people, however the severity of this is variable, with some developing typically and other with significant delays or an absence of spoken language (Boucher, 2003; Kjelgaard & Tager-Flusberg, 2001). Despite differences in language ability autistic people typically have difficulties with pragmatic language, or using language for social purposes (Tager-Flusberg, 2015). There have been many qualitative studies into parental perspectives on decisions regarding bilingualism for autistic children. This essay will focus on two, because they were conducted in the UK and therefore represent the views of the target population of this essay. Through semi-structured interviews of bilingual parents of children with ASD (17) and typically developing (18), Hampton et al. (2017) found that while both sets of parents were concerned about the impact of bilingualism on language development, this was more predominant in the ASD group, especially parents with children who had lower verbal ability. More recently Howard et al. (2020) used interpretative phenomenological analysis (IPA) to explore the experiences of 16 families across the UK of raising an autistic child in a bilingual family. Four families were advised to reduce dual-language exposure and seven received no advice. They found that parents who decided to maintain monolingualism did so to promote the child's development of English, the language used in school and for interventions.

Practitioner recommendations to limit language use could be based on theories of bilingualism such as the threshold and developmental interdependence hypotheses (Kremer-Sadlik, 2005). The developmental interdependence hypothesis states that development of a second language (L2) is

dependent of adequacy in first language (L1). According to the threshold hypothesis there is a certain threshold level of competence needed in both languages to avoid bilingualism being cognitively harmful and another threshold needed in order for advantages (Cummins, 1979). If children have low levels of competency in both languages then it can mean that they will have difficulty interacting with their educational environment. From these theories, Cummins (1979) argued that bilingualism can only be beneficial if L1 is sufficiently developed. Using these hypotheses as a guide, it could be argued that exposing language delayed autistic children to a second language could be harmful. This theory makes practical sense, especially as the parents of children with lower verbal ability were more likely to choose monolingualism (Hampton et al. 2017). However, research into children with developmental language disorders has not found evidence for the idea that difficulties in a first language are exacerbated by the addition of a second language (Andreou & Leroni, 2020; Paradis et al., 2003) Further, Cummins' theory does not account for autistic children who have a solid grasp of their first language and some parents have had concerns and received practitioner advice regardless of verbal abilities (Howard et al., 2020).

Another possible explanation for parental concern and practitioner advice, is that the social difficulties related to autism could affect a child's ability in acquiring a second language. Autistic children can struggle with joint attention and cognitive flexibility which can negatively impact learning of functional and structural parts of language (Wang et al., 2018). Further, Wang et al. (2018) argue that because autistic children spend less time looking at faces and referring to non-verbal cues they have reduced opportunities to rehearse language and communication, with this lack of practice impacting development of a second language. Hambly and Fombonne (2012) hypothesised that, due to these social challenges, a bilingual environment would cause additional language delays to autistic children. They compared language abilities of autistic children aged three to six from bilingual and monolingual homes and further categorised these into simultaneous and sequential exposure. A pattern emerged for simultaneous bilingual children to

perform better on receptive and expressive language tasks than the sequential bilingual children, however, this was not significantly so. The researchers found no significant differences in language development measures between the monolingual and bilingual autistic children. The researchers concluded that parents should not be discouraged from speaking two languages with their autistic children. The study included children with a range of language abilities including non-verbal, and while this is beneficial in representing the diversity of autism, perhaps differences could have been found by reducing the variance in groups. They also did not account for cognitive differences, another variable that may have an impact on results.

Parents have also expressed concern that bilingual exposure would limit autistic children's pragmatic use of language. Reetzke et al. (2015) explored the structural and pragmatic use of language in bilingual and monolingual autistic children in China aged three to eight. Based on questionnaires about competence in structural and pragmatic abilities in their first language; they found no significant differences. This adds to the body of research claiming that dual-language exposure is not harmful, and also highlights that, in this case, pragmatic use was not impaired either.

Two systematic reviews have compared language development in monolingual and bilingual autistic children and found similar findings. Drysdale et al. (2015) reviewed eight papers and found no significant differences between monolingual and autistic children in areas of language development including: receptive language scores; functional communication scores; age of first words/phrases and communication impairment. Further, Lund et al. (2017) found little difference in expressive and receptive language scores for monolingual and bilingual autistic children, concluding that their findings provided preliminary support that dual-language exposure does not have a significant negative effect on the language development of autistic children. Currently there is a shortage of literature to support the idea that dual-language exposure has a negative impact on the development of language in autistic children. However, this still a relatively new research area

with studies being exploratory and involving small sample sizes and large variance in ages. Further, the diversity of both autism and bilingualism mean that, until studies are replicated with more specific groups, findings may not be applicable to all members of the autistic community.

Some psychologists have argued that restricting home language use could disrupt autistic children's language development because a parent's role in teaching language would be negatively impacted when speaking their second language (Trelles & Castro, 2019). Parents have reported increased interruptions and feeling less comfortable when speaking their second language (Hudry et al., 2018; Yu, 2016). If a caregiver is less proficient in a language they are speaking with their child they will be limited in their ability to model (Kremer-Sadlik, 2005). This is particularly pertinent in the autistic community as parental influence is more important for autistic children than their neurotypical peers and autistic children are more likely to adopt the accent of their mother (Baron-Cohen & Staunton, 1994). However, these feelings of concern are not always reflected in quality of interactions. In a naturalistic setting study Hudry et al. (2018) found little differences in amount and complexity of speech between parents speaking in their first and second language with their autistic children. Despite this, the researchers did find that parents reported feeling less comfortable speaking their non-native language and they used less imitation and synchrony.

### **Impact of cognitive functioning**

Another concern of some parents and practitioners is that being exposed to a second language would be too confusing for an autistic child (Paradis et al., 2018). Hampton et al. (2017) found that parents showed concern about the impact of dual-language exposure on their child's cognitive abilities, resulting in them feeling confused and not learning any language at all. As previously mentioned, there is evidence that bilingual autistic children develop language at a similar rate to their monolingual peers, however it is possible that adding another language could overwhelm their cognitive resources. A parent in Hampton's (2017) study

reported receiving advice to limit language exposure because two languages would be too confusing. Howard et al. (2020) had similar finding that confusion was a theme in the advice from practitioners and parental concerns. They reported that one parent feared that their child would not know what language to use, and another parent said their child got overwhelmed having too much information in his mind.

There is some theoretical support for these assumptions. Research has found deficiencies in Executive functions (EF) for autistic children and adults (Demetriou et al., 2017; Geurts et al., 2004; Hill, 2004) EFs are higher order mental processes necessary for us to control our behaviour in order to achieve goals, including working memory, planning, set-shifting (Gonzalez-Barrero & Nadig, 2019; Hill, 2004; Verté et al., 2006). Set-shifting describes competence in switching between separate tasks and demands, it is a measure of cognitive flexibility (Gonzalez-Barrero & Nadig, 2019). According to the theory of executive dysfunction these executive functions can explain the behaviours associated with autism including difficulties with flexibility and lack of impulse control (Hill, 2004; Robinson et al., 2009). As autistic children typically have difficulties with flexibility and set-shifting it could be assumed that it would be challenging for them to differentiate between which language they should be speaking. Further, difficulties with flexibility could mean that having to switch would be an added burden to their cognitive resources.

There has been limited research exploring autism, EFs and bilingualism. However, the existing research has found some evidence that being bilingual is linked with improved executive functioning in autistic children. This is something that has been typically reported in neuro-typical bilinguals, however this has been challenged by recent research (Gunnerud et al., 2020). Gonzalez-Barrero et al. (2019) explored whether this advantage extended to autistic children. The researchers recruited 40 participants aged six to nine. Half were autistic, the groups were further categorised into monolingual and bilingual. Set-shifting was measured using the DCSS task; a computer-based card sorting task, that requires participants to sort the same cards based on

different rules. Parents also self-reported about EF in everyday life. They found that the percentage of bilingual autistic children who passed the DCSS was significantly higher than their monolingual peers. However, this difference did not extend to self-report measures from the parents. This study did not include children with an intellectual delay, and it is possible that this hypothesised advantage does not extend to this group of children. Further, the lack of difference in parental reports implies that even if there is an EF advantage it may be limited to certain tasks and not generalisable.

In recent study exploring bilingualism, autism, and executive functions Ratto et al. (2020) found less reports of executive functioning issues in bilingual autistic children than monolingual. The study was conducted in USA and used archival data of 55 families of children under the age of six, who have a clinical diagnosis of autism and whose language data was available. Parental accounts about EF were analysed and it was found they reported significantly fewer difficulties in flexibility deficits and executive deficits overall. This study benefited from representing a range of cultural backgrounds and languages spoken, with parents being properly matched based on socioeconomic status. The study also included children with a range of cognitive and intellectual abilities, representing the diversity of the autistic community. However, it relied on parental reports of EFs and results could be due to patterns of responses of monolingual and bilingual parents rather than EF skills. It is a possibility that children need to have a base level of EFs in order to benefit from this bilingual advantage. Howard et al. (2020) highlighted the voices of parents who had tried and abandoned bilingual exposure due to confusion. The studies only include parents who have made the decision to raise their child bilingual; there may be a group of parents who feel that this is not an option due to cognitive deficits, who are not represented in the research.

### **Social and cultural benefits of bilingualism**

The limited research suggests that dual-language exposure does not disrupt language and

cognitive development for many autistic children. Another under-researched area that is worth considering when providing recommendations is the impact of limiting language exposure on wellbeing and socio-cultural factors (Davis et al., 2020). Parents have reported cultural identity and communicating with family members as reasons that they chose to raise their child bilingual (Hampton et al., 2017; Howard et al., 2020).

There may be impacts on parent/child relationships if parents are not communicating in their first language. Relations between autistic children and their parents are particularly important due to potential lack of social relationships (Rubin et al., 2004). In a longitudinal study of 626 bilingual families with a range of heritages, Tseng & Fuligni (2000) found that when teenagers spoke a second language with their parents they felt increased emotional distance which negatively impacted family cohesion. Although not conducted in the autistic community this study suggests that feelings of emotional dysconnectivity from language choice could extend to adolescence. Similar concerns have been reflected in the autism population, parents have reported feeling more comfortable and able to connect with their children when communicating in their first language; limiting this connection by monolingualism could have negative effects on family well-being (Hampton et al., 2017; Kim & Roberti, 2014; Yu, 2016).

Difficulties with social interaction and communication are a core feature of autism irrespective of language or cognitive ability (Ozonoff & Miller, 1995; Williams White et al., 2007). Limiting language exposure could further reduce the opportunities an autistic child has for social engagement that they benefit from when speaking their parent's first language and engaging in activities in the wider community (Hampton et al., 2017). Kremer-Sadlik (2005) interviewed parents and found that choosing to limit language exposure left one child excluded from family dinners when his family switched from English to Chinese. Further, Howard et al. (2020) reported a parent saying that if their child didn't speak Spanish she would not be able to communicate with her father. Opportunities for engaging in family and cultural activities should

be considered as an important part of practising social relationships.

Finally, another implication of limiting language use is isolation from cultural identity. In interviews Kremer-Sadlik (2005) found that monolingual autistic children from bilingual families did not identify with their wider community. This could have negative impacts, especially for immigrant families who can gain emotional well-being from these connections (Halle et al., 2014).

### **Implications for EPs**

Although limited in scope, the research into bilingualism does not seem to find negative effects on dual-language exposure on the language development and cognition of autistic children. When looking at the child as part of a family and cultural community we can see possible negative implications for socialisation and well-being in limiting language. There is a discrepancy between this body of ever-growing research and the recommendations of some practitioners and the findings do not suffice in changing the attitudes of some parents (Hampton et al., 2017). By addressing possible reasons for these discrepancies, it may be possible to understand the role of an EP in helping to eradicate feelings of confusion and support the families facing difficult decisions about language.

A potential reason for the inconsistency is that parents and professionals are not able to access the latest information and research on the subject (Reetzke et al., 2015). Although growing, the frequency of bilingualism in the UK is small compared to other countries, and practitioners may feel unskilled in addressing parental concerns (Hampton et al., 2017). Journals can be difficult to access and are not always presented in accessible language. EPs have a role in collating and presenting this information to other professionals and parents. EPs could also discuss the findings and discussion in focussed teacher training on autism and at forums like ResearchED and the TES SEN show. There is some evidence of parent-friendly information about bilingualism, for example on Bournemouth Council's website (BCP Council, n.d.). However, further dissemination is required to reach a wider audience. Due to the

variability in circumstances between each family, it is possible that some parents even with access to the research might choose to limit language. However, the opportunity to make an informed decision will potentially eradicate feelings of regret found in some qualitative research (Howard et al., 2020).

Another reason for the discrepancy between literature and practitioner advice is that practitioners find the research unsatisfactory or not representative of what they have experienced. Further research is needed to explore social and cultural implications of limiting language. Another way to improve the body of research would be to explore the cognitive or language differences between sequential and simultaneous bilinguals, this is an under-researched area and there is a possibility that the type of bilingualism may have an impact on these functions. Further, autism is a spectrum condition and research should look at the effects of bilingualism on certain sub-types of autism to enable all parents to see that the research applies to them (Davis et al., 2020). The qualitative literature shows that some parents have stopped exposing their child to bilingualism due to the stress that it caused (Howard et al. 2020). It could be argued that there is a group of children, for which bilingualism would be unobtainable, but they are excluded from the research by nature of being monolingual. Further, most research has been conducted in the USA where bilingualism is more ingrained in society and is seen as less problematic (Hampton et al. 2017). In collaboration with Bilingualism Matters, The University of Edinburgh is currently conducting a large-scale and longitudinal research project into bilingualism in autism (Bilingualism Matters, n.d.). with the promise of disseminating findings through lectures for professionals and workshops. This provides some hope for the quality and applicability of research going forward. It is important for EPs from other areas of the UK to monitor this project and relay findings to parents and other practitioners.

Finally, it is worth noting that for some people bilingualism is not a choice, rather a way of life. In India schools are bilingual and children are encouraged to participate in this practice regardless of verbal or cognitive ability (Kremer-Sadlik, 2005). Howard et al. (2020) reported that some children had already been raised

bilingual when they received their autism diagnosis after the age of five. Finally, interactions between first and second language may mean that the idea of simply stopping speaking one language is too simplistic (Yu, 2016). Kim & Roberti (2014) have argued that when thinking about decisions about bilingualism and autism, the research has been too focussed on impairments and limitations. They suggest a focus towards looking at the impact of culture in the autism and bilingualism debate, finding consistency and opportunities to practice as key factors for success. It is beyond the scope of this essay to look at how EPs can support parents beyond the decision-making process. However, EPs, in collaboration with speech and language therapists, can play an important role in advising schools of best practice in this area.

For some families, deciding how many languages to speak with their autistic child can be distressing, especially in light of sparse or conflicting practitioner advice (Hampton et al., 2017; Howard et al., 2020; Trelles & Castro, 2019; Yu, 2016). Throughout this essay it has been argued that, although requiring improvements, the research to date does not provide evidence that bilingualism is harmful for the cognitive and language development of many autistic children. Further, autistic children can become isolated from their families and wider communities if they do not have shared language (Kremer-Sadlik, 2005). Despite this, the decision is personal, and the variety in autism and bilingualism means that conclusions drawn will look different for each family. Parents should not be discouraged from raising their autistic child bilingual, rather EPs have a responsibility to distribute the current literature in an easy to access format. Hopefully, doing this can help to eradicate feelings of guilt and regret in parents.

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