

RESEARCH ARTICLE

Examination of Children Referred and Identified with Socioemotional and Behavioral Needs in Head Start

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This study utilized a population-based approach to examine the prevalence of children identified with disabilities in a large, urban Head Start program serving diverse preschool children living in poverty ($N = 7,301$). In addition, the study examined demographic differences in patterns of screening and identification for disability with respect to socioemotional and behavioral needs. Two administrative data systems were integrated for analysis: program enrollment and demographic records; and a mental health screening assessment database including all children enrolled within the Head Start program. Findings suggested that sex (male) and ethnicity (Hispanic) were associated with higher rates of identification for disability, including emotional/behavioral disability. In addition, of those children identified with an emotional/behavioral disability, the program-wide social-emotional screening tool showed greater rates of externalizing behavior problems compared to internalizing behavior problems. Implications for policy, future research, and practice within early childhood programs such as Head Start are discussed.

Keywords: early identification; socioemotional; screening tools; Head Start

INTRODUCTION

Young children living in poverty disproportionately experience multiple stressors, such as food scarcity and community violence in their formative years (Casey Foundation, 2017; Garbarino, 1995; Kelch-Oliver, 2011). Relative to their more economically advantaged peers, children living in poverty—are disproportionately from ethnic and racial minority backgrounds—and are at increased risk for displaying socioemotional and behavioral problems prior to entering kindergarten (Qi & Kaiser, 2003; U.S. Department of Education, Office of Special Education Programs [OSEP], 2020). However, young children from low-income households often are under-represented in large-scale studies of children identified and referred for early intervention or special education services (Morgan et al., 2012; 2017). Early childhood programs serving low-

income children are strategic opportunities to screen and identify children in need of special education services (Farnsworth, 2018; Feil et al., 2005). Comprehensive early screening procedures, when implemented in early childhood programs such as Head Start, can inform timely and appropriate identification for those children most in need of intervention (Farnsworth, 2018). Early interventions hold promise to support foundational learning and future school success (Boyd, et al., 2010; Pizur-Barekew et al., 2010; Shonkoff, 2011).

Early intervention efforts guided by federal law delineate procedures for screening and identifying young children at-risk for delays and disabilities. The Individuals with Disabilities Education Act (IDEA, 2004) mandates early identification of developmental delays in an effort to provide effective intervention. IDEA mandates that children from birth to five years must receive appropriate assessment and early intervention services. In accord with Part B of IDEA, children ages three to five years who are screened and identified with a disability in any of the fourteen IDEA categories are entitled to receive an Individualized Education Plan (IEP) with appropriate intervention services in the least restrictive environment.

The federal Head Start program, one of our nation's most comprehensive intervention programs addressing the developmental needs of low-income children, is a critical mechanism for early identification of disabilities (Fantuzzo et al., 2003). The Head Start Program's Federal Performance Standards require that programs "complete or obtain a current developmental screening to identify concerns regarding a child's developmental, behavioral, motor, language, social, cognitive, and emotional skills" and conduct on-going assessments throughout a child's enrollment "with sufficient frequency to allow for individualization within the program year" (U.S. DHHS, 2016, 1302-33). In addition, the Performance Standards provide guidance for prevention and classroom-based intervention for children displaying socioemotional and behavioral needs, to prevent suspension and expulsion (U.S. DHHS, 2016).

Despite the federal program mandates, research studies identify gaps in meeting these requirements in practice (Barton et al., 2012; Redden et al., 2003). According to the Head Start Performance Standards, programs are required to reserve 10% of their enrollment for children with disabilities (U.S. DHHS, 2016). In an analysis of data from the national Head Start Family and Child Experiences Survey (FACES), approximately 8% of preschool children enrolled in Head Start programs had a documented disability and an IEP according to parent report and program records (Barton et al., 2012). However, in a closer analysis of the language and cognitive assessment scores in the FACES dataset, Barton and colleagues found that an additional 14% of children met criteria for a developmental delay but had been overlooked and not identified (Barton et al., 2012).

Identification of Socioemotional and Behavioral Needs in Head Start

In addition to developmental needs (such as cognitive or language delays as described above), between 20-30% of children living in low-income households may display significant and ongoing socioemotional and behavioral needs (Barbarin, 2007; Feil et al., 2005; Graziano et al., 2015; Qi & Kaiser, 2003). However, socioemotional and behavioral needs may not be identified or addressed in early childhood programs or until children transition to elementary school (Conroy

& Brown, 2004; Duchnowski et al., 1998; Duncan et al., 1995; Forness et al., 2000). Without early intervention, socioemotional and behavioral needs can persist as children transition into formal schooling (Bub et al., 2007; Campbell et al., 2000; Zahn-Waxler et al., 2000) placing children at increased risk of longer term social or academic difficulties, compared to their well-adjusted peers (Florian & McLaughlin, 2008).

Preschool socioemotional and behavioral difficulties place children at increased risk for poor school adjustment and are associated with special education placement, grade retention, poor attendance, peer rejection, and high school dropout. Approximately 50% of students with emotional and behavioral disorders drop out of school and only 42% of those who remain graduate with a diploma (Landrum et al., 2004; Loeber, 1990; Offord et al., 1998). In addition, a longitudinal follow-up study of children enrolled in Head Start found that if children were identified with socioemotional or behavioral problems during preschool, they showed higher rates of eventual identification for special needs services in elementary school, with 17% of children identified eligible for special education services by the end of third grade (Redden et al., 2003).

Programmatic Barriers to Identification

Despite Head Start's role in the early identification of and intervention for children's socioemotional and behavioral needs, there have been challenges to programmatic efforts. Researchers and practitioners document barriers and resulting delays in access to timely intervention. Agency-level data indicating the prevalence of children exhibiting socioemotional and behavioral needs is often discrepant from national and local estimates (López et al., 2000). Using large-scale screening tools, between 12-30% of low-income children may be identified as at risk for a socioemotional or behavioral concern (López et al., 2000). However, Head Start Program Information Reports typically indicate that less than 1% of children are classified with an emotional or behavioral disorder (López et al., 2000) and children are much more likely to be classified with a developmental, or speech or language delay, than a behavioral concern (Fantuzzo et al., 1999).

Interviews with teachers and staff suggest that barriers to equitable identification are due to children's lack of access to community-based services, professional help, or other interventions to address children's socioemotional and behavioral needs (Lutz et al., 1999; Padgett et al., 1994). In addition, teachers and parents are reluctant to identify or label young children with a behavioral disorder given the stigma associated with mental health (Yoshikawa & Zigler, 2000); however, children with socioemotional and behavioral difficulties, especially those displaying behaviors that disrupt classroom routines, are a top concern of Head Start teachers (Hemmeter et al., 2006; Reinke et al., 2014; Yoder & Williford, 2019).

Even when children's socioemotional and behavioral needs are identified within Head Start programs, children displaying externalizing behavior such as disruptive or aggressive behaviors in the classroom are more likely to be identified and referred for services than children displaying shy or withdrawn behaviors (Bulotsky-Shearer et al., 2014; Fantuzzo et al., 2003). Examining programmatic patterns of early identification of children especially those displaying shy or socially withdrawn behavior is needed, as there are short- and long-term negative associations between

socially withdrawn behavior and the development of positive peer relationships in preschool (Coplan et al., 2001; Fantuzzo et al., 2003; Hughes & Coplan, 2010; Rydell et al., 2005) and academic skills such as reading and mathematics achievement in preschool and elementary school (Bub et al., 2007; Bulotsky-Shearer & Fantuzzo, 2011; Miles & Stipek, 2006). Given the number of children enrolled in Head Start who may have socioemotional and behavioral needs, it is critical that researchers in partnership with Head Start programs take a closer look overall within the program at those children who are identified and referred for early intervention services.

Present Study

The primary purpose of the present study was to take a population-based look at the prevalence of children referred and identified for early intervention in a large, urban Head Start program serving a diverse population of preschool children living in poverty. The study also aimed to examine whether there were demographic differences in patterns of referral and identification and whether there were programmatic biases in the types of socioemotional and behavioral needs identified through the use of a program-wide social-emotional screening tool.

We had three specific research questions: (a) What is the prevalence of types of disabilities within the Head Start program? (b) What are the demographic characteristics (e.g., age, sex, ethnicity, and English Language Learner [ELL] status) associated with children classified with special needs? (c) Does a programmatic teacher behavior rating screening measure differentiate between children classified by the Head Start program as having socioemotional or behavioral needs and those who are not classified? Given prior research, we hypothesized that the majority of children would be classified with speech/language or developmental delays, with a minority of children classified with mental health or behavioral special needs. We expected that children exhibiting externalizing behavior would be overrepresented in the groups of children identified with socioemotional or behavioral needs.

In addition, we expected that boys would be overrepresented in the special needs group based on prior research indicating that boys are more likely than girls to be identified with or as at risk for a disability (Barton et al., 2012; Guarino et al., 2010; Hibell, et al., 2010; Markowitz et al., 2006; Matthews et al., 2010; Morgan et al., 2012). Additionally, boys tend to be referred and diagnosed with emotional disturbances, developmental delays, and language delays, at higher rates than girls in early childhood and elementary school (U.S. Department of Education, 2014).

Research findings on patterns of referral and identification of children from racial and ethnic minority backgrounds are mixed and vary by geographic region. Early childhood research studies have found that the rate of referral for early intervention services is greater for African American and Hispanic children, compared to White children (Hosp & Reschly, 2003) as well as the rates of expulsion in preschool (Gilliam, 2005; Gilliam et al., 2016). However, other research and meta-analytic reviews suggest that African American, Hispanic, and Asian children are underrepresented in special needs subgroups who are identified to receive early intervention services compared to White children (Delgado & Scott, 2006; Hibell et al., 2010; Markowitz et al., 2006; Morgan et al., 2012; Morgan et al., 2017; Morgan et al., 2018).

METHOD

Participants

The sample included all children enrolled in a large, urban Head Start program in the Southeastern United States. During this school year, the Head Start program served 7,301 children in 318 classrooms across 78 centers. Approximately 51.9% of the sample was female and children's ages in the fall ranged from 33 to 59 months ($M = 47.7$, $SD = 7.12$). Children were predominantly African American and Hispanic/Latino (57.1% and 42.1%, respectively), with 0.8% identified as being of another ethnicity (including White/Non-Hispanic, Asian, Native Islander, or Other). During this school year, 98% of the children in the program were from households that met the federal income requirement for enrollment in Head Start (less than \$22,050 for a family of four in 2009-10). Two sets of analyses were conducted using this larger population of children, as well as a subsample, as described below. All children ($N=7,301$) were included in the first set of descriptive analyses.

Analytic Subsample. Children were included in the second set of analyses if their teachers completed the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) during the program year. Of the 6,089 children (M age = 47.9 months, $SD = 6.9$) included in this subsample, approximately 53% were female. Children were predominantly non-Hispanic African American and Hispanic (55.4% and 43.8%, respectively), with .8% identified as being of another race (including White/Non-Hispanic, Asian, Other, or Native Islander). This subsample of children did not differ significantly from children in the overall sample with regard to age, sex, ethnicity, or home language.

Program demographic records indicated that teachers in the overall program were predominantly African American and White (49.7% and 35.8%, respectively), with 14.4% identified as being of another ethnicity (including Asian, Biracial and unspecified). Approximately 50% of all the teachers (regardless of race) identified themselves as of Hispanic/Latino descent. There were approximately 44% of teachers with a Bachelor's degree, 22% with an Associate's degree, and 17% with a Child Development Associate credential. Nine percent of teachers were enrolled in a Bachelor's degree program.

Measures

Classroom Socioemotional Adjustment. The Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) is a 37-item norm-referenced rating scale of social-emotional adjustment, developed for use by parents and teachers of children two to six years of age. In the current study, lead teachers completed the DECA for all enrolled children within the first 45 days of the school year. Teachers completed the DECA in their language of preference (English: $n = 5,197$ or Spanish: $n = 860$). The DECA uses a five-point Likert scale (0 = never, 1 = rarely, 2 = occasionally, 3 = frequently, and 4 = very frequently), asking teachers to rate how often they had observed each child display a behavior over the previous four-week period. The measure comprises four subscales, including three Protective Factors subscales (Initiative, Self-Control, and Attachment) and one Behavioral Concerns subscale.

The Protective Factors subscales assess adaptive, prosocial, and resilient behaviors children display in the classroom. The Initiative subscale consists of 11 items assessing children's ability to use independent thought and actions to meet their needs. Examples of items on the Initiative subscale include "does things for himself/herself," "chooses tasks challenging for him/her," "tries or asks new things or activities," and "asks other children to play with him/her." The Self-Control subscale comprising 8 items assesses children's ability to experience a range of feelings and express those using words and actions. Examples include, "shows patience," "handles frustration well," and "controls anger." The Attachment subscale of 8 items assesses the quality and strength of the relationship between the child and familiar adults. Examples include, "shows affection for familiar adults," "acts happy when parent returns," and "seeks help from adults when necessary." The Behavioral Concerns subscale includes 10 items assessing problem behaviors exhibited by preschool children. Items include, "destroys or damages property," "difficulty concentrating," "easily upset," and "temper tantrums." Generally, the Behavioral Concerns subscale taps externalizing or outward behavioral problems.

The published technical manual reports high internal consistency reliabilities for teacher ratings on the Initiative (.90), Self-Control (.90), Attachment (.85), and Behavioral Concerns (.80; LeBuffe & Naglieri, 1999). Test-retest reliability coefficients are reported as .80, .64, .55, and .68 for the Initiative, Self-Control, Attachment, and Behavioral Concerns scales, respectively.

Procedure. Data from this study were obtained as part of a larger University-Head Start collaborative research project examining the school readiness of Head Start children enrolled in a large urban program, located in the Southeastern United States. The purpose of the larger project was to integrate two large administrative databases programmatically collected by the Head Start program: (1) a child and family information database that included child demographic information (date of birth, gender, race, ethnicity, special needs status, primary and secondary home language, English language proficiency, center name, classroom assignment, etc.) and (2) a database containing scores from the teacher ratings on the DECA (LeBuffe & Naglieri, 1999).

Both databases were collected and stored electronically by the program to meet the federal Head Start Performance Standards requirements. According to procedure for the Head Start program, parents or guardians report on child and family demographic information which was then entered into the database by Head Start administrative staff upon a child's entry into the program. Information was updated when a child's enrollment information changes. For the DECA, teachers were trained to complete the measure after observing each child's behavior in their classroom over a period of four weeks. The DECA was then used program-wide as a behavioral screener to meet the Head Start Performance Standards for mental health screening within the first 45 days of school (U.S. DHHS, 2016).

Information about children's disability status was obtained through the child and family database, which included a disability module. The disability module indicated whether children were (a) "suspected" to have a disability and had been referred for evaluation based on either a teacher, parent, or disability specialist concern, or programmatic screening result; or (b) "identified" with a disability (had received a formal comprehensive educational evaluation by a professional, had been diagnosed with a documented delay or disability, and were found eligible to receive Early

Intervention services according to Part B of IDEA (U.S. Department of Education, 2004). There were 904 children with a suspected (referred) or identified special need. Within this group, some children had more than one special need (e.g., children could have a secondary and tertiary special need in addition to their primary special need). However, each child was only counted once in the analyses (either as having emotional/behavioral disability or as having one or more other special needs).

Approval for the project was obtained from the University Institutional Review Board, the Head Start director, and the Head Start Parent Policy Council. Because there was no unique identifier across the databases, Microsoft Integrated Services was used to link children's records using a probabilistic matching algorithm, using children's first name, last name, date of birth, gender, and race/ethnicity combinations. This linking strategy was based on a 95% confidence match. Records that matched were separated into a master table for that particular assignment and then joined at the end of the process. Once the databases were integrated, the data were de-identified to protect participant confidentiality.

Data Analyses

Investigation of Prevalence of Special needs within the Head Start Program. To obtain a descriptive picture and examine the prevalence of suspected and identified disabilities in the Head Start program, the percentage of children classified under each of these two categories (suspected and identified) were examined overall, as well as within each special need category.

Investigation of Demographic Characteristics of Children Suspected or Identified with Special Needs. The next set of analyses examined whether there were differences in child demographic characteristics between children in the overall program and (a) those children suspected or identified with an emotional/behavioral special need and (b) those children suspected or identified with another special need. Statistically significant deviations in the expected prevalence of each demographic variable (sex [female or male], race [Black or non-Black], ethnicity [Hispanic or non-Hispanic], primary home language [English or Spanish], and English language proficiency [proficient or non-proficient]), were determined based on the two-tailed tests of the standard error of proportional differences (Ferguson & Takane, 1989) and corrected for multiple pairwise comparisons by the Bonferroni method. One-way ANOVA using least square means with Tukey-Kramer post hoc comparison was used to examine differences with respect to age in months.

Analysis of children suspected or identified to receive special needs services in the Head Start program. In this final set of analyses, multiple discriminant function analysis was used for group explication purposes as advised by McDermott (1982) and Fantuzzo et al. (2003). This analysis permitted examination of the nature of the emotional and behavioral problems of a criterion group of children classified within the special needs system and a group who had not been classified by the program. In other words, it permitted examination of the differential pattern of program identification of children in the special needs system, according to the different types of socioemotional adjustment as assessed by the four DECA subscales.

RESULTS

Prevalence of Special Needs in the Head Start Program

In the overall program ($N = 7,301$), a total of 12.4% ($n = 904$) of the children were classified with either a suspected or identified special need. Table 1 displays the frequency distribution of children classified with a suspected or identified concern, by disability category. The majority of children classified with suspected or identified special need were classified with speech or language impairment. Approximately 13.5% of children suspected or identified with a special need were classified with an emotional/behavioral disorder.

TABLE 1

Prevalence of Disability Categories among Head Start Children in the Special Needs System

Special need category	Children in Special Needs System	
	Identified Disability $n = 571^a$	Suspected Disability $n = 428^a$
Speech/Language	437 (76.5%)	279 (65.2%)
Emotional/Behavioral	32 (5.6%)	90 (21.0%)
Health/Physical	33 (5.8%)	16 (3.7%)
Learning Disability	16 (2.8%)	9 (2.1%)
Autism Spectrum Disorder	5 (0.9%)	3 (0.7%)
Intellectual Disability	2 (0.4%)	0 (0%)
Other	46 (8.1%)	31 (7.2%)

$N = 7,301$.

Note. $N = 904$, include all children in either identified and/or suspected disability categories. Total number of children in the identified category, $n = 525$. Total number of children in the suspected disability category, $n=379$.

^a There are some children who were identified with or suspected as having more than one disability, so the numbers presented are total number of disability classifications, not total number of children.

Investigation of demographic characteristics of children with special needs and those with emotional/behavioral special needs.

Table 2 displays the frequency distribution of demographic variables for children in the program overall, as compared to children classified with a special need (suspected and/or identified), and children classified specifically with an emotional/behavioral special need (suspected and/or identified). Statistically significant departures from overall sample expectancy were found in the percentage of girls and boys in both the identified disability group and the identified emotional/behavioral special needs group (with a significantly lower percentage of girls represented in these two groups when compared to sample expectancy based on the distribution in the overall program). In addition, both emotional/behavioral and other special needs groups were comprised of a greater number of Hispanic children, children with home language of Spanish, and those who were not English proficient, when compared to sample expectancy. No significant differences among groups by children's age (in months) were found (ANOVA findings).

TABLE 2

Demographic Characteristics of Head Start Children with Identified Disability

	Overall Program <i>N</i> = 7,301	Identified Disability <i>n</i> = 525	Suspected Disability <i>n</i> = 379	Identified Emotional/ Behavioral Disability <i>n</i> = 32	Suspected Emotional/ Behavioral Disability <i>n</i> = 90
<i>Demographic variable</i>					
Mean age	47.68	48.24	47.04	46.63	46.27
Female	3,787 (51.9%)	173 (33.0%)*	137 (36.1%)	9 (28.1%)*	27 (30.0%)
Male	3,514 (48.1%)	352 (67.0%)*	242 (63.9%)	23 (71.9%)*	63 (70.0%)
Black	4,165 (57.0%)	193 (36.8%)	199 (52.5%)	9 (28.1%)	47 (52.5%)
Hispanic	3,076 (42.1%)	327 (62.3%)*	177 (46.7%)	22 (68.8%)*	43 (47.8%)
Other Race	60 (0.8%)	5 (1.0%)	3 (0.8%)	1 (3.1%)	0 (0%)
Primary home language is English	4,093 (56.1%)	216 (41.4%)	183 (48.3%)	15 (46.9%)	51 (56.7%)
Primary home language is Spanish	2,567 (35.2%)	284 (54.1%)*	148 (39.1%)	16 (50.0%)*	36 (40.0%)
Non-proficiency in English	2,471 (33.9%)	278 (53.0%)*	161 (42.5%)	21 (65.5%)*	37 (41.1%)

Note. Some children are suspected or identified with more than one disability. Children with both suspected and identified disabilities were classified as "identified."

* $p < .05$.

Analysis of children suspected or identified to receive special needs services for emotional/or behavioral problems in the Head Start program

A multiple discriminant analysis was conducted for three groups: (a) the group of 6,026 children who had never been referred or identified with a special need by the Head Start program, (b) the group of 90 children who were suspected with an emotional/behavioral special need by the Head Start program, and (c) the group of 32 children who were identified with an emotional/behavioral special need by the Head Start program. The analysis yielded a successful solution where Wilks's $\Lambda = 0.97$, multivariate $F(8, 10788) = 17.93$, and $p < .0001$. Only one discriminant function was significant. When examining the pattern of loadings on the discriminant function, it was the externalizing problem scales (high Behavioral Concerns and low Self-Control scores) that separated the smaller groups of children with either suspected or identified emotional/behavioral special needs from the larger non-special needs group.

Table 3 presents T Score means and standard deviations for the four DECA subscales, as well as the univariate tests of group differences for the three groups. Significantly higher T Scores were found for the two groups comprised of children with suspected and identified emotional/behavioral special needs on the Behavioral Concerns subscale and significantly lower T Scores were found on the Self-Control subscale for both groups, as compared to the group of children never referred or identified. The group means were comparable between the two groups of children who were either suspected (referred) or identified emotional/behavioral special need and significantly different from the non-special needs group.

Table 3

DECA Subscale T Scores across Non-Special Needs and Mental Health Special Needs Children in the Head Start Program

	Children with No Special Need <i>n</i> = 5,294	Children with Identified Emotional/ Behavioral Special Need <i>n</i> = 25	Children with Suspected Emotional/ Behavioral Special Need <i>n</i> = 81	
DECA subscale	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	Univariate <i>F</i> ^a
Behavioral Concerns	47.33 (9.10)	54.56 (11.95)	56.95 (9.54)	51.95**
Initiative	51.16 (8.50)	45.20 (8.90)	46.88 (9.33)	16.05**
Self-Control	54.92 (8.47)	47.36 (12.42)	47.37 (10.31)	40.88**
Attachment	48.56 (8.48)	46.04 (11.01)	45.77 (10.21)	5.32*

Note. $N = 6,903$, $n=32$, $n = 90$)

* $p < .001$. ** $p < .0001$.

Note. Wilks' lambda = 0.97, multivariate $F(8,10788) = 17.93$, $p < .0001$.

^aUnivariate $df = 2$ and 5397.

DISCUSSION

The purpose of the present study was to take a population-based look at patterns of early identification and referral for children with special needs within a large, urban Head Start program serving a diverse population of preschool children. We found demographic variables such as gender and ethnicity differentially associated with higher rates of identification of developmental disabilities, as well as greater rates of identification of externalizing problems compared to internalizing (shy or socially withdrawn) behavior problems through the use of program-wide social-emotional screening tool.

As expected, we found that in total 12.4% of preschool children in the Head Start program were identified with or suspected of having a disability (7.2% and 5.2% respectively). Nationally, Head Start programs are provided guidelines for allocating services to 10% of children in the program with special needs (U.S. DHHS, 2016). Findings from our local program approximate this number (when identified or suspected percentages are combined), however, the number of children identified with a documented disability (who had an IEP) is lower (7.2%) than the 10%. This discrepancy could indicate an under-representation of children in the program with a disability, but also could reflect the nature of the referral process. In our database, children who were flagged with a concern or suspected delay, might have been in the process of completing more formal comprehensive evaluations before being formally labeled with a disability, and gaining access to services through an IEP.

Consistent with prior research, the majority of the children identified with disabilities were classified with a speech or language impairment (5.99%), while emotional/behavioral disorders accounted for 0.4% of identified disabilities (within the population of Head Start children). This is consistent with national statistics, suggesting that for all children three to five, 5.74% of preschool aged children are classified with a disability, with 2.69% having a speech or language impairment and 0.03% having an emotional/behavioral disorder (U.S. Department of Education, 2019). In addition, Head Start studies have found that children who display challenging externalizing or internalizing behavior and who might be identified with an emotional/behavioral disorder often receive a speech/language impairment classification, rather than a classification of emotional/behavioral disorder (Fantuzzo et al., 1999).

Patterns of Early Identification across Subgroups of Children

In support of our hypothesis, boys were more likely than girls to be represented in the group of children identified or suspected of a disability, regardless of disability classification. Our findings are consistent with previous national and local studies where boys are more likely to be referred and identified for early intervention services, for any disability. For example, in the national FACES Head Start and ECLS-K samples, 67% of boys versus 33% of girls in the were identified as eligible to receive early intervention services (Barton et al., 2012; Morgan et al., 2012). This disparity may be caused in part by gender differences in the incidence of language, developmental, and emotional/behavioral disabilities between boys and girls, leading boys to be referred for an evaluation at a higher rate (Delgado & Scott, 2006; U.S. Department of Education, 2014). However, more research is needed to further understand if girls are being overlooked in the early

identification and referral process within early childhood programs. Prior research suggests that girls with emotional/behavioral disorders typically exhibit behaviors that are overlooked within the classroom or recognized by school staff (Oswald et al., 2003). Using validated screening tools and implementing systematic screening, referral and evaluation procedures within early childhood programs may enable equitable identification for all children (Farnsworth, 2018; Feil et al., 2005; Lopez et al., 2000).

With respect to race and ethnicity, we found that Hispanic children were more likely to be identified with a disability in comparison with non-Hispanic children, regardless of the type of disability. This finding is consistent with some prior research which indicates that Hispanic children are more likely to be classified with a disability and receive special education services, including for emotional disturbance, speech or language delays, and intellectual and learning disabilities (Skiba et al., 2005). However, findings in early childhood studies are mixed. In a recent study within a national sample, Hispanic children were 29% less likely than White children to be identified as having a learning disability (Morgan et al., 2015) and in a local kindergarten sample, Hispanic children were underrepresented in special education compared to other minority groups (Zhang et al., 2014). Further work is warranted to understand the early learning contexts in which Hispanic children may be over- or under-identified for intervention services.

In contrast to prior research that suggests African American students are overrepresented in special education systems (Kauffman et al., 2009; Zhang et al., 2014), we did not find that African American children were overrepresented with suspected or identified disabilities in our sample compared to our sample demographic distribution. However, most of the children in our sample were from ethnic and racial minority backgrounds (51.7% African American and 42.1% Hispanic). All children were from families living in poverty, by nature of their eligibility for the Head Start program (U.S. DHHS, 2020). Ethnic and racial minority children are disproportionately more likely to live in poverty, and experience increased risks to their early learning and social-emotional development (Skiba et al., 2008). In addition, research has found that African American boys are disproportionately more likely to be monitored and identified by teachers with emotional/behavior problems, subsequently at greater risk for suspension and expulsion from early childhood education programs, compared to their non-Black counterparts (Gilliam et al., 2016). Future research should continue to examine patterns in early identification within other Head Start programs and again promote more equitable screening procedures, as well as professional development supports to teachers within their classroom (Barbarin, 2007; Bricker et al., 2004; Hemmeter et al., 2016; Lamb-Parker et al., 2008; Perry et al., 2010).

Moreover, children speaking Spanish in the home (Dual Language Learners; DLLs) were found to be over-represented in the group of children identified with special needs compared to non-DLL children. Studies document increased risk for DLL children to be over-referred to special education services because of speech and language impairments or delays (Gildersleeve-Neumann et al., 2008; Sullivan, 2011). Sullivan (2011) found that DLL's were 30% more likely to be identified with a speech or language impairment than monolingual children. There is a growing recognition in the early childhood field that DLL children follow a more complex path in developing expressive and receptive language skills in two languages than monolingual children (Castro et al., 2011; López & Páez, 2021; Peña & Halle, 2011) and this may present as a delay in pronunciation, productive language or expressive vocabulary skills. In addition, a recent qualitative study

identified misconceptions by Head Start teachers about the language abilities of DLL children that were confounded with DLL status (Ramírez et al., 2020). Validated assessment tools are needed that can measure the language development of DLL children and accurately identify speech or language impairment, particularly for children from low-income backgrounds (Halle et al., 2014; Peña & Halle, 2011). In addition, more professional development and training of early childhood staff is needed, to further the field's understanding about the development of young DLL's, their cultural strengths and differences and early learning experiences across the home and school contexts (Castro, 2014).

Patterns of Early Identification of Socioemotional and Behavioral Needs

We found that a programmatic screening tool (the DECA) differentiated between children referred or identified with an emotional/behavioral special need, but only for children displaying externalizing behavior. Children who were referred or identified were rated higher on externalizing behavior problems by teachers on the DECA Behavior Concerns subscale and lower on the Self-control subscale than children who were not referred or identified. This finding is consistent with prior research conducted in Head Start programs, where those children who are referred or identified for special needs services are more likely to be children displaying aggressive, oppositional or challenging behavior, or difficulties with self-regulation that disrupts classroom routines (Fantuzzo et al., 2003). The DECA subscale scores that measure attachment and initiative (comprised of items capturing internalizing behaviors, such as shyness, or social withdrawn behavior) was not elevated in the referred or identified special needs group. Children rated by teachers with higher internalizing behavior were not represented in the special needs group. Findings are consistent with early childhood studies indicating that teachers report more attention and concern for children displaying externalizing behavior in the classroom (Arbeau & Coplan, 2007; Bulotsky-Shearer et al., 2014; Fantuzzo et al., 2003).

Limitations and Future Directions

There are several limitations that must be acknowledged. First, the purpose of the study was to take a population-based look in a large Head Start program and examine differences among children within the special needs referral and identification pipeline. This program provided services to an ethnically and racially diverse population of children living in poverty—overall, a group at very high risk for displaying developmental or emotional/behavioral needs. Therefore, we intentionally included all children within the program administrative records who were either referred (suspected) or identified during the program year. This group included children who either were referred (suspected) or identified with a disability. However, children who fell in the suspected category were in the eligibility determination process and it is possible that some of the children may ultimately have been deemed ineligible to receive early intervention services.

Another limitation of the study is that direct comparisons with national data are challenging because of differences in nomenclature and categorization of disability in Head Start compared to the federal IDEA. At the time of the study, the Head Start disability classifications did not align perfectly with IDEA categories, so it makes it difficult to compare directly local program

prevalence to national prevalence. In general, however, national statistics based on IDEA categories are comparable with local program statistics. The predominant disability classification for preschool children ages 3-5 years is speech/language delay (46%), followed by developmental delay (37%), with very few (0.4%) identified with emotional behavioral disturbance (U.S. Department of Education, Office of Special Education Programs, 2012).

Finally, while it is important that Head Start and other early childhood programs utilize validated screening tools to identify those children in need of further comprehensive assessment or follow-up, the socioemotional tool used by the program (the DECA) has limitations. The most significant limitation is that the Behavior Concerns subscale used to refer or identify children for socioemotional or behavioral needs, predominantly includes items that measure externalizing behavior (Bulotsky-Shearer et al., 2013). Future studies should include a comprehensive screening tool that measures both internalizing and externalizing behavior so that both can be equitably identified.

In summary, there is a critical need for early childhood programs serving children from diverse, and low-income families to use validated and comprehensive screening tools that equitably identify children's socioemotional and behavioral needs. Early identification is crucial so that early intervention and support can be provided within the classroom and home setting, to improve children's adaptive behavior and positive engagement in formative learning experiences that set the stage for future school and life success. Importantly, children who display internalizing behavior (shy or socially withdrawn) deserve special consideration and attention. More research is needed to develop better alignment within early childhood programs between screening results, teacher professional development/training, and program supports provided for teachers and families to address children displaying socioemotional and behavioral needs.

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