

An Examination of IEP Quality, Parent and Teacher Stress, and Teacher Background for Children with Autism Spectrum Disorders in Rural and Urban Areas

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ABSTRACT

Purpose: To compare parent, teacher, and student variables for students with ASD in rural and urban areas.
Methods: Parents and teachers of children with ASD completed several assessments about their child and background. The relationship between degree of rurality and teacher and family variables including IEP quality, parent and teacher stress, parent and teacher alliance, teacher background variables, and child goal attainment was assessed.
Results: Teachers in more rural areas were more likely to have taught more students than those in more urban areas.
Conclusion: Results from this study provide implications for families and service providers of children with autism in rural areas.

BACKGROUND

- As many as 1 out of 88 children have an autism spectrum disorder (ASD; ADDM, 2012).
- More than 190,000 children in 2009 received special education services under the autism category (U.S. Department of Education, 2009).
- Research indicates that parents (Abbeduto et al., 2004) and teachers (Kokkinos & Davazoglou, 2009) of children with ASD experience more stress in comparison to other disabilities.
- Further, Individualized Education Program (IEP) quality for students with ASD has been found to be weak (Ruble, McGrew, Dalrymple, & Young, 2010).
- Students with ASD in rural areas may face additional challenges in comparison to their urban counterparts due to a consistent shortage in special education teachers and personnel in rural school districts (Ludlow, Coner, & Schechter, 2005; Pennington, Horn, & Berrong, 2009).
- Moreover, rural parents have voiced concerns regarding their child's educational outcomes and the availability of school personnel (Applequist, 2009).
- Specific to ASD, there is a limited amount of research that compares IEP quality, parent and teacher stress, teacher background and child goal attainment in rural and urban areas.

OBJECTIVE

- The purpose of this study is to compare IEP quality, parent and teacher stress, parent and teacher alliance, teacher background variables, and child goal attainment for students with ASD in rural and urban areas.

METHODS

- 44 parents and teachers participated in a randomized control study of the Collaborative Model for Promoting Competence and Success (COMPASS; Ruble, Dalrymple, & McGrew, 2012).
- Parents and teachers completed a variety of assessment measures including measures of stress, background, and parent-teacher alliance.
- IEP quality was measured by a reliable IEP evaluation tool (Ruble, et al., 2010) that assessed students' individual goals (i.e., were they measurable, described in behavioral terms, the conditions under which the behavior must occur, etc.) and the description of students' present level of performance.
- Of the total sample, 49% of students received services in rural areas.
- Rurality in this study was measured by the Rural-Urban Continuum Codes (RUCC). The RUCC consist of a scale of 1-9, with 1 indicating more urban areas and 9 indicating more rural areas.
- The mean age of the children was 6 years.

RESULTS

- Partial correlations, controlling for the percent of students receiving free/reduced lunch, were utilized to assess the relationship between rurality and various child, teacher, and family variables.

Table 1. Descriptive statistics

Variable	Mean (SD)	Range
Degree of Rurality (higher is more rural)	3 (1.8)	1-9
Years of Teaching	5.71 (5.7)	0-21
Number of Children Taught	8.41 (16.4)	0-100
Overall IEP Quality	1.5 (.33)	.67-2.00
MBI Emotional Exhaustion	16.25 (8.5)	5-40
MBI Depersonalization	2.36 (2.9)	0-11
MBI Personal Accomplishments	40.34 (6.1)	26-48
Parent Teacher Alliance	53.33 (114.8)	21-56
Goal Attainment	6.77 (2.9)	0-12
Index of Teaching Stress (ITS)	74.33 (30.1)	43-190
ITS Sense of Competency	33.53 (14.3)	19-88
ITS Loss of Satisfaction	19.4 (8.4)	12-54
ITS Disruption of the Teaching Process	12.7 (5.3)	6-30
ITS Frustration Working with Parents	8.74 (4.64)	6-28
Parenting Stress – Child Domain	139.84 (24.8)	95-190
Parenting Stress – Parent Domain	126.00 (33.6)	75-231
Parenting Stress Total	266.1 (51.9)	174-421
	M %	
Control: Percent of students receiving F/R lunch	52.8%	7%-89%

RESULTS

Table 2. Partial Intercorrelation Matrix

Variable	Correlation with Rurality (r)	p-value
Percent F/R Lunch	.30	.05
Years of Teaching Experience	-.05	.80
Number of Children Taught	.51	.01*
Overall IEP Quality	.07	.73
MBI Emotional Exhaustion	-.21	.30
MBI Depersonalization	-.22	.27
MBI Personal Accomplishments	-.10	.64
Parent Teacher Alliance	-.15	.45
Goal Attainment	-.02	.92
Index of Teaching Stress (ITS)	-.03	.90
ITS Sense of Competency	.03	.88
ITS Loss of Satisfaction	-.06	.77
ITS Disruption of the Teaching Process	-.03	.89
ITS Frustration Working with Parents	-.13	.52
Parenting Stress – Child Domain	.27	.18
Parenting Stress – Parent Domain	-.19	.35
Parenting Stress Total	.04	.84

* $p < .01$

DISCUSSION

- Surprisingly, only one variable correlated with rurality – number of students taught, such that teachers in more rural areas were more likely to have taught more students.
- The lack of findings for the other variables suggests that results from studies based on other student populations may not generalize to the population of children with ASD and their teachers. This information is important and suggests that caution be used about inferences made based on rurality.
- The results could also reflect the uniqueness about educating children with autism that is independent from rurality, but specific to the education of students with ASD.
- More research is needed that specifically chronicles the educational experiences of children with autism in rural areas, including related services and outcome data.
- The findings are based on teachers from two states (midwestern and southern) and may not generalize.