# Understanding Differences in the Identification and Service Experiences

# of Racial/Ethnic Minority Children with Autism



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# INTRODUCTION

- Early identification and intervention for autism spectrum disorder (ASD) has been found to improve long-term developmental and family outcome.<sup>1</sup>
- However, less is known about potential disparities in the age of diagnosis and service experiences of children with ASD from racial/ethnic minority groups and their families.
- Limited research in this area suggests that minority children with ASD are identified at lower rates compared to their white counterparts. A diagnosis of ASD is often required to receive early intervention; therefore, minority children may have less access to ASD services.<sup>2</sup>
- Further, minority children with ASD are diagnosed at a later age than white children even when they present with comparable clinical presentations. <sup>3</sup>
- When white and minority families receive similar types of care, white families report more engagement in the diagnostic process and have access to a larger variety of services. In addition, white parents report more satisfaction with services compared to minority families.<sup>4</sup>
- The goal of the current investigation is to bring awareness to healthcare differences between minority and white families of children with ASD.

#### STUDY AIMS

- 1. Examine differences in age of ASD diagnosis between minority and non-minority children
- 2. Examine differences in service use between minority and non-minority families
- 3. Examine differences in adaptive behavior and ASD symptom severity between minority and non-minority children

### **METHODS**

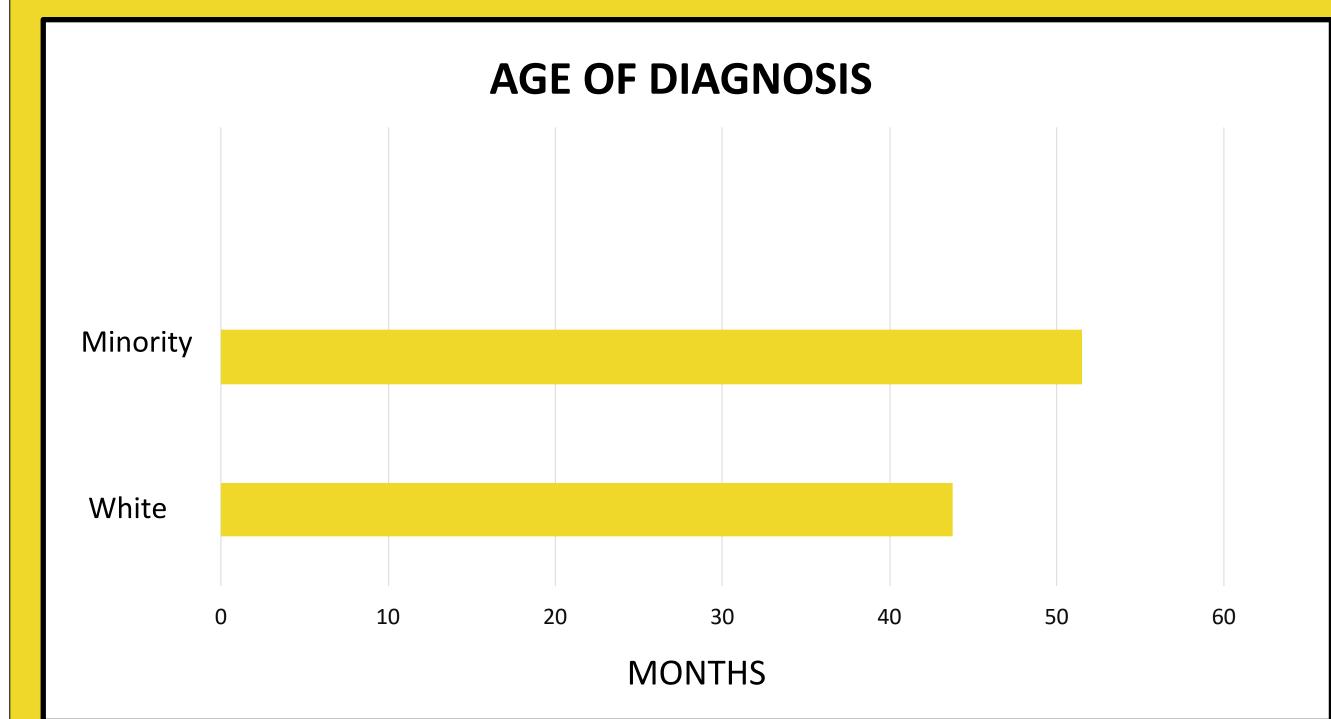
# Sample

Child Characteristics (N=73)					
Child Gender (n [%] Male)	61 (85.9)				
Child Age ( <i>M</i> [ <i>SD</i> ])	8.08 (2.29)				
Child ID Status (n [%])	27 (38.0)				
Parent Characteristics (N=73)					
Parent Race (n [%])					
Non-White	37 (52.1)				
White, Non-Hispanic	34 (47.9)				
Parent Age (M [SD])	38.24 (5.61)				
Parent Education (n [%] College)	44 (62)				
Household Income (M [SD])	US \$70,000-79,000 (US \$20,000-29,000)				

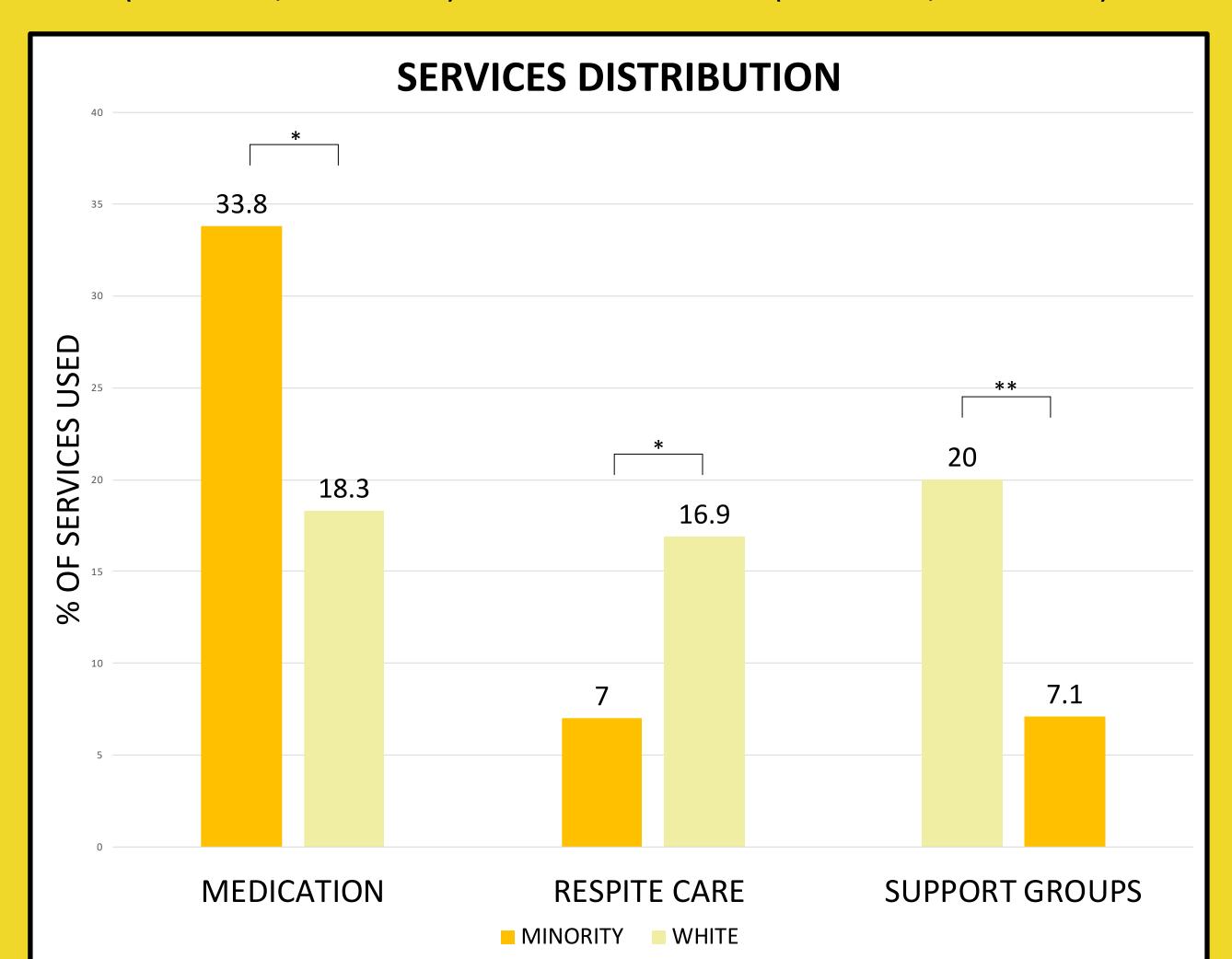
## Measures

- Medical/Educational Records
- Parent Interview
- Adaptive Behavior Assessment System- 3rd Edition (ABAS-3)<sup>5</sup>
- Social Responsiveness Scale-Second Edition (SRS-2)<sup>6</sup>

# RESULTS



No group differences in age of ASD diagnosis were found between minority (M=51.54, SD=23.40) and white children (M=43.75, SD=19.53).



Note. \*p < 0.05, two-tailed. \*\*p < 0.01, two-tailed.

Significant group differences in services were found between minority and white families for medication (t(69) = 2.30, p = 0.025), respite care (t(69) = -2.19, p = 0.032), and parent support groups (t(68) = -2.87, p = 0.005).

Adaptive Behavior & Autism Severity						
Measure	White	Minority	t (df)	p	Cohen's d	
ABAS	67.38(17.42)	60.59(15.88)	1.718(69)	.090	.41	
SRS	74.88(11.15)	81.57(8.58)	-2.844(69)*	.006	.67	

Note. \*p< 0.01, two-tailed.

No differences in adaptive functioning was found between minority and white children; however, autism severity was significantly different between the two groups (t(69)=-2.84, p<0.01).

## **DISCUSSION**

- Contrary to previous research, no difference in age of diagnosis was found between minority and white children with ASD in the current sample.
- Minority children with ASD (33.8%) were more likely to be taking medication compared to white children with ASD (18.3).
- Minority families were less likely to receive respite care (minority = 7%, white = 16.9%) and participate in parent support groups (minority = 7.1%, white = 20%) compared to white families.
- No significant differences in adaptive behavior (e.g., communication, activities of daily living, self-direction) were found. However, minority children, on average, had more severe ASD symptoms compared with white children.

#### CONCLUSION

• Findings from the present study provide insight into potential disparities between minority and white families of children with ASD. Specifically, there may be differences in access to or provision of services between minority and white families.

## **IMPLICATIONS**

- Results from the current investigation highlight the need to further examine potential health disparities between minority and white families of children with ASD.
- More research is needed to investigate the differences in age of ASD diagnosis and service experiences between minority and white families of children with ASD.
- This study should be replicated using a larger sample size to better understand group differences.
- In addition to adaptive functioning and ASD severity, other variables associated with age of diagnosis and service usage should be explored.

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# **REFERENCES**

- Durkin, M. S., Maenner, M. J., Baio, J., Christensen, D., Daniels, J., Fitzgerald, R., Imm, P., Lee, L. C., Schieve, L. A., Van Naarden Braun, K., Wingate, M. S., & Yeargin-Allsopp, M. (2017). Autism spectrum disorder among US children (2002–2010): Socioeconomic, racial, and ethnic disparities. *American Journal of Public Health*, 107(11), 1818–1826. doi: 10.2105/ajph.2017.304032
- Travers, J., & Krezmien, M. (2018). Racial disparities in autism identification in the United States during 2014. Exceptional Children, 84(4), 403–419. doi: 10.1177/0014402918771337
- Zuckerman, K. E., Lindly, O. J., Reyes, N. M., Chavez, A. E., Macias, K., Smith, K. N., & Reynolds, A. (2017).

  Disparities in diagnosis and treatment of autism in latino and non-latino white Families. *Pediatrics*, 139(5). doi: 10.1542/peds.2016-3010
- 4. Zeleke, W. A., Hughes, T. L., & Drozda, N. (2019). Disparities in diagnosis and service access for minority children with ASD in the United States. *Journal of Autism and Developmental Disorders*, 49(10), 4320–4331. doi: 10.1007/s10803-019-04131-9
- Harrison, P. L., & Oakland, T. (2003). *Adaptive Behavior Assessment System Second Edition*, The Psychological Corporation.
- 6. Constantino, J. N., & Gruber, C. P. (2012). Social Responsiveness Scale Second Edition. *Journal of Psychoeducational Assessment*, 32(4), 365-369.