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## Evaluating Knowledge of Developmental Disabilities Among WIC Participants

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# Evaluating Knowledge of Developmental Disabilities Among WIC Participants

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## Background

- One in six children in the U.S. has a developmental disability (DD)<sup>1</sup> such as intellectual disability, language delay, autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD) or Down Syndrome.
- Early diagnosis of DDs improves long-term child development and improves family coping strategies;<sup>3,4</sup> however, under-diagnosis and late diagnosis are more prevalent in low-income and racial/ethnic minority families.
- The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a national public health program that has been providing health screenings, nutritional education, referrals and supplemental foods for the last 40 years.<sup>2</sup>
- WIC may be a promising setting for early identification of DDs since little is known about the reasons behind late diagnosis amongst minority children.

## Objectives

- To assess what parents attending WIC know about typical child development and common developmental conditions of early childhood.
- To evaluate the connection between ethnicity and English proficiency in WIC participant knowledge of child development and in knowing someone with a developmental condition.

## Methods

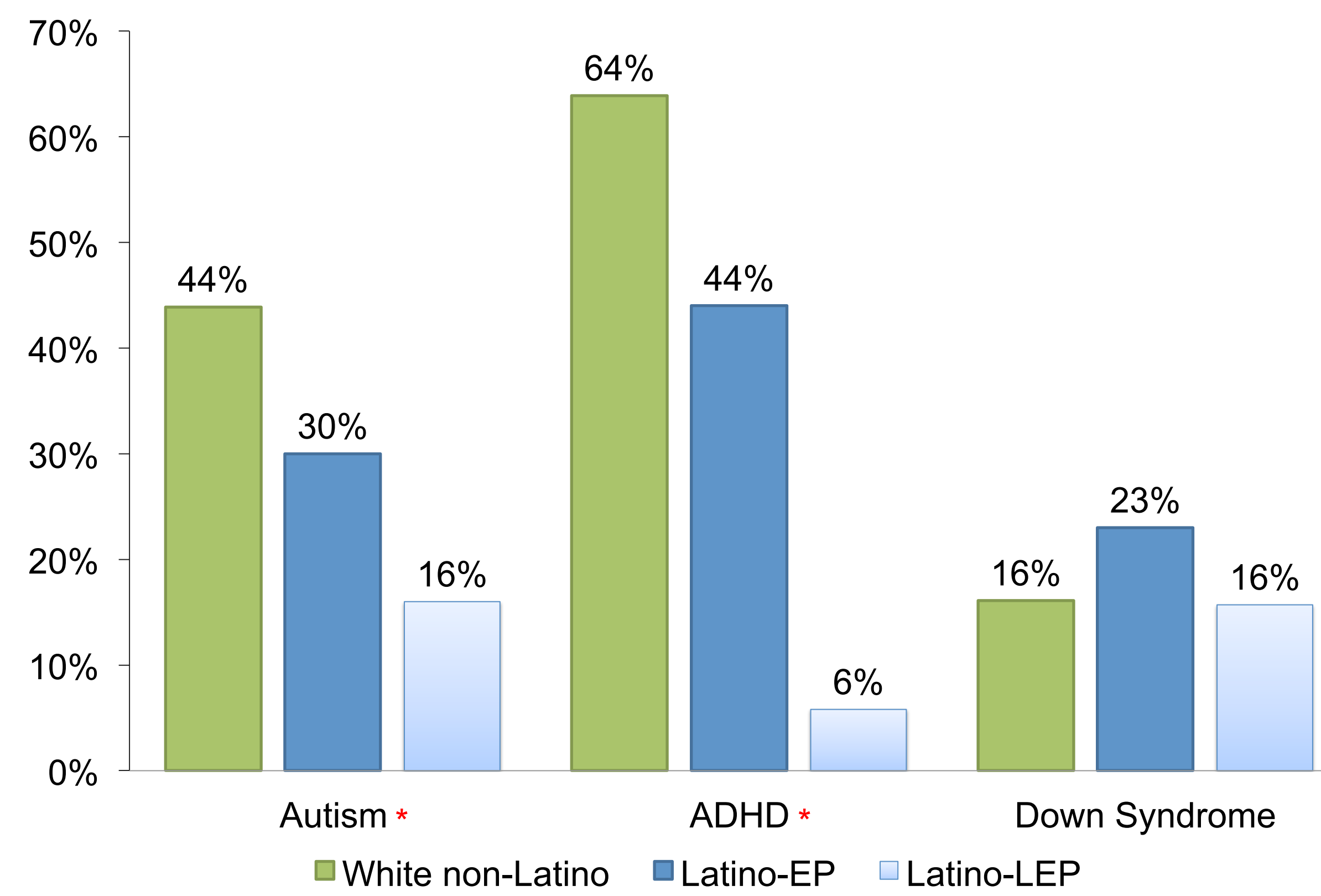
- Parents (n=539) with children 24-59 months of age attending WIC clinics in six Oregon counties were asked to complete a survey in English or Spanish.
- Two bilingual, bicultural research assistants helped parents needing oral administration.
- Survey items included:
  - Questions asking whether parents know individuals with DDs
  - "Quiz" on signs of typical and atypical child development
  - Parents' familiarity with DDs
  - Parents' race/ethnicity, educational attainment, and English proficiency

## Respondent Demographics

Characteristics	Percentage or Mean (N=539)
<b>Parent Gender</b>	
Female	91%
Male	9%
<b>Parent Race/Ethnicity</b>	
Non-Latino white	31%
Latino - English proficient (EP)	20%
Latino - limited English proficient (LEP)	38%
<b>Education Level</b>	
8 <sup>th</sup> grade or less	16%
High school graduate or GED completed	28%
Some college education	34%
Associate or Bachelor's degree completed	6%
Mean parent age	31

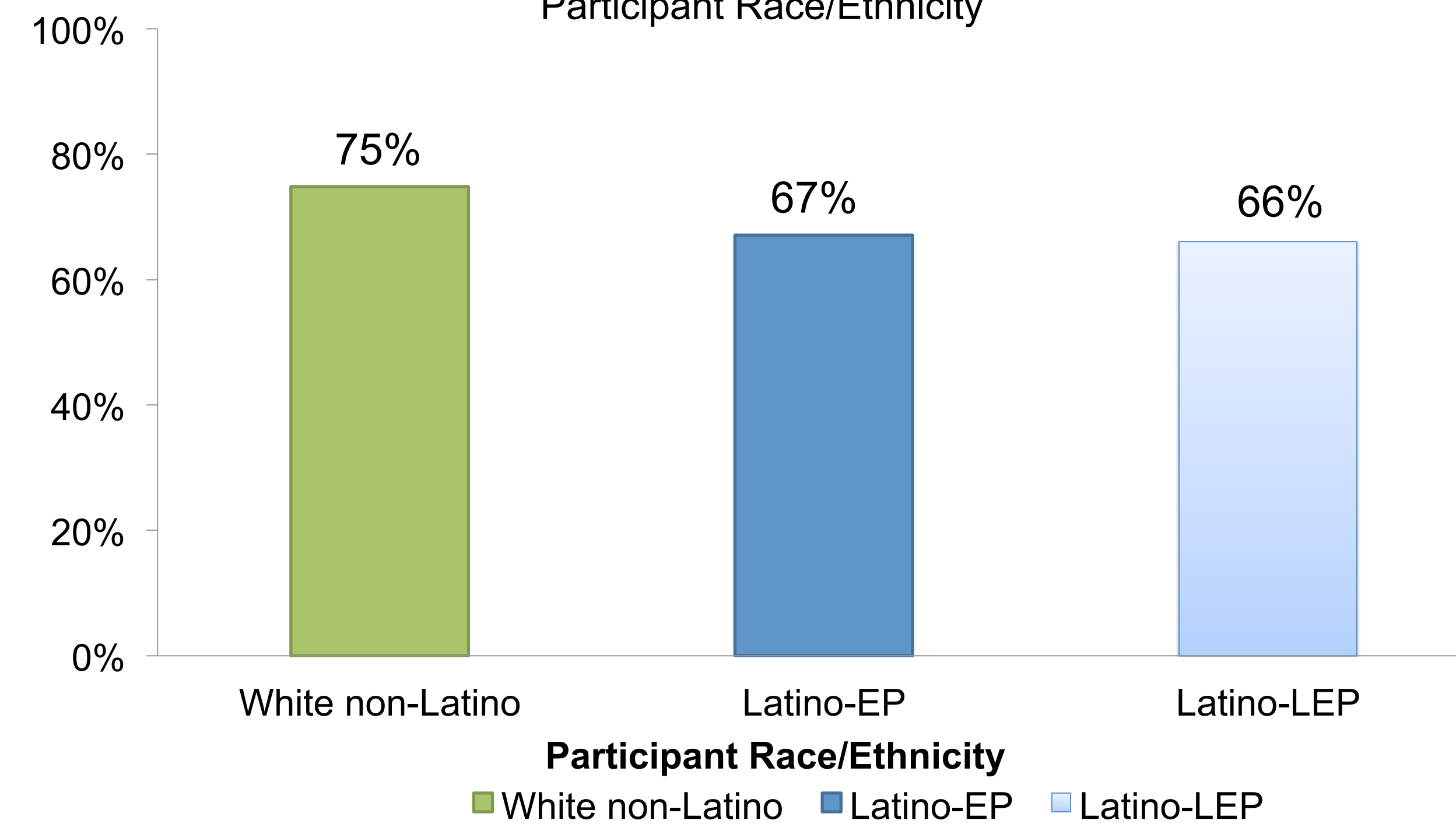
## Results

Figure 1. Percentage of Participants Who Reported Knowing Someone with a Developmental Disability



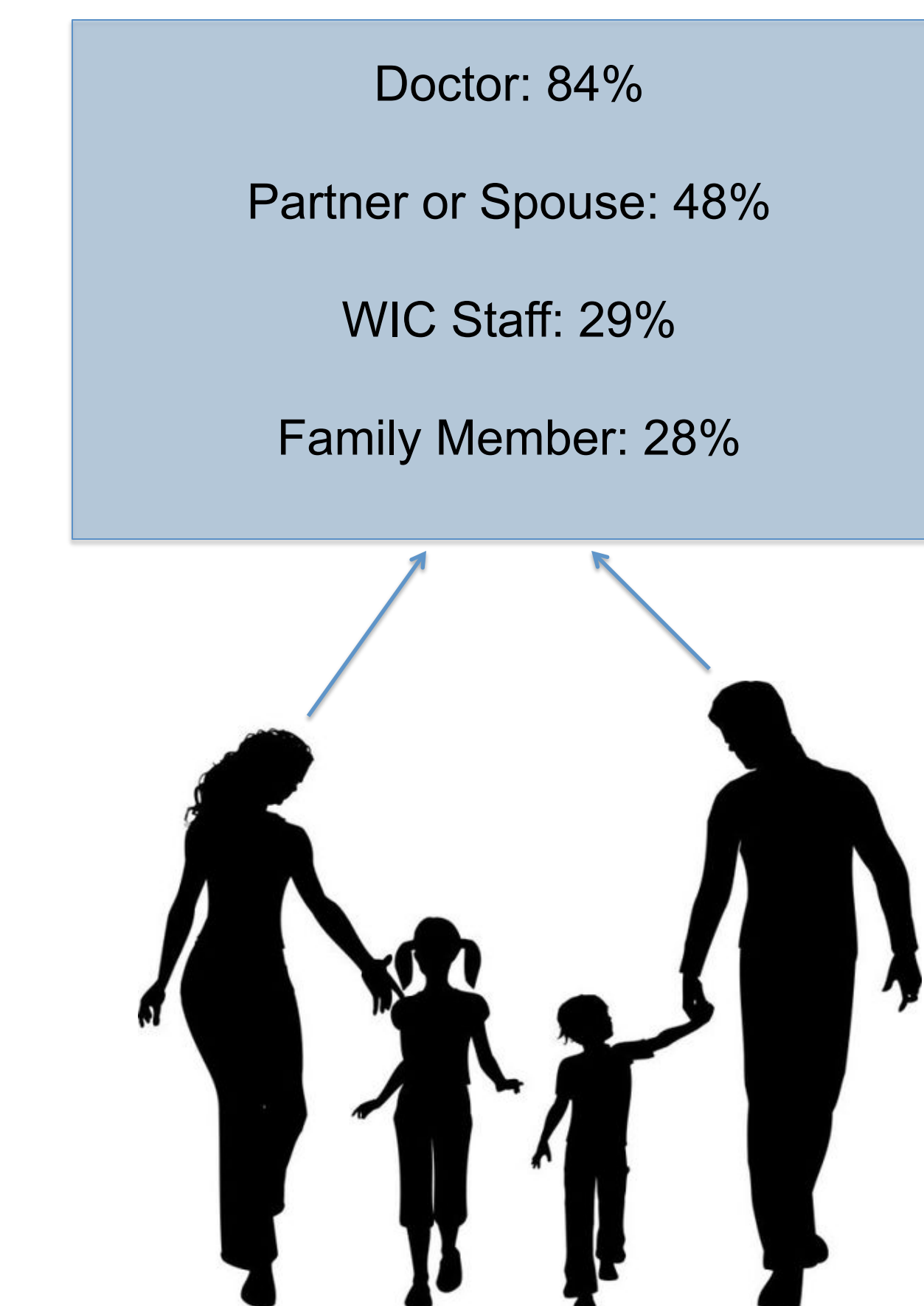
\*p <0.01 for Latino-LEP vs. white

Figure 2. Average Score on Child Development Quiz by Participant Race/Ethnicity



\*p <0.01 for Latino-LEP vs. white

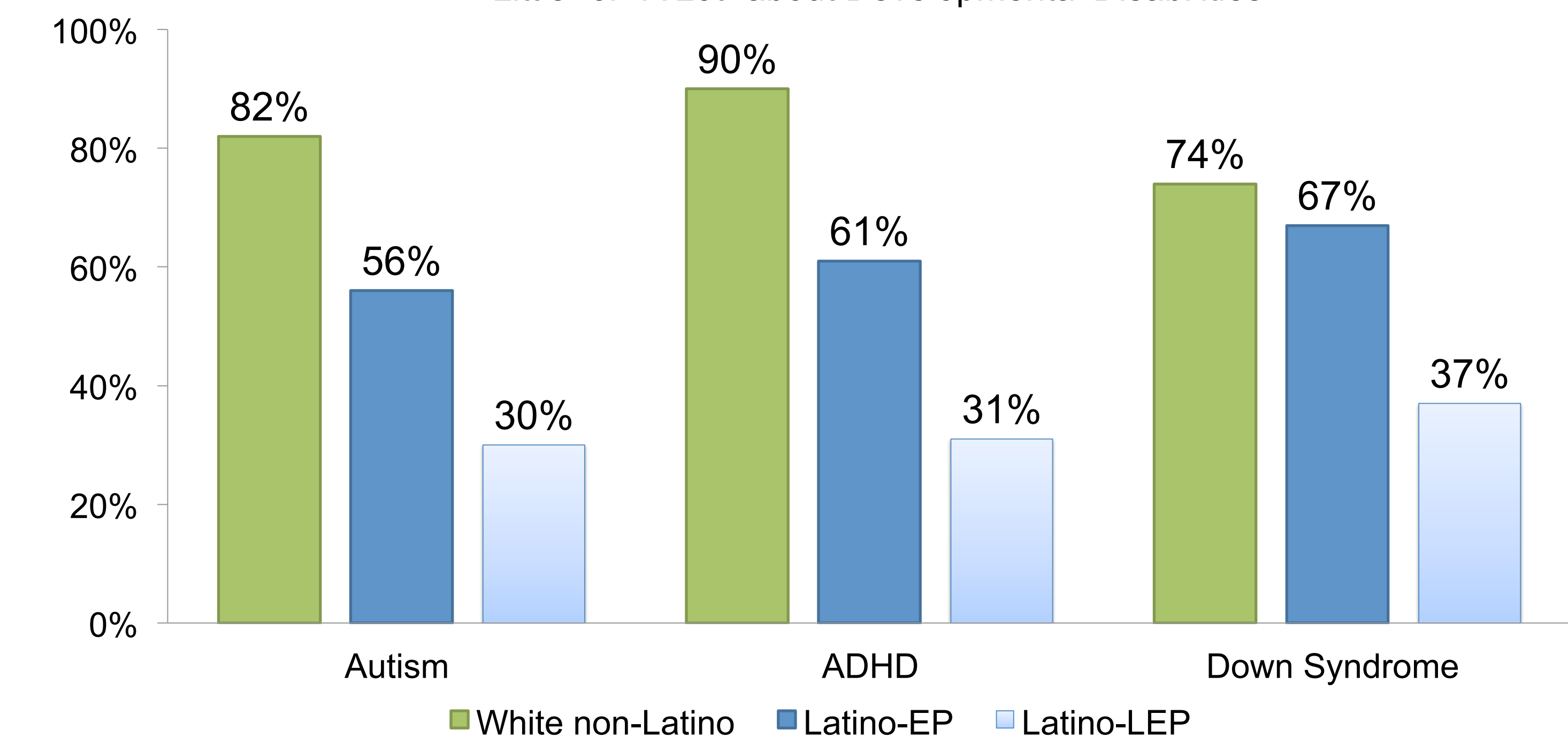
Who Would Participants Advise a Friend to Talk to about Developmental Concerns?



Summary of Results:

- Compared to white non-Latinos, Latinos with LEP were significantly less likely to know someone with ASD or ADHD.
- After doctors and partners/spouses, WIC is the third most frequent source of information about child development for respondents.
- Latinos with LEP had significantly less knowledge about typical child development than white non-Latino participants.
- Latinos with LEP were less likely than white non-Latino and Latino-EP groups to report knowing "a lot" or "a little" (versus "never heard of it") about ASD, ADHD, and Down syndrome.
- Overall, Latino-EP respondents tended to act more similarly to white non-Latinos than to Latino-LEP respondents, suggesting English proficiency may play a critical role in knowing about DDs and child development.

Figure 3. Percentage of Participants Who Reported Knowing "A Little" or "A Lot" about Developmental Disabilities



## Conclusions and Implications

- Lack of information and awareness about DDs may constitute a significant barrier to DDs identification within the Latino population.

### Suggestions for Creating Awareness about Disabilities

- Since low health literacy may be an obstacle to understanding written health information, visual and auditory materials on child development in English and Spanish may be viable alternatives for teaching Latino families about the early signs of DDs.
- Encourage Spanish language media exposure, community outreach, and public presentations focusing on recognizing typical and atypical child development.
- Increase knowledge and awareness of DDs in the Latino community by providing information and support in areas Latinos frequent for healthcare services, such as WIC clinics. Support services could take the form of organized parent support groups focused on sharing concerns about developmental conditions.
- Inform healthcare providers on how to educate the Latino community about early signs of developmental disabilities.
- Advise WIC participants with limited English proficiency to take advantage of interpreter availability during doctor visits to ensure they communicate all healthcare concerns.

### References:

- Boyle CA, Boulet S, Schieve L, Cohen RA, Blumberg SJ, Yeargin-Allsopp M, Visser S, Kogan MD. Trends in the Prevalence of Developmental Disabilities in US Children, 1997–2008. *Pediatrics*. 2011.
- Myers SM and Johnson CP. Management of Children With Autism Spectrum Disorder. *Pediatrics* 120 (5) November, 2007.
- Zuckerman K, Sinche B, Mejia A, Cobian M, Becker T, Nicolaidis C. Latino parents' perspectives on barriers to autism diagnosis. *Academic Pediatrics* 14 (3) May- June 2014.
- Prevalence and Characteristics of Autism Spectrum Disorders Amongst Children Aged 8. 2016. Autism and Developmental Disabilities Monitoring Network, 11 sites, United States, 2012. *MMWR Surveillance Summary*. 65 (3).
- Johnson CP, Myers SM, and the Council on Children With Disabilities. Identification and Evaluation of Children With Autism Spectrum Disorders. *Pediatrics* 134 (5), November 2007.
- Zuckerman K, Sinche B, Mejia A, Cobian M, Becker T, Nicolaidis C. Conceptualization of autism in the Latino community and its relationship with early diagnosis. *Journal of Developmental and Behavioral Pediatrics* 35(8) October, 2014.