

Bilingualism and Children with Autism Spectrum Disorders: Issues, Research, and Implications

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Clinicians and educators often recommend that bilingual parents expose their children with autism spectrum disorders (ASD) to only one language, despite the fact that there is limited research on bilingualism and children with ASD (Seung, Siddiqi, & Elder, 2006). Typically, the recommended language is English, as it is the dominant language of education and treatment services. The push to use only one language with autistic children from bilingual households is related to the notion that becoming bilingual is too challenging for children with ASD and might even cause additional language delays (Bird, Lamond, & Holden, 2011; Yu, 2009). This paper looks at the extent to which such beliefs are supported by the literature. What does the limited research on this issue suggest about whether the recommendation to avoid fostering bilingualism is truly in the best interest of children with ASD from bilingual households? Implications for parents, educators, clinicians, and researchers are discussed.

Keywords: autism spectrum disorders, bilingualism, language, special education, treatment

When a child is first diagnosed with autism spectrum disorders (ASD), one of the immediate concerns among parents and professionals is, “How will this child develop language?” Language input and output become central to the child’s treatment, education, and interactions with family. Deciding what language practices to use with autistic children is especially problematic if the parents’ first language does not align with the dominant language of schools and clinical services. This is because many educators and clinicians fear that dual-language exposure could contribute to additional challenges and delays in language development (Seung et al., 2006).

The Center for Disease Control’s (CDC) most updated count for the prevalence of autism spectrum disorders in the United States is 1 in 88, reported in 2008 (CDC, 2012)—a 23% increase from the prevalence reported in 2006. Black and Latino children show the greatest increases in autism prevalence, 91% and 110% respectively. Asians have the third highest prevalence rate—1 in 103 children (CDC, 2012). The CDC does not report on the linguistic demographics of children with autism spectrum disorders. It is possible, however, that because the prevalence of autism has increased among ethnic minorities, greater numbers of bilingual youth are being diagnosed with ASD. Little is known about the impact of being raised bilingually on the development of language in children with ASD (Seung et al., 2006; Valicenti-McDermott et al., 2012). Yet, clinicians and educators often advise parents against the use of two or more languages with their autistic children (Bird et al, 2012; Kremer-Sadlik, 2005; Wharton, Levine, Miller, Breslau, & Greenspan, 2000; Yu, 2009).

Research has shown that bilingual children tend to have stronger cognitive and linguistic abilities in such areas as concept formation and metalinguistic awareness than do their monolingual peers (Bialystock, 2001; Petersen, Marinova-Todd, & Mirenda, 2012; Wei, 2000).

Romaine (2004) explains that bilingualism also serves a social function, as being bilingual connects people to specific communities. These connections build individuals' sense of identity. Maintaining bilingualism may therefore be important in order for children to feel like they belong to their heritage communities (Wei, 2000).

Given the potential advantages associated with bilingualism, why do professionals advise parents to use only one language with their ASD children? Children with autism already struggle with developing social and emotional connections with others (APA, 2013). Is the recommendation to avoid fostering bilingualism truly in the best interest of the child? To provide some clarity on the issue of language use with autistic children from bilingual households, this paper addresses the following questions:

1. What does the research say about bilingualism and children with autism?
2. What are the implications of these findings for practitioners working with children with ASD from bilingual households?

There is no experiment, let alone group of experiments, that can definitively answer whether bilingualism is beneficial for children with autism. It is important, however, to consider relevant research that sheds light on the issue so parents and practitioners can make a more informed decision about raising children with autism bilingually.

The Challenges and Concerns of Raising Children with ASD Bilingually

The American Psychiatric Association's new diagnostic guide, *DSM-V*, broadly defines autism as a neurological disorder that manifests in impaired social interaction and communication, as well as restricted behavior, or the overdependence on routines and intense focus on specific items (APA, 2013; Wing, Gould, & Gillberg, 2011). Children must exhibit behaviors from all three criteria in order to be identified as having autism spectrum disorders. As the name indicates, children fall on a continuum, displaying anywhere from mild to severe forms of the indicators listed above (APA, 2013).

Typically, parents and professionals begin to suspect the presence of autism spectrum disorders in children when speech does not develop by 15 to 18 months. Another sign of ASD is when children develop a few words age-appropriately, but then lose them or fail to develop more language. As such, language delays are one of the key components to identifying the presence of ASD. The ultimate diagnosis of autism spectrum disorders sends the child and the family into an array of evaluations, interventions, and treatments, many of which focus on language and communication skills (Alpern, 2012).

The development of both receptive and expressive language is therefore central to identifying autism spectrum disorders. Knowing this, many parents of children with autism have come to the conclusion that using two or more languages with their child would be too confusing and might further delay language (Bird et al., 2012; Wharton et al., 2000; Yu, 2009). Yu (2009) examined parental language choices among 15 Chinese-English bilingual parents of children with ASD. Despite their sense that it would be ideal for their children to maintain some degree of Chinese proficiency, many of the parents reported concerns that expecting their children to learn both Chinese and English was unreasonable given their developmental disabilities. A majority of the parents ceased speaking in Chinese to their children because they did not want to confuse them or increase their children's speech delay. Bilingualism was

considered too developmentally challenging; code-switching and mixing languages were seen as particularly problematic.

Other researchers report that parents are fearful of speaking a non-English language to their children. This fear stems from concern that their children with autism would get too confused, that learning two languages would be too hard, and that the children would not become fluent enough in English to socialize with peers and participate in school (Bird et al., 2012; Wharton et al., 2000). These worries are heightened when professionals advise parents against using two languages with their ASD children and specifically recommend speaking in only English with them (Kremer-Sadlik, 2005; Yu, 2009).

Where does this notion that bilingual parents should speak only one language to their autistic children come from? In one of the first studies on children with autism from bilingual households, Baron-Cohen and Staunton (1994) found that the children in their study tended to adopt the speech patterns of their mothers more than that of their peers. This differs from the research on typically developing bilingual children, which shows that these youth often adopt the speech patterns of their peers more than those of their parents. Baron-Cohen and Staunton's findings indicate that mothers' language use could be critical for language acquisition and development in children with ASD. This has led to professionals often advising bilingual parents to speak in only English with their autistic children (Kremer-Sadlik, 2005).

Even if parents want to raise their children bilingually, they face many challenges in trying to do so. Bilingual parents of children with ASD often report that most, if not all, of their educational and interventional services are provided in English, and that primary language alternatives are not available (Bird et al., 2012; Mueller, Singer, & Carranza, 2006; Yu, 2009). In their survey study of 750 special educators, Mueller et al. (2006) found that a majority of their respondents primarily used English for the expressive and receptive language instruction of English learners with moderate to severe disabilities. Other scholars also report that because of a shortage in bilingual special education teachers, much instruction and support for students with special needs is provided solely in English (Lang et al., 2011).

Although the lack of non-English educational and treatment services for children with ASD is probably a product of the commonly held belief that becoming bilingual is too challenging for these youth, there are likely to be other factors at play. English is also the language of power, both within the United States and throughout the globe. In Yu's (2009) interviews, parents reported that though they wanted their children to learn Chinese, it was not as imperative as learning English. The parents explained that English was a necessity in order to function in "an English-speaking world" (p. 104). Being fluent in English was therefore regarded as a survival skill for children with ASD. The global dominance of English likely affects professionals' advice as well. They do not recommend monolingual English with autistic children from bilingual households chiefly because they fear that bilingual techniques will result in further language delays. They too recognize the power of English and worry that time spent speaking to the child in a language other than English will undermine whatever level of English proficiency the child could acquire.

Prevailing beliefs about the complexity of bilingualism and the dominance of English have strongly affected household language practices for children with ASD from bilingual households (Kremer-Sadlik, 2005; Yu, 2009). Is it truly better, though, for such children to receive exposure to only one language?

The Importance of Developing Bilingualism in Children with ASD

Kremer-Sadlik (2005) explored the relationship between such professional advice and family language use in his ethnographic study of four high-functioning autistic children and their parents. All of the parents in Kremer-Sadlik's study received professional recommendations to speak to their children in English, regardless of the parents' proficiency in the language. These clinicians and educators emphasized the importance of simplifying the children's linguistic input by exposing them to the same language inside and outside the home.

One family stopped speaking Mandarin to their autistic son but continued to speak it with their older, typically developing son. Kremer-Sadlik found that when the family talked to each other in Mandarin, the son with autism disengaged and stared at the television. The parents reported that because their English was weak, they felt limited in their interactions with this son. Furthermore, the child lost valuable opportunities to engage socially because of his lack of Mandarin speaking skills. His identity was also influenced, as he himself declared that he was not Chinese, but American (Kremer-Sadlik, 2005).

Another family stopped speaking Armenian to their son when he turned four because they did not want to confuse him. Their doctor had also advised using only English with the boy. The mother reported that she had ceased taking her children to church with her because her autistic son could not understand the Armenian priest. As with the previous family, the autistic son was unable to engage in an important cultural experience because of his limited abilities in the family's native tongue; he also was not able to access the social interactions provided in a church setting (Kremer-Sadlik, 2005). For both of these boys, bilingualism was a potential gateway to the increased development of social and emotional skills within their families and communities. Not having the opportunity to grow up bilingual resulted in social consequences for these children.

Trying to use only English with their children with ASD, however, has also been found to cause numerous challenges for bilingual families. Wharton et al. (2000) explain that affective interactions are of great import to young children with ASD because it helps them make emotionally strong memories that can be drawn upon in future play. Parents have a harder time making an emotional connection with their children when they cannot speak to them in their native language; bilingual parents often show more affect when using their native language because it is typically more comfortable for them. In addition, speaking and playing in their native tongue reminds parents of their own childhood experiences. The researchers conclude that children need to make emotional connections with their parents in order to maintain engagement in social interactions. As such, recommending that parents not use their affect-laden native languages can be harmful to the language development and social growth of young children with ASD (Wharton et al., 2000).

Developing dual-language abilities in children with ASD from bilingual families is essential for the facilitation of communication with parents, the formation of ethnic identities, and the increased opportunity for social interaction in and out of the home (Kremer-Sadlik, 2005; Wharton et al, 2000; Yu, 2009). The choice to not raise a child with ASD bilingually may deny that child the benefits that come with being bilingual. The commonly held belief that bilingualism is too confusing and even unreasonable to expect of children with ASD has led to potentially detrimental outcomes for autistic youth from bilingual families (Petersen et al.,

2012; Yu, 2009). It is therefore critical that we know whether such beliefs are supported by research before specialists or service providers make recommendations about language use.

Can Children with ASD Become Bilingual Without Further Delaying Language?

A few studies on bilingualism and children with ASD address the question: Do children with ASD who have dual-language exposure develop language at a slower pace than their peers with monolingual exposure? The researchers of these works have found that there are no differences between bilingual autistic children and their monolingual peers in terms of their conceptual vocabulary in both languages and their English vocabulary sizes (Petersen et al., 2012); expressive and receptive communication skills, as well as their socio-communicative levels (Hambly & Fombonne, 2012); number of words, presence of word combinations, babbling or vocalizations (Valicenti-McDermott et al., 2012); and their age of first words, age of first phrases, and communicative abilities (Ohashi et al., 2012). These findings indicate that there is no difference in language development between monolingually exposed and bilingually exposed children with ASD. Much of this research is observational, however, and more experimental data is needed to support these results.

Some of these researchers also found a few language-related advantages among bilingually exposed children when compared to their monolingual peers. Petersen et al. (2012) discovered that the bilingual children in their study had larger total production vocabularies than the monolingual group. Valicenti-McDermott et al. (2012) looked at testing data for toddlers with autism spectrum disorders. Their analyses revealed that the bilingual children with ASD cooed more often than the monolinguals. The bilingual group also demonstrated more gestures like pointing, more leading to desired objects, and greater pretend play.

In addition to indicating that bilingualism does not further delay language development among children with ASD, research has also found that autistic children are completely capable of becoming bilingual. As such, concerns that dual-language exposure is too confusing for children with ASD may be unfounded. There was one family in Kremer-Sadlik's (2005) study that continued to use their native language, Chinese, with their son despite professional advice to use only English. The son with autism demonstrated the ability to code-switch between English and Chinese, indicating that he was becoming bilingual.

Other researchers have also shown that using primary language with autistic children from bilingual households facilitates language development in both the first and second languages. In Seung et al.'s (2006) case study of a Korean-English bilingually exposed child with ASD, the researchers found that the subject demonstrated growth in both English and Korean vocabulary, even though his speech-language treatment was solely in Korean. Another study, conducted by Lang et al. (2011), found that a young child with ASD from a Spanish-speaking household followed instructions more often and exhibited fewer undesirable behaviors when receiving treatment in Spanish compared to when she was treated in English. This did not mean that she was unable to perform when treatment was in English, just that her performance was stronger when Spanish was used. Thus, it appears that primary language use was beneficial for this child, giving her opportunities for success without preventing her acquisition of English.

According to a few studies, therefore, bilingual children with autism do not show additional impairments in their language development when compared to their monolingual peers. Instead, there are some areas in which they may be more advanced than monolinguals.

Furthermore, children with autism spectrum disorders are capable of developing bilingualism. These findings suggest that such a diagnosis should not immediately cause professionals to recommend eliminating one language in a bilingual child's repertoire. Such recommendations are not supported by research and could, in fact, be detrimental to children's linguistic, cognitive, affective, and social development.

Conclusion

From the instant a child is diagnosed with autism spectrum disorders, parents are required to make countless decisions, only one of which is what language to use with their child. Parents, therapists, and educators make choices about language, treatment, and instruction for bilingual children with ASD every day without having sufficient research to support their decisions. The misconception that raising autistic children bilingually would only confuse them and further delay language development has resulted in families, teachers, and clinicians using only one language (typically, English and not the primary language) with these children. Such language practices can have serious consequences in identity formation, access to cultural heritage, and social growth for bilingual youth with ASD. This mirrors educational practice for bilingual children in general. Many misconceptions exist about bilingualism that are not supported by research, yet influence policies and practices for emergent bilingual children (August, Goldenberg, & Rueda, 2010).

The research that does exist on bilingualism and children with ASD is rudimentary and limited, as it is primarily observational and involves small samples of children. Nonetheless, this research does not support the recommendation to use only English. A few studies have found that there are no significant differences in the language development of young monolingual and bilingual children with ASD. These data would indicate that bilingualism does not lead to additional language delays in autistic children. Even if parents want to raise their children bilingually, however, they often do not have access to resources and services that would help them do so. Children with autism need spaces where they can learn and be treated in their primary language as well as in English. Schools should have more bilingual special education teachers and specialists working with autistic children from bilingual households.

Research on autism has grown exponentially since the late 1990s. Matson and LoVullo (2009) report that this growing body of research tends to focus on three categories: basic causes and psychological processes, description and diagnosis of the disorders, and treatment or interventions. Given this expansion of research on ASD, the lack of research on bilingual children with ASD is troubling. It reflects a linguistic and educational climate in which bilingualism is considered a disadvantage rather than a resource (Bialystock, 2009). Just as practitioners recommend monolingual English environments for children with ASD, autism researchers as well promote such monolingualism by failing to investigate the validity of the numerous assumptions that exist about bilingualism and ASD. The silence in the field of autism on the topic of bilingualism works to allow English to dominate in the language practice of adults interacting with autistic children from bilingual households.

Expanding the literature on bilingual autistic youth would help parents, professionals, and educators make better informed decisions as they treat and work with this population. In particular, research should be conducted comparing the effects of treatment and instruction in both English and the home language on children's language development. This will inform the

language practices of teachers and clinicians, which will in turn affect the language use of parents. Depending on the outcomes of these studies, they may also provide evidence needed to encourage the development of bilingual special education programs for children with ASD. Individuals connected to bilingual children with ASD make choices based on what they believe are best for these youth. They genuinely desire to help this population develop language and social skills that will allow them to participate meaningfully in society. It is now the responsibility of the research community to help these individuals in their endeavors to provide the most effective language, treatment, and instructional practices for bilingual children with autism spectrum disorders.

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