

TITLE OF THESIS:

THE HANDWRITING ON THE WALL

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KEYWORDS:

**CHILDREN, AUTISM SPECTRUM DISORDER (ASD), POOR PENMANSHIP,
CLINICIANS AND AUTISM EXPERTS, DEVELOPMENT OF SKILLS, POSITIVE
RESULTS.**

ABSTRACT:

The purpose of the study is to investigate the Children handwriting on the wall with autism spectrum disorder (ASD) often has poor penmanship. In turn, poor penmanship leads to decreased success in communication, failed academics, and a lack of self-esteem. Until now, clinicians and autism experts believed that developmental delays were to blame for inferior handwriting skills, but a new study in *Neurology* reports that weak motor skills may be the cause. And, more importantly, they may be treatable.



The study examined the handwriting of children with and without ASD. The children completed the Minnesota Handwriting Assessment, as well as the Wechsler Intelligence Scale for Children-IV and the Physical and Neurological Examination for Subtle (Motor) Signs. The children without ASD performed better on handwriting tasks than age- and intelligence-matched children with ASD. Specifically, children with ASD had trouble forming letters, but were able to correctly size, space, and align their letters. The results of the motor skills assessment accurately predicted handwriting skills within the ASD group. Age, gender, intelligence were not related to handwriting.



Many children with ASD experience impaired motor skills, not just handwriting. Any skilled movement requires basic motor skills, spatial relations, and the ability to plan movement. The inability to perform such tasks — referred to as “dyspraxia” — is prevalent in ASD children. Currently, experts do not know if these deficits in motor skills and execution are a marker of a neurological abnormality underlying ASD. However, similar deficits have been seen in patients with lesions of the cerebellum, implicating the region of the brain responsible for motor coordination and learning in the neurological basis for ASD.



CONCLUSION:

Following responses are drawn for conclusion, no matter the cause of ASD, the symptoms of dyspraxia — handwriting included — are associated with the underperformance in social, communication, and behavioral skills that have come to define the disorder. These impairments significantly negatively impact quality of life, self-esteem, and academic performance in children with ASD.

Armed with this new research, occupational therapists are now recommending targeted techniques to teach letter formation, as well as general training to improve fine motor control in children with ASD. For example, using the non-writing hand to steady the writing hand might aid in letter formation. A little extra penmanship work may help children with ASD achieve academic success and healthy self-esteem. The curse of bad penmanship does not need to spell out the future for kids with ASD.

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