**DOES ANXIETY INFLATE AUTISM SEVERITY MEASURES?**

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**Objectives:** Anxiety disorders are among the most common comorbid disorders in individuals with Autism Spectrum Disorders (ASD). Even amongst individuals who do not meet criteria for a comorbid anxiety disorder, symptoms of anxiety are common (e.g., Hartley & Sikora, 2009; Kim et al., 2000). A number of studies have found higher anxiety to be related to more severe symptoms of ASD, including social deficits (e.g., Dubin et al., 2015; Eussen et al, 2013) and repetitive behaviours (Rodgers et al., 2012). As a result of this relationship, some researchers have expressed concerns regarding the discriminant validity of measures of ASD and anxiety (Renno & Wood, 2013). Hartley and Sikora (2009) found that the DSM-IV social communication criteria were largely able to discriminate individuals with ASD from those with anxiety disorders. Conversely, Cholemery and colleagues (2014) found that the Social Responsiveness Scale showed poor discriminant validity in the identification of ASD versus anxiety symptoms. Overall, little research has examined the influence of comorbid anxiety symptomatology on severity of ratings assigned to individuals with ASD on other commonly used measures, such as the Autism Diagnostic Observation Schedule (ADOS) and the Childhood Autism Rating Scale (CARS). The purpose of this pilot study is to report on an initial examination of the relationship between two autism measures and four indicators of anxiety.

**Method:** The data for this study came from a project evaluating the long-term outcomes of Intensive Behavioural Intervention (Perry, Koudys, & Ho, 2017). Twenty-one youth (13-20 years) diagnosed with ASD were reassessed after receiving IBI as children. Analysis for this study was conducted with a subsample who had complete data for four anxiety indicators (parent and youth ratings on Achenbach and SCARED) and two ASD measures (ADOS and CARS) (*N* = 15; *M*age = 15.2).

**Results:** The ADOS total score and the algorithm score for Social Communication and Repetitive Behaviours were weakly correlated with anxiety. The total CARS score was also weakly correlated with anxiety. Based on clinical cut-off scores on all anxiety measures, we dichotomized individuals in two groups (anxious vs. not anxious). We found no significant differences between the anxious and not anxious groups in terms of ADOS or CARS scores.

**Discussion/Conclusion:** Clinicians are often concerned regarding the overlap between symptoms of anxiety and ASD. For example, obsessive behaviours seen in anxiety disorders can sometimes look similar to repetitive or stereotyped behaviours. Thus far, there has been little research examining the influence of anxiety levels on the ADOS and CARS. The results from this pilot study indicate that the ADOS and CARS scores are not likely influenced by varying levels of anxiety. Given that these are well established and commonly used measures, it is encouraging to know that they are relatively independent of anxiety symptoms. However, this study was based on a small sample of high functioning and older individuals. Therefore, since ASD is greatly heterogeneous, more research is needed with a larger and more variable sample (i.e., varying levels of ASD severity and cognitive functioning).

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