

PREDISPOSITION IN THE ACQUISITION OF THE ENGLISH LANGUAGE IN CHILDREN WITH AUTISM SPECTRUM DISORDER COMPARED TO MOTOR PERFORMANCE: CROSS-SECTIONAL STUDY.

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SUMMARY

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder where there is a disruption in the fundamental processes of socialization, communication, and learning. A percentage of autistic individuals do not develop speech, and when it occurs, it is typically altered; however, there are reports of a predisposition to learning a second language to the detriment of the first. Objective: To evaluate the predisposition for acquiring English as a second language and motor development in Brazilian children with ASD. **Materials and method:** The cross-sectional study had a convenience sample composed of 16 children diagnosed with ASD, with chronological ages between 6 and 11 years old. After being approved by the Ethics and Research Committee of UniEVANGÉLICA and constituted by screening, the participants took a placement test where their level of confidence and fluency in the English language was assessed. For the motor assessment, the Revised Psychoeducational Profile (PEP-R) (Schopler, Reichler, Bashford, Lansing & Marcus, 1990) was applied, aiming to evaluate the developmental age in seven areas: imitation, fine motor coordination, gross motor coordination, visuomotor coordination, perception, cognitive performance,

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and verbal cognition. **Results:** The results will be statistically analyzed assuming a significance level of $p \leq 0.05$, with the aim of promoting communication and cognitive interventions and providing a better quality of life in the language development of the autistic child.

Keywords: Bilingualism; Verbal Fluency; Autism Spectrum Disorders.

INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social communication, the presence of restricted and stereotyped behaviors and interests, classified into three levels: mild, moderate, and severe, according to the characteristics presented by the Childhood Autism Rating Scale (CARS). ASD causes a disruption in the fundamental processes of socialization, communication, and learning, known as pervasive developmental disorders. A significant percentage of autistic individuals do not develop speech, and if they do, it is typically altered. The abnormalities found are: the immediate or delayed repetition of another person's words and phrases (echolalia), pronominal inversion ("you" for "I"), the use of invented words (neologisms), and repetitive questioning (FRIEDMAN, L., STERLING, A. 2019).

Language is a predominant factor in the development of the human person. In this way, it is dialogical by nature and is seen as action, that is, as a work of the subject on the language aiming at meaning. Through the process of language acquisition, the child constitutes themselves as a subject and builds their knowledge of the world through interaction with others. When a child is diagnosed with ASD, one of the immediate concerns of the parents and professionals involved in the case is: "How will this child develop language?"

The input and output of language become essential for the child's treatment, education, and interactions with the family. Deciding which language practices to use is especially problematic if the parents' first language does not align with the dominant language in the child's social environment. This is because educators and doctors fear

that exposure to dual language may contribute to additional challenges and delays in language development (PARK, S. 2014).

Children with ASD would have a predisposition for acquiring a second language? Would it be the English language? Does the level of motor development correlate with this predisposition? There are studies that evaluate bilingualism and the predisposition to learn a second language in the autistic population. In English children, bilingualism develops with English-Spanish, and bilingual children were more likely to vocalize and use gestures, with no other differences in language skills (VALICENTI-MCDERMOTT M., et al. 2013). However, there is a gap in the scientific literature evaluating bilingualism in relation to Portuguese-English and motor development. Thus, the objective of this work is to evaluate the predisposition for acquiring English as a second language and motor development in children with ASD.

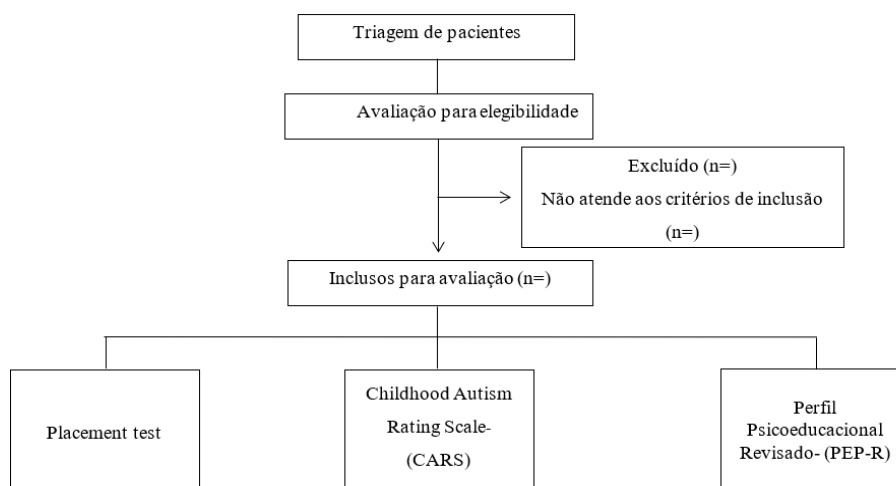
METHODOLOGY

This is a cross-sectional study, with a sample of 16 children diagnosed with ASD and chronological ages between 6 to 11 years old. The evaluation is underway with a project approved by the Ethics and Research Committee of UniEVANGÉLICA, consisting of screening and a protocol where participants underwent an assessment of language and communication disorders. For this, a placement test is applied to assess the child's level of confidence and fluency in the English language.

In the motor assessment, the Revised Psychoeducational Profile (PEP-R) test (Schopler, Reichler, Bashford, Lansing & Marcus, 1990) was applied, aiming to evaluate the developmental age in seven areas: imitation, fine motor coordination, gross motor coordination, visuomotor coordination, perception, cognitive performance, and verbal cognition. Each area has its specific tests totaling 131 items. The test is standardized and involves materials such as colored wooden blocks, picture books, puppets, objects and their respective photographs, musical instruments, and modeling clay. The presentation of the material was done verbally and gesturally by the examiner. Such measures were taken to minimize the possibility of the child not performing it due to a lack of understanding of the instructions. The children were referred by professionals from the Association of Parents and

Friends of Exceptional Individuals of Anápolis (APAE) and Couto Magalhães School, where the purpose of the research was explained. After the first stage of screening, the guardians of the minors signed the free and informed consent form (FICF) and the children signed the minor's assent form (MAF), after it was presented in a playful and figurative manner.

Figure 1 – Study Flowchart



Source: Authors

Figure 2. Collections



Source: Authors

CONCLUSION

The proposed project stands out for its originality, and combined with the prior experience of the researchers involved, it is believed that the results derived from it will be disseminated in the scientific community, fostering growth and continuity in related research. The presentation of partial results in scientific articles and International Congresses is planned. One of the main expectations of the impact of this project refers to the innovative potential of the research in the context of developing bilingualism in this population.

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