Public Abstract

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Individuals with autism experience difficulty with social interaction and communication. Effective treatments for these individuals are sorely lacking, especially when it comes to medication. Most currently available drugs target symptoms such as aggression and irritability that occur alongside the primary symptoms of the disorder. These individuals also commonly experience anxiety and heightened stress responses. In the present dissertation, the body's stress system was explored as a potential target for medication for individuals with autism. A drug called propranolol that dampens anxiety and stress was examined for its effects on social and cognitive behavior in adults and adolescents with autism. Improvements associated with propranolol were seen for both social and cognitive functioning. Additionally, measurements of stress and anxiety were able to predict which individuals responded to the drug. These findings suggest that propranolol may be an effective medication for some individuals with autism, but further work in the form of large-scale clinical trials is necessary. Through these future studies, this line of work may eventually help improve the lives of individuals on the autism spectrum.