باب الأبحاث المقدمة بالإنكليزية:

1-The Underpinning Roadblocks of Autism and Language Learning

الحواجز الأساسية للتوحد وتعلم اللغة

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ملخص البحث:

تشمل المعالم التنموية للطفل قدرات منظورة مثل الكلمة الأولى، الخطوة الأولى، الابتسامة الأولى والتلويح بالوداع. يمر الأطفال بمرحلة تمتاز بعلامات تقدمية في اللعب، التعليم، الكلام، السلوك، والحركة مثل الزحف، المشي، التصفيق، ربط أربطة الحذاء والعد ... تظهر المهارات الاجتماعية والفكرية واللغوية للطفل إما نموًا طبيعياً أو تأخيراً أو إعاقة أثناء نضجه. يجعل اضطراب طيف التوحد (ASD) من الصعب على الأطفال المتضررين فهم الديناميكيات الاجتماعية والتوقعات الأكاديمية (كيمبي، 2014). تهدف هذه الورقة إلى تعريف اضطراب طيف التوحد، وتسليط الضوء على أعراضه وأسبابه وآثاره على تطور اللغة، بالإضافة إلى التدخلات المدرسية والمنزل لدعم تعلم اللغة وتنمية مهارات الاتصال، وتسليط الضوء على القضايا الأساسية التي

تمنع الأطفال المصابين بالتوحد من تطوير مهاراتهم اللغوية.

الكلمات الدالة: اضطراب طيف التوحد (ASD) - تعلم اللغة - الأعراض - الأسباب - الآثار - التدخلات

Abstract

A child's developmental milestones include abilities like the first word, the first step, the first smile, and the waving of a goodbye. Children go through progressive markers in their play, education, speech, behavior, and movement such as crawling, walking, clapping, tying their shoe laces, counting, .The unveiling of these skills and abilities is a much awaited time by parents of their child's development. A child's social, intellectual, and language skills show either normal development, delay, or disability as they mature. Autism spectrum disorder (ASD) makes it difficult for affected children to comprehend social dynamics and academic expectations. (Kimbi, 2014). This paper aims to define autism spectrum disorder, highlight its symptoms, causes, and effects on language development, as well as school and home interventions to support language learning and the growth of communication skills, shedding light on the underlying issues that prevent autistic children from developing their language skills.

Keywords

Autism Spectrum Disorder (ASD) – language learning – symptoms – causes – effects – interventions

Introduction

One of the neurodevelopmental conditions that impacts a child's

social, linguistic, and communication skills is autism spectrum disorder. According to Ha, Sohn, Kim, Sim, and Cheon (2015), children with ASD have larger brains with anomalies in the white and gray matter. During the first three years of a child's growth, mental and genetic problems are discovered. The prognosis is frequently dismal for autism, which is typically not diagnosed until a child is 2 or 3 years old. It can be difficult to understand and treat autism because it has a major impact on so many different aspects. Regarding diagnosis, causation, and therapy, the relatively recent history of autism has been characterized by debate and theoretical conflicts. Thankfully, a more logical and scientific approach to the area has emerged as a result of the more recent emphasis on the empirical examination of autism (Schreibman, 1988).

Autism is characterized as "a lifelong, developmental disability that affects how a person communicates with and relates to other people, as well as how they experience the world around them" (www.autism.org.uk), according to the National Autistic Society. According to Baird et al. (2006), current prevalence rates in the UK are estimated to be around 1 in 100.

According to the Equality Act of 2010, autism is considered a handicap and is predicted to cost the UK economy 32 billion pounds annually, largely in missed wages (Knapp, Romeo, and Beecham, 2009). Many people with an autism diagnosis, including those without intellectual disabilities, "have poor adult psychosocial functioning as indexed by measures such as independent living and gainful employment," according to the Diag-

nostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM – 5). (American Psychiatric Association, 2013, p. 57). The UK's 2009 adoption of the Autism Act made it easier to incorporate autism into local service commissioning. A strategy for adults with autism was also released by the UK government in 2010 (DH, 2010), and it was updated in 2015 (DH, 2015).

An online search for "autism" recently returned 110,000,000 results, demonstrating how broad the subject is. According to YouGov: What the World thinks (2015), 99% of people in the UK have heard of autism. According to Runswick-Cole (2016), autism is "big business" with a variety of products, books, TV shows, magazines, journals, intervention programs, conferences, and schools devoted to the disorder. It is worth noting that several well-known historical luminaries, including Mozart, Michelangelo, and Einstein, were allegedly autistic (listverse.com/2011/12/05/top-10-alleged-autistics-in-history).

This paper attempts to define Autism Spectrum Disorder, highlight the symptoms, the causes, and their effects on language development along with home and school interventions to promote language acquisition and development of communication skills shedding the lights on the underlying barriers that hinder the language development of autistic children.

Defining Autism Spectrum Disorder

A neurodevelopmental disorder called autism spectrum disorder (ASD) is a syndrome that affects how the brain develops and manifests in children before the age of three. Children with ASD display symptoms of abnormal social interaction and cog-

nitive function. They frequently exhibit issues with learning new languages, developing their literacy, and interacting with others. (Masi, Demayo, Glozier, & Gaustella, 2017). According to Rutter and Schopler (1986), the characteristics that characterize the syndrome of autism are its behaviors and natural history, not its genesis or pathology. There are two etiological principles for autism, even though the cause is frequently unknown in many cases due to the results of several biological and epidemiological investigations. First, there are numerous etiologies, as would be expected in a condition that is solely identified by its clinical characteristics. Second, rather than being psychosocial, autism's etiologies are organic (Folstein & Rutter, 1988).

Diagnosis

Symptoms of ASD

When children with ASD begin to form social and behavioral routines that influence their communication and daily activities at age two, it is common to identify them as having the disorder. Parents, teachers, and preschool personnel all notice and report symptoms. Medical professionals evaluate a patient's communication abilities in terms of prosody (speech rate and tone) and pragmatic language (comments and discussions). (Soto, Kiss, & Carter, 2016).

Social non-verbal symptoms in children with ASD. When interacting with others, children with ASD make fewer eye contact than typical children. "Studies found that high-risk infant siblings who went on to receive a diagnosis of ASD showed a significantly lower rate of eye contact during administration of

the Screening Tool for Autism in Toddlers and Young Children at 15 months" (Soto et al., 2016, p.5). Studies have also revealed that infants with high-risk ASD display a limited gesture vocabulary and exhibit delays in the learning of both symbolic and communicative gestures. (Soto et al., 2016).

Social interactions in children with ASD. Children with ASD require longer than average children to learn to communicate and develop social skills, according to Jobs, Bolte, and Ytter (2018). Children with ASD don't reply when their names are called, don't appear to be listening during talks, and act strangely when touched. They favor playing by themselves and creating their own worlds.

Behavior problems. Children with ASD exhibit particular behaviors that are not displayed by other kids. Children with ASD are sensitive to light and sound; that is why they tend to cover their ears and closes their eyes in case of a loud noise or a strong light. Hence, they have strong reactions to sensory stimuli such as aversion to food with a texture or smell that does not appeal to them. They struggle with abstractions and pretend play. They interact repeatedly with the same things or circumstances and move in peculiar ways. They exhibit dissatisfaction when they don't assimilate a concept explained by the teacher; they might exhibit their frustration by raising their hand and interrupting the instructor while showing weird looks on their faces and squinting their eyes in confusion. Their thoughts are not accurately reflected and this makes many ASD children frequently grow frustrated and discouraged. Either anxiety, mood disor-

ders, or inappropriate reactions to disturbances are common in them. Children with ASD often talk to themselves and separate themselves as a form of self-defense. (Jobs et al., 2018).

Language usage patterns of children with ASD. Children with ASD have unusual speech patterns, such as robotic tones, high pitches, sing-song voices, and a propensity to repeat words and phrases. They are likely to repeat the same conversation trying to make themselves comprehensible. Their comments are meaningless or unrelated to the conversations they are having with other people. Children with ASD could keep repeating things they've heard. This ailment is known as echolalia. "Echolalia, the repetition of words and/or utterances spoken by another person (Wallesch, 1990), is frequently documented in individuals with autism spectrum disorders (Stiegler, 2015)" (Berthier, Torres-Prioris, and López-Barroso, 2017, p.1).

Children with ASD may display great talent and outstanding abilities. Hughes et al. (2018) explain that some ASD children may exhibit certain signs that show unusually advanced skill in particular fields. It's known as Savant Syndrome. Savant Syndrome in autistic youngsters results in extraordinary talent in music, math, calendar computation, and fact and numerical memory recall. They possess a remarkable talent, which is evident in their rote recall and familiarity with numbers and dates. Most of them can recall the names of all the teachers and students, along with the names of their families. Most of them exhibit outstanding abilities in calculating the ages of their family members, problem solving skills, and mental math.

Causes of ASD

According to statistical data, ASD has become much more common over the last 20 years as a result of both hereditary and environmental causes. There are four categories of risk factors: parental, natal, postnatal, and environmental (Karimi, Kamali, Mousavi, & Karahmadi, 2017).

Parental risk factors. According to Karimi et al. (2017), The risk variables that the parents experience have an impact on the fetus's developmental phases.

–Parental age. Having parents that are older than 34 can be one of the biggest risk factors for autism.

– Maternal physical and mental health. Children with ASD are more likely to have mothers who experience stress, sadness, illnesses, or bleeding during pregnancy.

– Maternal prenatal medication use. Medication use during pregnancy disrupts fetal development and raises the likelihood that a kid may acquire autism.

– Familial socioeconomic status. The likelihood of having autistic children is increased by the parents' low socioeconomic level. The probability of having an autistic kid increases with poverty, stress, and hunger.

Natal risk factors. The mother's health issues prior to, during, and after pregnancy raise the risk of having a child with ASD.

Post- natal risk factors. Babies born prematurely or with low birth weight or other health issues are more likely to develop autism.

Environmental risk factors. Autism risk is either increased or decreased by the mother's diet both before and during pregnancy. Autism can be warded against with a healthy, balanced diet. Additionally, the chance of autism is increased by the mother's exposure to pollutants, x-rays, and toxins.

Effect of ASD on Language Development

Chen and Kuo (2017) note that Children who have autism spectrum disorder struggle to communicate with others and frequently behave inappropriately when they do. They might scream, interrupt, or use inappropriate language.

Receptive language is typically more delayed in ASD children than expressive language. They have difficulty comprehending or using the language correctly. Repeating words and phrases, known as echolalia, and using nonsense words, known as jargons, are characteristics of early language development.

ASD children find difficulty with emergent literacy skills especially the ones dealing with meaning related knowledge such as reading and writing skill development (Flusberg, 2015).

Recommendations: Interventions to Develop Language Skills in ASD Children

Defilippis and Wagner (2016) claim that there is no medical cure for ASD despite the fact that various drugs are used to control or lessen the related symptoms According to Thun-

berg (2013), if parents and teachers frequently use intervention approaches at home and at school, ASD children's communication and language skills can improve.

Children with ASD have better language and literacy skills thanks to supportive household interventions. Reading aloud to children and sharing books with them helps to establish a comfortable environment where kids can pick up new words and practice speaking freely at home. Parents can start talks with their kids or play games that require oral connection with them. Parents can help their children improve their social skills by using daily language, such as greetings and engaging in conversation, and by modeling the language by asking some questions that require a full response.

Teachers' interventions at school assist individuals with ASD in improving their oral and communicative abilities. In addition to teachers, speech therapists also help struggling students to develop their oral and communication skills.

Children with ASD can improve their linguistic, social, and communication abilities with the use of educational interventions, speech therapists, and family support.

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