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SCIENTIFIC LETTER

Continuous Distribution of Autistic Traits in an Indian Sample

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To the Editor: Whether psychiatric syndromes exist as discrete entities or on a continuous dimension in the general population has been frequently debated by researchers. Several researchers from across different cultures have reported on autistic traits being continuously distributed [1]. This has resulted in a shift in nomenclature over the last few decades with Childhood Autism being now referred to as Autism Spectrum Disorders [2]. This is the first large scale study to report on autistic traits among children in mainstream schools in India. Seven hundred seventy one children (ages 5 to 11) from different mainstream schools across Bangalore city were rated on the Social Responsiveness Scale (SRS) [3] by consenting parents. The SRS data showed that autistic traits were continuously distributed in the population (Fig. 1). Accordingly, non-parametric tests were used for further analysis. The range of SRS scores for the entire sample was 1 to 119 with a standard deviation of 19.717. Girls in this sample unusually had a higher mean score. However, when we removed the higher outliers (using the inter-quartile rule) among the scores, we found that the mean scores of the boys were higher than those of the girls.

Krushkal Wallis test showed no significant difference in the distribution of SRS scores by age ranges ($p = 0.106$). The range of scores for the different economic groups was similarly explored and a statistically significant difference was found ($p < 0.001$). Post hoc analysis carried out using the Mann Whitney U to compare between the socio-economic status (SES) groups, showed that children from the lower economic group had significantly lower scores. The middle income group had the highest scores. More people from the lower socio-economic status needed assistance from the rater to score the SRS.

The study supports findings of several other studies conducted in different cultures using different measures [4]. Autistic traits were found to be continuously distributed in the general population. The distribution remained similar even when the sample was analysed based on age/gender/socioeconomic status, although socio-economic status influenced the scores. By demonstrating presence of continuous distribution of autistic traits in a community sample of children without a clinical diagnosis, this study adds support to literature describing a dimensional view of disorder [5].

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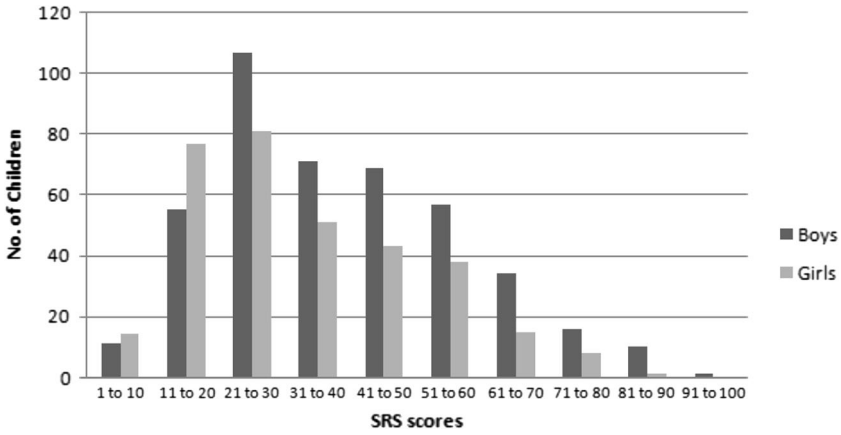

Fig. 1 Distribution of SRS scores by gender

Compliance with Ethical Standards

Conflict of Interest None.

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