Attention and Response of Joint Attention Bids in Autism Spectrum Disorder Children Depend on the Visibility of the Target

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Introduction to Joint Attention

Joint attention (JA) is a foundational social communication skill where two individuals focus on the same object or event.

JA is crucial for language development, cognitive skills, and social interaction.

Children with ASD often struggle with joint attention, which impacts their communication development.

Importance of Joint Attention in ASD

Joint attention deficits are a core feature of autism.

Impaired joint attention can lead to difficulties in shared experiences and learning from others.

Interventions that
enhance joint attention
may help improve
communication and social
skills in children with
ASD.

Study Purpose and Hypothesis

The study aimed to examine the role of target visibility in joint attention.

The hypothesis was that children with ASD would initiate and respond to joint attention more frequently when the target was visible.

The researchers also wanted to explore the impact of visible versus hidden targets on engagement in joint attention tasks.

Methodology Overview

The study used a within-subject design to measure joint attention.

The participants were children diagnosed with ASD.

Each child participated in trials where the target object was either visible or hidden, and their responses were recorded.

Participants

The study involved a small group of children diagnosed with ASD.

All participants were selected based on specific criteria such as age and level of ASD-related impairments.

The age range of the children was between 3 and 5 years old.

Experimental Setup

The children were presented with a toy as the target object.

In each trial, the toy was either fully visible or partially hidden behind an object.

The child's initiation (e.g., pointing, looking) and response (e.g., following gaze) to the target were recorded.

Key Findings

Children with ASD initiated joint attention more often when the target was visible.

The response rates to joint attention bids were also higher when the target was visible.

Visibility played a significant role in facilitating joint attention initiation and responses.

Secondary Findings

THE STUDY ALSO
FOUND THAT THE
CHILDREN WITH ASD
WERE MORE LIKELY TO
RESPOND TO JOINT
ATTENTION BIDS WHEN
THE TARGET WAS
VISIBLE.

THERE WAS AN
INCREASE IN
VOCALIZATIONS AND
OTHER
COMMUNICATIVE
BEHAVIORS WHEN THE
TARGET WAS VISIBLE.

THIS SUGGESTS THAT
VISIBILITY MAY
FACILITATE NOT JUST
INITIATION BUT ALSO
THE OVERALL
ENGAGEMENT IN
SOCIAL
COMMUNICATION.

Implications for Intervention

THE FINDINGS HAVE IMPORTANT IMPLICATIONS FOR INTERVENTIONS FOCUSED ON SOCIAL COMMUNICATION.

MAKING THE TARGET OBJECT VISIBLE MAY ENHANCE JOINT ATTENTION BEHAVIORS AND OVERALL ENGAGEMENT.

THERAPISTS AND EDUCATORS MAY USE THESE FINDINGS TO DESIGN INTERVENTIONS THAT PROMOTE JOINT ATTENTION IN MORE NATURALISTIC SETTINGS.

Limitations of the Study

The sample size was small, limiting generalizability.

The study only assessed a narrow age range (3-5 years), so results may not apply to older children with ASD.

Other factors such as the child's prior experience with the toy or environmental distractions were not fully controlled.

Conclusions

01

Target visibility significantly impacts the initiation and response to joint attention in children with ASD.

02

Enhancing the visibility of targets can increase social engagement and communication.

03

The findings emphasize the importance of visual cues in social communication for children with ASD.

Recommendations for Practice

Ensure

 Ensure that targets in joint attention exercises are clearly visible to children with ASD.

Consider

 Consider the child's visual attention when selecting materials for interventions.

Create

 Create engaging and visually accessible environments that promote social interaction.

Future Directions

Future research should explore the role of other sensory modalities in joint attention.

Studies could investigate the long-term impact of visible-target interventions on social and language development.

Research should also examine the impact of object type and complexity on joint attention in children with ASD.

Reference

Cilia, F., Touchet, C., Vandromme, L., & Driant, B. L. (2020). Initiation and response of joint attention bids in autism spectrum disorder children depend on the visibility of the target. *Autism & developmental language impairments*, 5, 2396941520950979. https://doi.org/10.1177/2396941520950979