

Social Responsiveness in Agenesis of the Corpus Callosum and High Functioning Autism

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Introduction: Individuals with agenesis of the corpus callosum (ACC), even when their FSIQ is in the normal range, tend to exhibit deficits in social interaction and communication that are consistent with the diagnostic criteria for autism spectrum disorder. However, the similarities and differences in social cognition between ACC and high functioning autism (HFA) are not yet clear.

Method: This study compared social cognition in 8 adults with complete ACC and FSIQ > 80 (mean age=34; FSIQ=107), and 9 age- and IQ-matched individuals with HFA (mean age=28; FSIQ=115) using the Social Responsiveness Scale (SRS).

Results: Overall scores on the SRS did not differ significantly between the ACC group and the HFA group ($p > .05$), nor did the subscale scores for Social Cognition, Social Communication, and Social Motivation ($p > .05$ in all cases). However, individuals with ACC were significantly less impaired than HFA in Social Awareness ($t=2.30, p<.05$; means ACC=7.5; HFA=11.3) and Autistic Mannerisms ($t=2.39, p<.05$; means ACC =11.9; HFA=19.4).

Discussion: This study supports prior findings of symptom overlap between ACC and HFA, particularly in the domains of social communication and social cognition. New findings herein suggest that, while social motivation may be similar, individuals with ACC exhibit more typical social awareness and have fewer autistic mannerisms than adults with HFA.

Word count = 228