



## INTISARI

*Autism spectrum disorder* (ASD) adalah gangguan *neurodevelopmental* yang ditandai dengan gangguan interaksi dan komunikasi sosial serta perilaku atau minat stereotip yang berulang. Salah satu kemampuan yang paling dibutuhkan oleh individu dengan ASD dalam kehidupan sehari-hari adalah pengenalan ekspresi wajah. Mayoritas hasil penelitian menunjukkan bahwa individu dengan ASD memiliki pengenalan ekspresi wajah yang lebih rendah dibandingkan dengan individu sehat. Hingga saat ini belum ada penelitian yang mencoba mengeksplorasi pengenalan ekspresi wajah pada sampel ASD di Indonesia. Penelitian ini mencoba menjawab pertanyaan apakah ada perbedaan pengenalan ekspresi wajah antara remaja ASD dan remaja sehat (*typical development/TD*) di Indonesia. Enam belas remaja (8 ASD dan 8 TD) yang mendapatkan ijin mengikuti penelitian dari orangtua mengikuti tes pengenalan ekspresi wajah dan pengukuran IQ. Orangtua diminta melaporkan gejala perilaku ASD dengan mengisi *Social Communication Questionnaire* (SCQ). Tes pengenalan ekspresi wajah terdiri dari 36 gambar yang tersusun dari enam ekspresi emosi dasar manusia (marah, jijik, takut, senang, sedih dan terkejut). Hasil penelitian menemukan adanya perbedaan pengenalan ekspresi wajah yang signifikan antara kelompok ASD dan TD. Analisis tambahan dilakukan lebih lanjut pada pengenalan ekspresi wajah, tingkat inteligensi, gejala perilaku ASD, akurasi jawaban, waktu reaksi dan jenis ekspresi wajah dan jenis kelamin model. Penelitian ini berkesimpulan bahwa keberhasilan individu untuk mengenali suatu ekspresi wajah dapat dipengaruhi banyak faktor, seperti kesadaran akan emosi diri sendiri, tingkat gejala perilaku ASD, tingkat inteligensi dan fungsi otak yang bertanggungjawab dalam mengenali ekspresi emosi yang.

Kata kunci: *Autism Spectrum Disorder*, Rekognisi Ekspresi Wajah, Emosi Dasar Manusia



## ABSTRACT

*Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social interaction, communication, and stereotyped behaviors. One of the abilities most needed by individuals with ASD in day to day basis is the ability to recognize facial expressions. Majority of studies found that people with ASD have a lower facial expression recognition compare to healthy (typical development/TD) people. To these days, in the researcher's knowledge, this is the first study that tries to explore facial expression recognition in people with ASD in Indonesia. This study attempted to answer if there is any difference in facial expression recognition between adolescents with ASD and TD adolescents in Indonesia. Sixteen adolescents (8 ASD & 8 TD) that given permission from a parent and willing and able to complete Basic Expression Test (BET) and IQ test were tested. Each participant's parent was asked to complete the Social Communication Questionnaire (SCQ) to measure behavioral symptoms of ASD in their child. Basic Expression Test (BET) consists of thirty-six pictures based on six basic emotions: anger, disgust fear, happiness, sadness, and surprise. The result shows that there is a significant difference in facial expression recognition ability between adolescents with ASD and TD adolescents. Healthy adolescents have a higher mean score in BET compare to ASD adolescents. Additional analysis was carried out further on recognition of facial expressions, intelligence levels, behavioral symptoms of ASD, the accuracy of answers, reaction time and type of facial expression and sex of the models. In conclusion, many things contribute to how someone could accurately know others' facial expression, such as awareness to their own emotion, level of intelligence, behavioral symptoms of ASD and function of the brain's area that responsible in recognizing people facial expressions.*

**Keywords:** *Autism Spectrum Disorder, Facial Expression Recognition, Human Basic Emotion*