

# Personality traits in parents of people with autism

Susan O'Hanrahan, Michael Fitzgerald & Myra O'Regan

*Ir J Psych Med* 1999; 16(2): 59-60

## Abstract

**Objectives:** This study set out to explore if there were measurable personality characteristics specific to parents of people with autism.

**Method:** Parents of 12 people with a DSM-III-R diagnosis of autism presented for the study. Each of the people with autism were matched where possible with a counterpart without autism but with a lifelong disability on parameters of age, sex and IQ level. Parents of the 'autism' and 'non-autism' groups were then interviewed in detail using four personality assessment instruments. Scores were tabulated for both mothers and fathers in each group and intergroup comparisons were made.

**Results:** No significant personality profile difference was identifiable between the two parental groups.

**Conclusions:** Personality traits specific to parents of people with autism are not identifiable in this study thus casting doubt on the validity of personality phenotypes as measurable heritability factors in autism.

**Key words:** Autism; Personality traits; Parents.

## Introduction

Leo Kanner first described autism in 1943.<sup>1</sup> On clinical impression he believed affected children suffered from innate inabilities which may have been compounded by personality characteristics in both parents. Others, including Eisenberg and Despert,<sup>2,3</sup> were in general agreement with this. In 1967, Bettelheim<sup>4</sup> proposed direct parental causation through an abnormal mother/child bond. Further research disproved this and autism was recognised as an organically based neurodevelopmental disorder. Rutter<sup>5</sup> defined autism as a behavioural syndrome with multiple aetiologies. While some cases of autism have been associated with genetic disorders, eg. Fragile X<sup>6</sup> and medical conditions<sup>7</sup> in most cases the aetiology remains obscure.

Gillberg<sup>8</sup> viewed autism as a sign of central nervous system abnormality and no more diagnostically specific than learning disability or epilepsy. As a result of extensive research in family and twin studies, Rutter<sup>9,10</sup> postulates that it is not autism that is inherited but a genetic influence on linguistic or cognitive impairment, of which autism is but one part. Thus autism could result from a combination

of brain damage and an inherited cognitive abnormality, a deficit which ordinarily would cause linguistic or cognitive impairment would, in the presence of brain injury, give rise to autism.

While geneticists search for chromosomal markers in autism, others have set about identifying its inherited phenotype. This work has focused mainly on personality traits in parents of people with autism. Results conflict. Wolff et al<sup>11</sup> speculated on an excess of mild schizoid traits in parents, especially fathers, of children with autism. Piven et al<sup>12</sup> reported an aggregation of aloof, untactful, undemonstrative and unresponsive traits in parents of children with autism. Many others, for example, Koegal et al<sup>13</sup> found no correlation between autism in children and parental psychological characteristics.

## Method

Parents of 12 people with autism were interviewed, having responded to requests through the Irish Society of Autism and a local school addressing the needs of children with autism. All 12 offspring fulfilled the DSM-III-R criteria for autism and had a previous psychological assessment placing them in the mild to severe range of learning disability. The people with autism were matched as accurately as possible with people without autism but with a lifelong learning disability on parameters of age, sex and level of learning disability. This latter group were selected from clients at Stewart's Hospital in Palmerstown, Dublin. Stewart's Hospital Learning Disability Service provides a variety of adult and child day and residential services and a Special Educational Needs school in the West Dublin area. Parents of this 'non-autism' group were also interviewed. In the 'autism' group 20 parents were interviewed in total (11 fathers and 10 mothers). In the 'non-autism' group 21 parents were interviewed (10 mothers and 10 fathers). For two of the people with autism whose parents were interviewed it was not possible to identify 'non-autism' counterparts. Most parents were interviewed in their homes and four measures of personality were used:

1. The Maudsley Obsessional-Compulsive Inventory (MOCI):<sup>14</sup> This is a 30 item 'true/false' self-administered inventory, providing a total score and separate scores for four subscales (checking, washing, slowness/repetition, doubting/conscientiousness).

2. The Personality Assessment Schedule (PAS):<sup>15</sup> This is a structured interview used to identify personality disorders. The schedule allows for the rating of 24 personality variables in three ways: by personal observation of the subject, by interview with the subject and by interview with an informant.

3. The Rust Inventory of Schizoid Cognitions (RISC):<sup>16</sup> This is a psychometrically constructed short questionnaire for assessing the schizotypal cognitions associated with the positive symptoms of acute schizophrenia and schizotypal

\*Susan O'Hanrahan, MD, SpR, Clwydian Community Care Trust, Catherine Gladstone House, Mancot, Deeside CH5 2EP, Wales.

Michael Fitzgerald, MD, MRCPsych, Henry Marsh Chair of Child Psychiatry,

Myra O'Regan, Senior Lecturer, Dept of Statistics, Trinity College, Dublin 2, Ireland.

\*Correspondence

SUBMITTED: JULY 30, 1997. ACCEPTED: DECEMBER 20, 1998.

Table 1: RISC score summaries

Range (0-78)				
	Autism group		Control	
Fathers	Mean	24.7	Mean	25.8
	Numeric	11.0	Numeric	9.0
	Std dev	5.14	Std dev	7.51
Mothers	Mean	28.3	Mean	25.5
	Numeric	10.0	Numeric	10.0
	Std dev	8.14	Std dev	7.09

personality disorder. It is designed to tap the cognitive schizotypal dimension in the normal population and emphasises cognitive content rather than cognitive deficit. RISC scores range from 0-78. Higher scores represent a higher incidence of schizotypal cognitions. Scores greater than 38 are in the above average range.

4. The 16 Personality Factor Questionnaire (16PF):<sup>17</sup> This is a factor analytically developed inventory that rates personality on 16 dimensions. Dimensions assessed by the 16PF represent personality attributes and not necessarily elements of psychopathology.

## Results

Using the four described personality questionnaires, no significant personality profile difference was identifiable between the two groups of parents. The groups were then further analysed to compare maternal and likewise paternal intragroup scores. No significant differences were identified.

MOCI scores in neither group were sufficient to diagnose obsessiveness in any of the four measured scales. On the PAS, no subject scored sufficiently to diagnose personality disorder. RISC scores showed no significant difference in distribution between the parental groups and no one scored in the above average range (see Table 1). An independent t-test was used to compare the average scores for mothers and fathers in each group on each of the 16PF measures. No significant difference between the groups was identified.

The study concludes that personality traits specific to parents of people with autism are not identifiable in such a study group using the measuring instruments described. Cautious generalisation is advised because of a number of study limitations.

## Discussion

This is an exploratory study looking at differences between two parent groups. Because of small sample sizes the study is of low power. Parents of people with autism who took part in the study were a highly motivated group who had partaken in previous autism studies and were familiar with its many aetiological theories, which could bias their response to questionnaires. The MOCI and PAS are more appropriately used in the identification of personality disorders as opposed to subtle traits in the normal population and may not be sufficiently sensitive for such a

study. While the 16PF provides a good measure of personality attributes, the combination of its many variables and the small sample size hinders the identification of possible differences in traits or trends. Using the DSM-III-R as a diagnostic instrument in this study allowed the inclusion of a wide spectrum of autistic disorders. While this is in keeping with Gillberg's concept of autistic spectrum disorder,<sup>18</sup> the sample may have included an excess of lower functioning or atypical disorders. Rutter et al favour the differentiation between autism, atypical autism and other subcategories. Thus it may be that a diagnostic instrument more specific for classic, or Kanner-type autism would identify a study group where heredity plays a greater role.

## Conclusion

This study explored personality phenotypes as measurable heritability factors in autism. The lack of positive findings begs careful interpretation. Some of the instruments proved clearly too crude as measures of personality traits. Of the instruments used, the dimensional approach of the 16PF shows most promise for further research in the area. Used as a postal survey in a larger population, the 16PF might highlight more subtle personality profile differences between parents of people with autism and controls.

## Acknowledgements

Dr M Mulcahy, Stewart's Hospital, Palmerstown, Dublin 20, Ireland.

## References

- Kanner L. Autistic disturbances of affective contact. *Nervous Child* 1943; 2: 217-50.
- Eisenberg L. The classification of childhood psychosis reconsidered. *J Autism Child Schiz* 1972(Oct-Dec); 2(4): 338-42.
- Despert JL. Reflections on early infantile autism. *J Autism Child Schiz* 1971(Oct-Dec); 1(4): 363-7.
- Bettelheim B. *The Empty Fortress - Infantile autism and the birth of the self*. New York: The Free Press, 1967.
- Rutter M. The development of infantile autism. *Psychol Med* 1974; 4: 147-63.
- Hagerman RJ. *Fragile X Syndrome: Advances and Controversy Annotation*. *J Child Psychol Psychiatry* 1992; 33: 1127-39.
- Rutter M, Bailey A, Bolton P, Le Couteur A. Autism and known medical conditions: myth and substance. *J Child Psychol Psychiatry* 1994; 35(2): 311-22.
- Gillberg C. In: Gillberg C ed. *Clinical Child Neuropsychiatry*. Cambridge: Cambridge University Press, 1995.
- Folstein S, Rutter M. Infantile autism: a genetic study of 21 twin pairs. *J Psychol Psychiatry* 1997; 18: 297-321.
- Bolton P, Rutter M. Genetic influences in autism. *Int Rev Psychiatry* 1990; 2: 67-80.
- Wolff S, Sukhdev N, Moyes B. Personality characteristics of parents of autistic children: a controlled study. *J Child Psychol Psychiatry* 1988; 29(2): 143-53.
- Piven J, Wzorek M, Landa R et al. Personality characteristics of the parents of autistic individuals - preliminary communication. *Psychol Med* 1994; 23: 783-95.
- Koegel R, Schreibman L, O'Neill R, Burke J. The personality and family interaction characteristics of parents of autistic children. *J Consult Clin Psychol* 1983; 51(5): 683-92.
- Hodgson RJ, Rachman S. Obsessional compulsive complaints. *Behav Res Ther* 1977; 15: 389-95.
- Tyer P, Alexander J, Ferguson B. *Manual of the personality assessment schedule*, 5th Revision. Clinical Research Department, Mapperley Hospital, Nottingham, 1987.
- Rust J. The Rust Inventory of Schizoid Cognitions: a psychometric measure of psychoticism within the normal population. *Br J Clin Psychol* 1987; 16(2): 151-2.
- Cattell RB, Eber HW, Tatsouka MM. *Handbook for the sixteen personality factor questionnaire (16PF)*. The Institute for Personality and Ability Testing, Champaign, Illinois, USA, 1970.
- Gillberg C. Autism and pervasive developmental disorders. *J Child Psychol Psychiatry*; 1990: 31: 99-110.