

# Abnormal visual fixation does not mediate deficits in emotion recognition in conduct disorder

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Studies have shown that conduct disorder (CD) is associated with impaired recognition of facial emotions<sup>1</sup>, but whether the cause of this deficit is due to difficulties with attention, interpretation and/or appraisal is unclear. Now, researchers at the Universities of Southampton and Bath have addressed this question, by asking 50 adolescents (aged 13-18) with CD and varying degrees of callous-unemotional (CU) traits to report the emotion (anger, sadness, fear, happiness, surprise, disgust or neutral) represented in images showing dynamic and static facial expressions.

While the participants viewed the images, the researchers performed eye tracking to relate the categorization of each image to the participants' allocation of overt attention. They then compared the results to those of 51 typically developing controls. Adolescents with CD (particularly males) showed worse emotion recognition compared to controls, and fixated less on the eyes when viewing images depicting fearful and sad expressions.

Overall, higher levels of CU traits associated with deficits in fear recognition and reduced attention to the eyes of surprised faces; however, compared to those with CD and low levels of CU traits, individuals with high levels of CU traits showed better fear recognition. Because the group-level differences in fixation behaviour were small and did not explain the much larger group differences in categorisation performance, the researchers propose that CD-related deficits in emotion recognition are not mediated by abnormal fixation patterns.

## Referring to:

Martin-Key, N.A., Graf, E.W., Adams, W.J. and Fairchild, G. (2017), Facial emotion recognition and eye movement behaviour in conduct disorder. *J. Child. Psychol. Psychiatr.* 59: 247-257. doi: 10.1111/jcpp.12795.

## Further reading:

<sup>1</sup>Short, R.M.L. et al. (2016), Does comorbid anxiety counteract emotion recognition deficits in conduct disorder? *J. Child. Psychol. Psychiatr.* 57: 917-926. doi: 10.1111/jcpp.12544.

## Glossary:

**Conduct disorder (CD):** CD is characterized by behaviour that violates either the rights of others or major societal norms. To be diagnosed with conduct disorder, symptoms must cause significant impairment in social, academic or occupational functioning. The disorder is typically diagnosed prior to adulthood.

**Callous unemotional (CU) traits:** a dimension of psychopathy in which an affected individual displays low empathy, low guilt and no remorse.

