What behaviors mostly likely present a diagnosis of Autism?

I have a personal interest in this as my now 14-year-old son is on the Autism Spectrum. He was evaluated and diagnosed just prior to his third birthday. However, he was also evaluated just after his second birthday and was diagnosed as neuro-typical, although showing development in the “low range” of normal in some areas. The broader interest lies in the increased rate of diagnosis of Autism Spectrum Disorder, now 1 in 59 according to the [Center for Disease Control and Prevention](https://www.cdc.gov/mmwr/volumes/67/ss/ss6706a1.htm) CDC,and the related healthcare costs.

In order to examine this question, I have chosen a data set on toddlers from the following source, which is comprised of 1,054 observations taken with an app for assessing autism.

**Data Set Name: Autistic Spectrum Disorder Screening Data for Toddlers**

**Date: July, 22, 2018.**

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As the abstract for this data set points out, there are significant healthcare costs associated this disorder, and an early diagnosis may reduce these costs.

To start, I will want to examine summary statistics such as percentage of males vs. females who display classic autism spectrum disorder (ASD) traits, and what percentage of those who did display these traits were evaluated by a family member vs. a health care professional. My ultimate goal is to show which behaviors are most closely related to positively identifying classic ASD traits.

CDC, Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014, Surveillance Summaries, Volume 67(6), April 27, 2018, <https://www.cdc.gov/mmwr/volumes/67/ss/ss6706a1.htm>