

Diagnostic disparities and functional challenges of African American preschoolers with Autism Spectrum Disorder

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◆ Abstract

Early diagnosis of Autism Spectrum Disorder (ASD) is critical for improved outcomes. However, children from ethnic minority backgrounds tend to receive their diagnosis later. A sequential explanatory mixed methods study was used to explore the relationship between symptom severity, functional difficulties, and age at diagnosis for ASD, as well as to describe the functional challenges encountered by preschool-aged children with ASD of African American descent. Data consisted of analysis of the 2009-2010 National Survey for Children with Special Healthcare Needs and locally-conducted interviews with parents. No significant relationships were found between age at diagnosis and symptom severity or degree of functional challenges. Qualitative themes provided insight into the diagnosis process and functional challenges, as well as home, school, and community barriers and supportive strategies. More research and focused interventions are needed to address racial and cultural implications for delays in ASD diagnosis.

◆ Background

The mean age for diagnosis of ASD is reported to range from 38 to 120 months of age. Parents have been said to notice symptoms as early as 6 to 8 months, with diagnosis occurring as early as 1 to 3 years of age. Even with similar symptomology, children from minority backgrounds receive their diagnosis later. Proposed possibilities for this disparity have included maternal education, socioeconomic status, irregular screening, and perceptions of disability in minority populations. Few studies have focused on symptom severity and functional challenges of minorities as potential factors. The purpose of this mixed methods study was to explore symptom severity, functional difficulties, and age at diagnosis for ASD, as well as describe the functional challenges encountered by preschool-aged children of African American descent with ASD.

◆ Research Questions

- 1) How does symptom severity relate to age of ASD diagnosis?
- 2) How does the degree of reported functional challenges relate to age of ASD diagnosis?
- 3) How do parents describe adaptive functioning challenges and related to performance and participation?

◆ Quantitative Results

Table 1

Quantitative Data: General Linear Model Results

Independent variable	Wald F	Sig.
ASD Severity	.428	.733
Functional Challenges	.144	.866

Note. $R^2 = .005$

- ❖ No significant relationship found between ASD severity or degree of functional challenges with earlier age of ASD diagnosis
- ❖ Mean age of ASD diagnosis: 6 years old

Figure 1. Severity level of ASD reported by parents on the NS-CSHCN

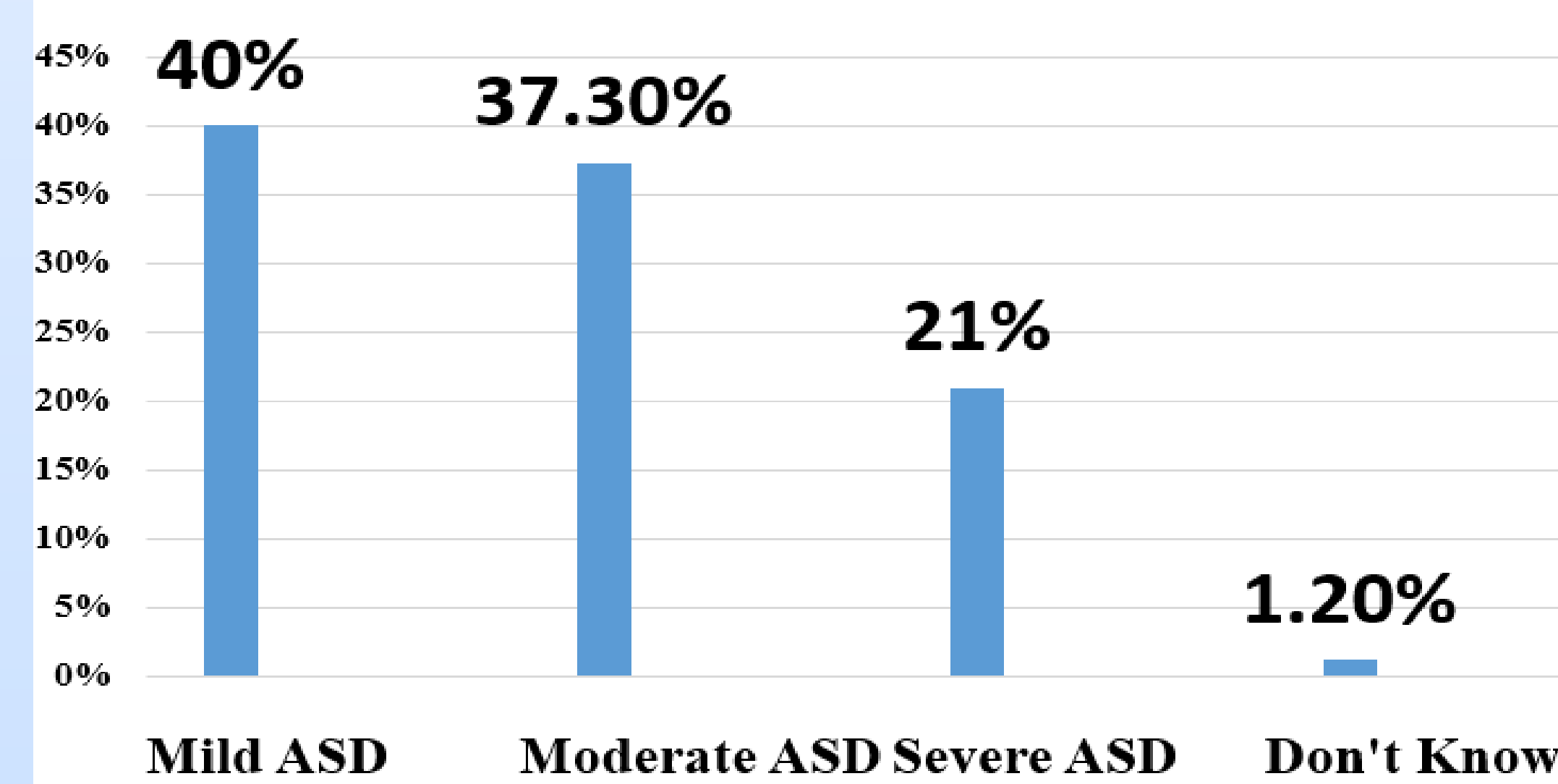
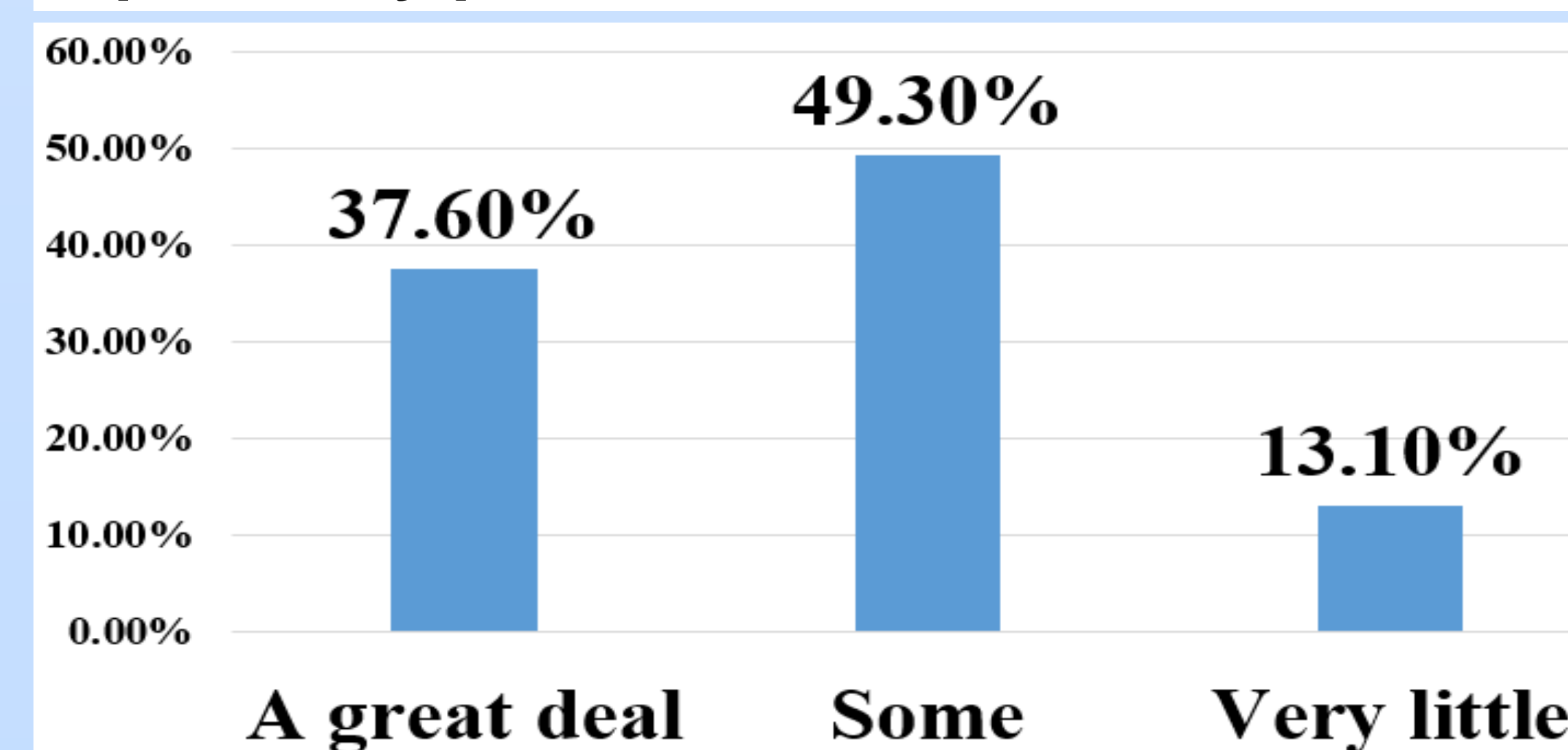


Figure 2. Degree of functional challenges reported by parents on the NS-CSHCN



◆ Methodology

Mixed Methodology:

A sequential explanatory approach was used to gain insight into the diagnostic disparities and adaptive functioning challenges of African American preschool-aged children with ASD.

❖ QUAN→QUAL

Quantitative:

($N = 224$) Analysis of sub-populated data from the 2009-2010 National Survey for Children with Special Healthcare Needs (NS-CSHCN); general linear model

Qualitative:

($N = 3$) Interviews with local parent using the Short Child Occupational Profile (SCOPE)-Extended Parent Interview and SCOPE Parent Report Form; coding of transcribed data

◆ Qualitative Results

Table 2

Qualitative Data: Child's Current Age and Age at Diagnosis

Participant (parent)	Child's age	Age of ASD Diagnosis
Q1 (Ava)	3 years, 2 months	2 years old
Q2 (Janette)	3 years, 10 months	3 years old
Q3 (Sharon)	5 years, 1 month	4 years old

Note. QI=Qualitative Interview ($N=3$)

Participant Responses:

Interviews provided insight into the adaptive functioning challenges, as well as personal difficulties and supportive strategies used in the home, school, and community settings.

Themes:

- ❖ Diagnosis process: all by neurologist
- ❖ Routines and Transitions
- ❖ Communication
- ❖ Family and Home Environments
- ❖ School and Community Environments

◆ Acknowledgements

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◆ Discussion

Quantitative analysis indicated that age at diagnosis was not found to be related to ASD symptom severity or degree of functional challenges reported by parents. On the contrary, qualitative findings based on responses provided by parents during interviews indicated various functional and environmental factors that led these parents to seek out an early diagnosis for their children's developmental delays, with communication being their primary concern. Participants in the qualitative interviews were able to obtain an ASD diagnosis between the ages of 2 and 4. In a recent study, Jo et al. (2015) found a continued tendency of children from non-Hispanic Black and Hispanic backgrounds who were reported to have mild to moderate ASD to have been diagnosed at a later age. However, they also found that children with more severe symptomatology, such as language regression, received their ASD diagnoses closer to 2 to 3 years of age.

◆ Conclusion

More research is needed that includes minorities as representative samples to determine associated factors with diagnostic delays. Targeted awareness campaigns and screening processes need to be developed and implemented that are racially and culturally sensitive to ethnic minority populations.

◆ References

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