Abstract

Background: First-order relatives of persons with Autism Spectrum Disorder (ASD) exhibit a cognitive pattern which is part of a broader autism phenotype. Method: The purpose of the present study was to evaluate whether some neuropsychological features related to the autism phenotype are present in parents of ASD children. To this end, the exploration included a dichotic listening task, handedness and the Empathy Quotient (EQ-60). Results: The scores obtained by the total sample (fathers plus mothers) were similar to those of the general population, although there were differences in some parameters of the dichotic listening task depending on the gender. Contrary to expectations, only in fathers, the negative correlation between data from both ears was not statistically significant, which could be evidence of a lack of hemispheric interdependence. Conclusions: These results support the possible existence of a genetic susceptibility to an aberrant language asymmetry pattern. Moreover, possible unknown epigenetic factors could act on a vulnerable genotype in some ASD subjects. Nevertheless, due to the small sample size, the present research must be considered a pilot study.

Keywords

Language laterality, broader autism phenotype, autism, parents