

## **A Comparison of Teacher and Parent Views of Autism<sup>1</sup>**

**Wendy L. Stone<sup>2</sup>**

*University of Miami, Mailman Center for Child Development*

**Jennifer L. Rosenbaum**

*Department of Psychology, University of Miami*

*Changing conceptualizations of autism have led to an increased focus on parents and teachers as treatment agents. In order to evaluate the views of autism held by these two groups, 47 teachers of autistic students and 47 parents of autistic children completed a survey assessing beliefs regarding various aspects of the disorder. Parent and teacher responses were compared to those obtained from a group of 22 "specialists" in autism, drawn from across the country. Both parents and teachers were found to harbor misconceptions regarding cognitive, developmental, and emotional features of autism. Furthermore, parents and teachers hold discrepant views in some areas that may have implications for their collaborative efforts.*

The past 40 years have seen dramatic changes in the conceptualization and treatment of autism. Empirical investigations have resulted in an increased understanding of the emotional, cognitive, and developmental aspects of the disorder. For example, autism was originally considered to be an affective

<sup>1</sup>The preparation of this paper was supported in part by the Florida Diagnostic and Learning Resources System through a state general revenue appropriation for evaluation services in exceptional student education. Special thanks are extended to Annette La Greca, Gary Mesibov, and Rick Urbano, for their comments on early versions of the survey, and to Peter Mundy, Gene Fisch, and Debra Eger, for their assistance in distributing the survey.

<sup>2</sup>Address all correspondence to Wendy L. Stone, Box 158, Peabody College of Vanderbilt University, Nashville, Tennessee 37203.

or emotional disorder; parental psychopathology such as emotional coldness or rejection of the child was thought to "cause" autism in predisposed children. Over the years, however, little empirical support was found for psychogenic theories. In contrast, research findings have strongly suggested that autism is a developmental disability, resulting from organic or neuropsychological factors (Morgan, 1986; Rutter, 1985a; Schopler, 1983). Like other developmental disorders, autism has come to be viewed as a lifelong handicapping condition (Schopler & Mesibov, 1983).

The nature of cognitive impairments in autism has also been elucidated by empirical research. In the past, autistic children were considered to have normal cognitive potential, despite their reported "untestability." Poor performance on standardized tests was attributed to social and emotional problems rather than intellectual deficits. Reports of unusual abilities or peak skills in autistic children further contributed to the notion that these children possessed average intelligence or better. However, recent efforts have seriously challenged this view by revealing that (a) the intellectual functioning of autistic individuals can be reliably assessed (Marcus & Baker, 1986; Rutter, 1983); (b) most autistic children (about 70%) are mentally retarded (Dawson & Mesibov, 1983); and (c) peak skills are not necessarily indicative of normal cognitive potential (Schopler, 1983). Thus, while autism can occur at all levels of intelligence, most autistic children do demonstrate significant cognitive impairments.

Treatment approaches have also changed to reflect the new developments in the field. When assumptions of emotional etiology prevailed, traditional psychotherapy was employed, with the goal of restoring disturbed parent-child relationships. However, now that autism is understood to be organically based, special education and behavior therapy have become the predominant approaches (Handleman, 1986; Rutter, 1985b). Furthermore, parent involvement has also come to be viewed as a vital component of treatment for autistic children (Harris & Milch, 1981). No longer regarded as causes of the disorder, parents have been found to be effective agents of change, and now play key roles in facilitating generalization of learning from clinic and school settings to the home and community (Harris, 1986; Mesibov, Schopler, & Sloan, 1983).

In light of the prominent roles that special educators and parents now play in the treatment of autistic individuals, it is important to ensure that both groups possess an up-to-date understanding of the nature of the disorder. A lack of awareness of current views of autism in either group might have potentially deleterious consequences. For example, a teacher's failure to understand the extent of a student's cognitive impairment might result in academic overexpectations and inappropriate educational programming. This is likely to lead to frustration and failure experiences for the student and teacher alike. Similarly, a parent's misconceptions can also impair his/her

effective work with the child. A persistent belief in emotional causes of autism, for instance, may lead to feelings of guilt which undermine the parent's ability to implement treatment plans successfully. Thus, an evaluation of teachers' and parents' views of autism may serve to pinpoint specific training needs of each group.

The interactive nature of the relationship between teachers and parents suggests another reason for assessing each group's views and beliefs about autism. In addition to providing insight into differential training needs, a comparison of views between the two groups may yield useful information regarding their collaborative efforts. Parent-teacher collaboration has been described as an essential ingredient in treatment success (Handleman, 1986; Schopler, Mesibov, Shigley, & Bashford, 1984). It seems plausible that divergent views regarding autism might obstruct cooperative and productive parent-teacher transactions. For example, a teacher's attributions of emotional etiology might create a blaming attitude toward parents that prevents the formation of a collaborative relationship. Similarly, a parent's persistent belief that his/her child will eventually outgrow autism might lead to insistence on pursuing a traditional academic course. In contrast, the child's teacher might regard prevocational training as essential in preparing the child for his/her likely work activities. Such incompatible ideas regarding educational planning may be understood fully only by examining the underlying views of autism possessed by each group.

The present study was undertaken to evaluate and compare beliefs about the emotional, cognitive, and developmental features of autism held by parents and special education teachers. The goal was to obtain information regarding specific training needs of each group as well as to pinpoint areas of potential misunderstanding between the two groups.

## METHOD

### *Subjects*

Forty-seven teachers of autistic students and 47 parents of autistic children participated in this study. The sample of teachers consisted primarily of participants in a statewide in-service training program for autism conducted in Florida from January 1985 to May 1986.<sup>3</sup> Participants in the program

<sup>3</sup>This training program was conducted through a National Personnel Training award to the State of Florida by the National Society for Children and Adults with Autism (NSAC) for 1984-1986.

were designated by school administrators and represented all parts of the state. In all cases, their participation was engaged *prior* to the initiation of training activities. A small proportion of the sample consisted of teachers who were not involved in training, but were contacted by the training participants. Demographic characteristics of the teacher respondents are presented in Table I.

The teachers' experience with autistic students spanned all grade levels, and ranged from 1 to 19 years. Most teachers (59.6%) held multiple certification, with the most common areas being emotional handicaps and mental retardation. Although none of the teachers received certification in the specific area of autism, two respondents mentioned a specialization in autism within their certification area. Moreover, almost half (48.9%) reported specialized training in the form of participation in workshops.

The sample of parents of autistic individuals also represented all parts of the state. Most of the parent sample was obtained from meetings of parent organizations or lectures for parents provided as part of the in-service training program. The rest of the sample consisted of parents contacted by training participants or those seen during clinic visits at the Mailman Center for Child Development. Demographic information obtained from the parent sample is presented in Table II.

Of the parent respondents, 33 (70.2%) were mothers, and 14 (29.8%) were fathers of autistic individuals. The sex distribution of the children was typical for autistic samples: 75.7% of the children were male, 24.3% were female. Children ranged in age from 2 to 32 years, and were first diagnosed

**Table I.** Demographic Characteristics of Teacher Respondents ( $n = 47$ )

Experience teaching autistic (years)	
Mean	4.8
SD	4.3
Grade level(s) taught (%)	
Preschool	19.6
Kindergarten	15.2
Elementary	50.0
Junior high	28.3
Senior high	26.1
Area(s) of certification (%)	
Emotionally handicapped (EH)	53.3
Mentally retarded (MR)	51.1
Learning disabled (LD)	26.7
Other	13.3
Highest educational degree (%)	
Bachelor's (BA or BS)	60.5
Master's (MA or MS)	39.5

**Table II.** Demographic Information Obtained from Parent Respondents ( $n = 47$ )

Age of parent (years)	
Mean	38.9
SD	7.4
Parent's educational level (years)	
Mean	14.4
SD	2.2
Age of child (years)	
Mean	10.5
SD	5.6
Age of child at diagnosis (years)	
Mean	4.0
SD	2.4
Professional making diagnosis (%) <sup>a</sup>	
Pediatrician or family physician	25.8
Clinical psychologist	25.7
School psychologist	17.1
Psychiatrist	14.3
Neurologist	11.4
Other	8.6
Year in autistic classroom	
Mean	5.7
SD	4.5

<sup>a</sup>Percentages add up to more than 100 because one parent specified multiple professionals.

as autistic between the ages of 1 and 12 years. It is interesting to note that these parents represented a highly educated group, over half (55.3%) having earned college degrees or better. For 30 parent respondents, socioeconomic level could be calculated according to Hollingshead's (1957) two-factor index. Although all five levels were represented, the mean socioeconomic level of the sample was 2.27, which reflects a bias toward the upper end of the socioeconomic distribution.

### *Procedure*

The Autism Survey (Stone, 1987) was used to evaluate parents' and teachers' views of autism. This instrument was developed to assess beliefs regarding etiology, diagnosis, and specific features of autism, and has been shown to be sensitive to differential perspectives of autism held by various professional groups (Stone, 1987). The survey consists of two parts: Part I assesses the understanding of various facets of autism, and Part II evaluates knowledge regarding specific diagnostic criteria. For the purpose of this study, only responses from Part I of the survey were used. Part I is composed of 21 statements reflecting common misconceptions about autism, der-

ived from clinical experience as well as myths described in the literature (e.g., Farber & Capute, 1984; Schopler, 1983). The items were selected to represent misconceptions pertaining to social and emotional characteristics (8 items), cognitive characteristics (6 items), and general descriptive features, such as course and prognosis (7 items). Respondents indicate the degree to which they agree with each statement, using the following scale: (1) *fully agree*, (2) *mostly agree*, (3) *somewhat agree*, (4) *somewhat disagree*, (5) *mostly disagree*, and (6) *fully disagree*.

The Autism Survey was completed by the sample of teachers and parents described above. However, in order to obtain a standard of comparison for parent and teacher responses, the survey was also distributed to a group of 22 specialists in the field of autism. Specialists were defined as individuals known to be directly and extensively involved in research or clinical work in autism. They were culled from five university and research settings engaged in active research with autistic populations. The surveys were distributed to the specialists via several contact persons, who directed them to specific individuals meeting the "specialist" criteria. The group was composed of specialists from the following settings: University of North Carolina (10), Yale University (2), University of California at Los Angeles (6), University of Oregon (1), and Institute for Basic Research in Developmental Disabilities, in New York (3). Demographic characteristics of the specialist group are presented in Table III. As the table reveals, the specialists represent a group well acquainted with autistic populations.

**Table III.** Demographic Characteristics of Specialist Group ( $n = 22$ )

<b>Profession (%)</b>	
Psychologist	50.0
Educational therapist/teacher	27.3
Psychiatrist	13.6
Speech/language pathologist	9.1
<b>Years experience</b>	
Mean	11.2
SD	4.3
<b>Total no. autistic seen</b>	
Mean	266.7
SD	215.5
<b>Work setting(s) (%)</b>	
University medical center	71.4
Research center	14.3
School	14.3
Other	9.5
<b>Work activities (%)</b>	
Research	85.7
Training	81.0
Direct patient care	57.1

## RESULTS

### *Overview*

Responses to the 21 survey items were analyzed using one-way analyses of variance with planned comparisons between the teacher, parent, and specialist groups. Of the 21 statements, 11 yielded significant  $F$  ratios; these are presented in Table IV. As the table reveals, the specialists' survey responses were consistent with the current conceptualizations of autism found in the research literature. Their responses reflected contemporary views of autism as a lifelong developmental disability, resulting from organic causes, and associated with significant cognitive impairments. Within each of the following sections, the findings are reviewed first by examining comparisons of the teacher and parent responses with those of the specialists, and then by looking at differences between the teacher and parent responses.

### *Cognitive Characteristics*

As Table IV illustrates, four of the statements dealing with cognitive aspects of autism revealed significant group differences. Planned comparisons revealed both parent and teacher groups to differ from the specialists on three items: They were *less* likely to believe that autistic children are mentally retarded,  $t(111) = 5.22$  for parents and 4.12 for teachers,  $ps < .001$ ; and *more* often agreed that autistic children possess special talents or abilities,  $t(111) = 6.70$  for parents and 6.42 for teachers,  $ps < .001$ ; and are more intelligent than appropriate tests indicate,  $t(110) = 8.07$  for parents and 7.78 for teachers,  $ps < .001$ . Only the parent group was more likely than the specialist group to regard autistic children as untestable,  $t(112) = 3.32$ ,  $p < .01$ .

Planned comparisons revealed a difference between teachers and parents on only one cognitive item. Parents were less likely than teachers to accept that most autistic children are mentally retarded,  $t(111) = 4.12$ ,  $p < .001$ .

### *Emotional Characteristics*

Four of the statements related to emotional factors in autism revealed group differences. Both parents and teachers were more likely to view autism as an emotional disorder,  $t(110) = 3.92$  for parents and 3.87 for teachers,  $ps < .001$ ; to believe that emotional factors play a major role in its etiology,  $t(109) = 5.53$  for parents and 4.29 for teachers,  $ps < .001$ ; and to regard autism and schizophrenia as difficult to differentiate,  $t(109) = 2.13$ ,  $p < .05$  for parents;  $t(109) = 3.86$ ,  $p < .001$  for teachers, relative to the specialists.

**Table IV. Mean Ratings on Survey Items Revealing Group Differences<sup>a</sup>**

Items	Respondents			F
	Parents (n = 47)	Teachers (n = 47)	Specialists (n = 22)	
<b>Cognitive</b>				
Most autistic children are also mentally retarded	4.20	3.04	1.23	36.31 <sup>d</sup>
Autistic children are more intelligent than scores from appropriate tests indicate	2.38	2.47	4.95	37.00 <sup>d</sup>
Autistic children are "untestable"	4.52	4.96	5.50	5.66 <sup>c</sup>
Most autistic children have special talents or abilities	2.76	2.85	4.82	25.75 <sup>d</sup>
<b>Emotional</b>				
Autism is an emotional disorder	3.98	4.00	5.57	8.98 <sup>d</sup>
Emotional factors play a major role in the etiology of autism	3.74	4.16	5.62	15.52 <sup>d</sup>
It is difficult to distinguish between autism and childhood schizophrenia	3.98	3.41	4.68	7.66 <sup>d</sup>
Autistic children usually grow up to be schizophrenic adults	5.33	4.81	5.36	3.27 <sup>b</sup>
<b>Developmental</b>				
Autism exists only in childhood	5.13	5.81	5.91	7.41 <sup>d</sup>
With the proper treatment most autistic children eventually "outgrow" autism	4.14	5.19	5.64	14.12 <sup>d</sup>
Autism is a developmental disorder	2.20	2.51	1.00	9.61 <sup>d</sup>

<sup>a</sup>Ratings range from 1 to 6, with lower numbers reflecting greater agreement.

<sup>b</sup> $p < .05$ .

<sup>c</sup> $p < .01$ .

<sup>d</sup> $p < .001$ .



Only the teachers were significantly more likely than the specialists to believe that autistic children usually grow up to be schizophrenic adults,  $t(104) = 2.00, p < .05$ .

Two differences between teachers and parents occurred on this scale. Teachers more often believed that autism is difficult to differentiate from childhood schizophrenia,  $t(109) = 2.11, p < .05$ , and that autistic children usually grow up to be schizophrenic adults,  $t(104) = 2.28, p < .05$ .

### *Developmental Features*

Three statements about the course and development of autism revealed group differences. Teacher and parent groups were both less likely to view autism as a developmental disorder, compared with the specialists,  $t(111) = 3.43, p < .01$  for parents;  $t(111) = 4.34, p < .001$  for teachers. However, only the parent group was more likely than the specialist group to believe that autism exists only in childhood,  $t(112) = 3.08, p < .01$ , and that most autistic children eventually outgrow autism,  $t(110) = 4.74, p < .001$ .

Teacher-parent differences were found on two developmental items. Parents were more likely than teachers to think of autism as existing only in childhood,  $t(112) = 3.36, p < .01$ , and to believe that autistic children eventually outgrow autism,  $t(110) = 4.15, p < .001$ .

## **DISCUSSION**

As anticipated, the specialists' survey responses were indeed compatible with contemporary empirically based conceptualizations of autism. As a group, they view autism as a lifelong developmental disability of organic etiology, which is associated with significant cognitive impairments. Agreement with the research literature was expected, given the specialist group's extensive contact with autistic individuals and the high proportion involved in research activities.

In contrast, both parents and teachers harbor misconceptions regarding cognitive, emotional, and developmental characteristics of autism. Both groups tended to view autistic individuals as less cognitively impaired (e.g., more intelligent and less often mentally retarded) than research findings and specialist responses to the survey indicated. The danger of this misconception lies in its potentially deleterious effect on relationships between adults and autistic children. Overly high expectations in home or school settings can easily lead to situations of frustration and failure for both child and adult. Moreover, noncompliant behavior may be misinterpreted as unwillingness or stubbornness, rather than inability or lack of understanding. Consequent-

ly, it seems that parents as well as teachers might benefit from training activities that provide information pertaining to the nature of cognitive impairments in autistic children. General issues addressed by such training might include the prevalence of mental retardation in autistic groups, the implications of mental retardation for prognosis and developmental teaching, the reliability and validity of intelligence testing in this population, and the strategies employed to facilitate accurate cognitive assessment.

The fact that parents of autistic children were less likely than teachers to acknowledge the presence of mental retardation in autistic individuals is consistent with other information obtained in this study. Responses to the developmental questions on the survey suggest that parents view autism as a more transient condition than teachers (and specialists). Parents were more likely to believe that autism exists only in childhood and that most autistic children eventually "outgrow" autism. Perhaps the parents' more optimistic long-term outlook serves a useful purpose in facilitating their ability to cope with the disorder. However, disparate views between parents and teachers regarding outcome and prognosis may lead to incompatible ideas concerning educational programming and planning. Decisions regarding the relative importance of academic versus prevocational instruction may be particularly vulnerable to parent-teacher conflicts. Determination of appropriate teaching activities requires a good understanding of the general nature of autism (e.g., cognitive and developmental features) as well as each individual student's strengths, weaknesses, and learning style. Resolution of conflicting ideas about educational goals between teachers and parents may be accomplished only if the two groups share compatible views in both areas.

Parents and teachers also displayed misconceptions regarding the role of emotional factors in autism. Relative to the specialists, both groups were more likely to consider autism to be an affective disorder with emotional etiology. Furthermore, the teachers, in particular, had difficulty differentiating between autism and childhood schizophrenia. One possible explanation of the teachers' responses relates back to their training experiences: Over half received their teaching certification in the area of "emotionally handicapped." Such training might instill a frame of reference that leads to emotional—rather than cognitive—attributions of behaviors. Subsequent research might thus be designed to examine the effects of specific training backgrounds on teachers' understanding of autism.

Although it is impossible to predict the precise consequences of such beliefs, it is possible that attitudes such as blaming and guilt might accompany the emotional perspective and might color the interactions between teachers and parents. However, future work in this area is required in order to evaluate the impact of particular attitudes and beliefs on actual behaviors in teacher and parent groups. In any case, the persistence of the emotional

view of autism in parent and teacher groups warrants further exploration, and appears to be a potentially fruitful area for continued training efforts.

The degree to which the specific results of the present study are applicable to other samples of teachers and parents is difficult to determine. As indicated earlier, there is evidence to suggest that our parent respondents represented a relatively highly educated, upper SES group; as such, they are not representative of the general population of parents of autistic children (Schopler, Andrews, & Strupp, 1979; Tsai, Stewart, Faust, & Shook, 1982; Wing, 1980). The fact that our sample consisted primarily of parents participating in educational training activities (i.e., attending topical lectures and discussions) is likely to have contributed to the upper SES bias found in this study. Similar questions arise regarding the representativeness of the teacher sample. Although approximately half of the teachers surveyed had received some specialized training in autism (through participation in workshops), specific certification in autism was lacking. Because training and certification requirements vary from state to state, teachers in different states may not be comparable in terms of background and experience. Consequently, in order to evaluate the generalizability of these findings, replication with samples representing wider socioeconomic and geographic distributions is highly recommended.

These limitations notwithstanding, this study demonstrates that certain misconceptions about autism persist in teacher and parent groups, and, moreover, that the two groups hold different views regarding specific aspects of autism. In light of the increased role that parents and teachers play in the treatment of autism, these results underscore the importance of further investigation along these lines. Continued efforts in this area should be undertaken with the goals of keeping abreast of continuing education and parent training needs, illuminating fundamental beliefs underlying teacher-parent differences, and enhancing communication and cooperation between the two groups.

## REFERENCES

- Dawson, G., & Mesibov, G. B. (1983). Childhood psychoses. In C. E. Walker & M. C. Roberts (Eds.), *Handbook of clinical child psychology* (pp. 543-574). New York: Wiley.
- Farber, J. M., & Capute, A. J. (1984). Understanding autism. *Clinical Pediatrics*, 23(4), 199-202.
- Handleman, L. S. (1986). A glimpse at current trends in the education of autistic children. *Behavior Therapist*, 7, 137-139.
- Harris, S. L. (1986). Families of children with autism: Issues for the behavior therapist. *Behavior Therapist*, 9, 175-177.
- Harris, S. L., & Milch, R. E. (1981). Training parents as behavior therapists for their autistic children. *Clinical Psychology Review*, 1, 49-63.

- Hollingshead, A. B. (1957). *Two-factor index of social position*. Unpublished manuscript. (Available from 1965 Yale Station, New Haven, CT.)
- Marcus, L. M., & Baker, A. F. (1986). Assessment of autistic children. In R. J. Simeonsson (Ed.), *Psychological assessment of special children* (pp. 279-304). Boston: Allyn & Bacon.
- Mesibov, G. B., Schopler, E., & Sloan, J. L. (1983). Service development for adolescents and adults in North Carolina's TEACCH program. In E. Schopler & G. B. Mesibov (Eds.), *Autism in adolescents and adults* (pp. 441-432). New York: Plenum Press.
- Morgan, S. B. (1986). Early childhood autism: Changing perspectives. *Journal of Child and Adolescent Psychotherapy*, 3(1), 3-9.
- Rutter, M. (1983). Cognitive deficits in the pathogenesis of autism. *Journal of Child Psychology and Psychiatry*, 24, 513-531.
- Rutter, M. (1985a). Infantile autism and other pervasive developmental disorders. In M. Rutter & L. Hersov (Eds.), *Child and adolescent psychiatry: Modern approaches* (pp. 545-566). Boston: Blackwell Scientific.
- Rutter, M. (1985b). The treatment of autistic children. *Journal of Child Psychology and Psychiatry*, 26, 193-214.
- Schopler, E. (1983). New developments in the definition and diagnosis of autism. *Advances in Clinical Child Psychology*, 6, 93-127.
- Schopler, E., & Mesibov, G. B. (Eds.). (1983). *Autism in adolescents and adults*. New York: Plenum Press.
- Schopler, E., Andrews, C. E., & Strupp, K. (1979). Do autistic children come from upper-middle-class parents? *Journal of Autism and Developmental Disorders*, 9, 139-152.
- Schopler, E., Mesibov, G. B., Shigley, R. H., and Bashford, A. (1984). Helping autistic children through their parents: The TEACCH model. In E. Schopler & G. B. Mesibov (Eds.), *The effects of autism on the family* (pp. 65-80). New York: Plenum Press.
- Stone, W. L. (1987). Cross-disciplinary perspectives on autism. *Journal of Pediatric Psychology*, 12, 615-630.
- Tsai, L., Stewart, M. A., Faust, M., & Shook, S. (1982). Social class distribution of fathers and children enrolled in the Iowa Autism Program. *Journal of Autism and Developmental Disorders*, 12, 211-221.
- Wing, L. (1980). Childhood autism and social class: A question of selection? *British Journal of Psychiatry*, 137, 410-417.