UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Emotion Recognition and Gaze Pattern of Preschool Children with Autism Spectrum Disorders Children

Permalink

https://escholarship.org/uc/item/7fc9f76r

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

Authors

CHEN, SSU-YU Wang, Ying-Chien Liu, Shin Yu et al.

Publication Date

2023

Peer reviewed

Emotion Recognition and Gaze Pattern of Preschool Children with Autism Spectrum Disorders Children

SSU-YU CHEN

National Cheng Kung University, Tainan City, Taiwan

Ying-Chien Wang

National Cheng Kung University, Tainan, Taiwan

Shin Yu Liu

National Cheng Kung University, Tainan, East Dist, Taiwan

TSE MING Chen

National Changhua University of Education, Changhua, Taiwan

HUA FENG

Graduate Institute of Rehabilitation Counseling, Changhua, Taiwan

I CHENG WU

National Cheng Kung University, Tainan, Taiwan

Shu-Ling Peng

National Cheng Kung University, Tainan, Taiwan

Po-Sheng Huang

National Taiwan University of Science and Technology, Taipei, Taiwan

Jon-Fan Hu

National Cheng Kung University, Tainan City, Taiwan

Abstract

Very few studies have focused on the stimuli materials for social situations to understand if contextual cues have impacts on the gaze patterns of children with ASD to investigate the emotion recognition performance. This study investigated the performance across 2 age groups (preschool, school age) between ASD and typically developing (TD) children by using eye-tracking techniques and recording recognition accuracy for different areas of interest (AOI). The performance of ASD (n=91) and TD (n=155) participants were observed while asked to identify emotions in a context, including happy, sad, anger, fear, and surprise. The results showed no significant relationship between age and correct rate; but ASD groups actually spent more time on faces to recognize emotions compared to TD groups. The findings highlighted the greater effects of social experience on TD groups, leading to correctly identify emotions despite less gazing time for scanning faces.