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**Steven Severance**

California State University (USA)

**Erica Howell**

California State University (USA)

## **On Gender Disparities in Disability Identification and Special Education Services**

**ABSTRACT.** In the present paper the author discusses the issue of gender imbalance in disability identification, with a special focus on the referrals to Special Education Services. Having identified a significant prevalence of male students being referred to Special Education, the article discusses a range of factors that influence the disparity. The paper explains the role of the subjective opinion as well as the gender-biased behavioral and academic expectations in the process of disability identification. Furtherly, the behavioral differences are identified as another cause for the underrepresentation of female students in the special education referrals. In addition, the gender-biased studies play a significant role in establishing of the diagnostic criterias focused on the typically male symptoms of disabilities. The final section presents the gender differences in earliness of diagnosis and the severity of disability among students referred to special education services. The paper seeks to explain the reasons of gender disparities in the special education and identify the possible focus areas for the further studies in the field of gender, disability and behavior oriented sciences.

**KEYWORDS:** special education, disability identification, referral bias, learning disorders, gender expectations

### **Introduction**

In the United States, male and female students are nearly equally represented in the public-school population; however, boys outnumber girls more than two-to-one among students receiving special education services (Arms, Bickett & Graf, 2008; Coutinho & Oswald, 2005). Specifically, male students from low-income backgrounds are high risk characteristics predictive of disability identification (Sullivan & Bal, 2013). This gender disparity is noted in virtually every disability category, and is even more pronounced for certain disabilities. For example, autism has

been diagnosed in boys at a rate of about four-to-one compared to girls (Szalavitz, 2016). In fact, these numbers hold true across race, ethnicity, and class, making gender the single greatest predictor of whether a student will be identified as having a disability (Arms et al., 2008).

While this gender imbalance may be due in part to male over-representation, current research indicates that it is more a result of female under-representation (Wehmeyer & Schwartz, 2001; Arms et al., 2008). Wehmeyer and Schwartz (2001) noted that, for the most part, boys receiving special education services have academic needs or challenges that warrant their identification and placement. However, they also noted that many girls who would benefit from similar services are not referred to special education, or are referred later than boys with comparable disabilities. Thus, the gender imbalance is inequitable not because more boys are served per se; rather, it is inequitable because girls who otherwise qualify for, or would benefit from, special education services do not receive them (Wehmeyer & Schwartz, 2001).

A number of explanations, many complementary, have been put forth to explain this trend. Some common theories include the role of referral bias and subjective opinion in special education referrals; gender bias inherent in diagnostic tests and criteria; teacher bias in behavioral and academic expectations of boys vs. girls; the generally more active and disruptive behavior of male as compared to female students; and the impact of severity of disability on identification and referral. Most likely a combination of these factors contributes to female under-representation in special education (Arms et al., 2008).

### **Referral Bias: The Role of Subjective Opinion in Special Education Referrals**

One explanation for the gender imbalance focuses on the role of referral bias, defined as referral based on subjective personal and professional opinions rather than objective criteria (Wehmeyer & Schwartz, 2001). Common biases may include a teacher's tolerance level for certain types of behavior as well as personal biases based on gender, race, or ethnicity (Wehmeyer & Schwartz, 2001).

Population-based studies have often found greater gender balance than is reflected in school special education programs. For example, Learning Disabilities (LD) account for about 42% of all special education

eligibility, and research indicates that an equal proportion of boys and girls experience the reading difficulties that commonly characterize LD. However, two-thirds of all students identified with LD are male (Cortiella & Horowitz, 2014). Similarly, research indicates that an equal number of boys and girls have dyslexia, but schools identify boys at a rate of three- or four-to-one (Wehmeyer & Schwartz, 2001). Finally, although a gender gap of three-to-one is noted in population studies of Attention Deficit Hyperactivity Disorder (ADHD), this gap grows to between five-to-one and nine-to-one in clinical samples (Bruchmüller, Margraf & Schneider, 2012).

In all of these disability categories, referral and diagnostic bias is noted as a root cause of the shortfall between gender ratios in the general population and those found in special education and clinical programs (Cortiella & Horowitz, 2014; Wehmeyer & Schwartz, 2001; Bruchmüller et al., 2012). In the case of ADHD, for which clear diagnostic criteria are established in the Diagnostic and Statistical Manual of Mental Disorders, several studies have shown that clinicians often make diagnoses based not on the standard criteria but instead on their own heuristic and biased judgment (Bruchmüller et al., 2012). These personal biases include an image of the “typical” child with ADHD, which often reflects the hyperactivity seen in boys with ADHD rather than the inattention noted in girls with ADHD (this is discussed further in the “Role of Behavior” section below). When students are identified based on subjective opinions rather than more objective criteria, such a process often favors those who reflect the biases of those making the referrals and those making the diagnoses (Bruchmüller et al., 2012).

### **The Role of Gender-Biased Expectations in Special Education Referrals**

Closely related to the role of behavior in special education referral and identification is the impact of gender-biased behavioral and academic expectations. Sadker and Sadker (1994) noted that, while boys are praised for risk-taking and intellectual pursuits, girls are praised for behaving appropriately and being submissive to authority (as cited in Arms et al., 2008). Classroom success is often defined for girls as “being good.” In other words, girls are socialized to please, and they often fear bringing undue attention to their needs (Arms et al., 2008). In fact, Jans

and Stoddard (1999) theorized that girls work hard to mask their disabilities, and can often deal with their disabilities more independently than boys due to faster maturation (as cited in Arms et al., 2008).

Generally speaking, boys are held to higher academic standards and higher societal expectations, while girls are held to lower achievement standards (Wehmeyer & Schwartz, 2001). In a 1999 study, Froschl, Rubin, and Sprung asserted that “boys are more likely to be classified as Mentally Retarded (MR), Learning Disabled (LD) and Emotionally Disabled (ED) because society’s standards for achievement are higher for males than for females; thus traits similar to those assigned to children with LD or MR are considered ‘healthy’ for females” (as cited in Arms et al., 2008).

The 1992 American Association of University Women (AAUW) Report provides further examples of gender bias in the classroom that may impact special education identification. These include teachers’ tendency of “calling on boys more often than girls..., evaluating boys’ papers for creativity and girls’ for neatness, and giving boys the time and help to solve problems on their own, but ‘helping’ girls along by simply telling them the right answers” (as cited in Wehmeyer & Schwartz, 2001).

### **The Role of Behavior in Special Education Referrals**

In addition to referral bias and biased teacher expectations, another explanation for the gender imbalance focuses on the role of behavior in special education referral and identification. Arms et al. (2008) note that “teachers are the gatekeepers for entrance into special education programmes, and the primary reason for referral is student disruption of the classroom.” Thus, behavioral considerations, rather than specific academic or learning concerns, are the priority in special education referrals (Arms et al., 2008). This prioritization of behavior over academic concerns has led to a de facto prioritization of boys over girls, as boys generally display more disruptive behaviors than girls (Wehmeyer & Schwartz, 2001; Arms et al., 2008; Szalavitz, 2016).

Sadker and Sadker set the framework for this discussion in 1994, positing that girls are marginalized and overshadowed by the more assertive and disruptive behavior of their male classmates (as cited in Arms et al., 2008). Because boys generally act out more, frequently get out of their seats, and often disturb the classroom environment, they are

more likely to attract the attention of their teacher and are more likely to be referred for special education. For a girl to be referred, she usually must exhibit disruptive behaviors on par with boys. Due to this focus on behavior, underperforming students without overt behavioral problems are often low priorities for special education referrals, and the evidence suggests this impacts girls more heavily than boys (Arms et al., 2008). Overtness of behavior is key to referral and identification; girls often have internalized behaviors, such as depression and learned helplessness, that are not particularly disruptive and therefore do not attract the same attention from teachers as the more disruptive externalized behaviors of boys (Wehmeyer & Schwartz, 2001).

Research into Attention Deficit Hyperactivity Disorder (ADHD) has shed much light on this phenomenon. Studies suggest that ADHD expresses itself differently in boys and girls; while boys with ADHD tend toward hyperactivity and aggression, girls with ADHD tend toward inattentiveness (Bruchmüller et al., 2012). Inattention is generally less likely to be disruptive than hyperactivity and aggression, leading to less frequent diagnoses and treatment of ADHD in girls (Bruchmüller et al., 2012). Furthermore, because more boys are identified as having ADHD than girls, co-occurring disabilities such as reading disorders are more likely to be identified in boys than in girls (Wehmeyer & Schwartz, 2001).

### **The Role of Gender-Biased Studies, Criteria, and Testing in Special Education Referrals**

An additional bias discussed in the literature is the fact that many disabilities were first identified and studied in boys, and diagnostic tests and criteria often reflect how these disabilities present themselves in boys without always giving as complete a picture of how girls are affected. This is important because many disabilities present themselves differently in girls (Arms et al., 2008). Girls with autism, for example, tend to have fewer or less obvious “restricted interests” or fixations than their male counterparts, but these interests are at the core of diagnostic criteria for autism, especially at the milder end of the spectrum (Szalavitz, 2016). In addition, the literature and tests abound with examples involving stereotypically “male” interests, including train timetables and numbers (Szalavitz, 2016). Furthermore, issues inherent to the

testing process may delay diagnostic timing for females on the autism spectrum (Beeger et al., 2013).

Current research also indicates that the disinterest in, and disengagement from, social interaction that is associated with autism is true only of boys with autism (Mandavilli, 2015). Ongoing research in brain imaging conducted by Kevin Pelphrey indicates strong social brain function in girls with autism, which is counter to the prevailing image of autism as reflected in diagnostic criteria and tests (as cited in Mandavilli, 2015). The most significant preliminary finding is that girls with autism may be closer in social functions to typically-developing boys than to either boys with autism or typically-developing girls (Szalavitz, 2016). Stated otherwise, “if typical girls have the most active social brains and boys with autism the least active, typical boys would tie with girls who have autism somewhere in the middle” (Mandavilli, 2015).

### **Gender Imbalance as a Function of Severity of Disability**

Finally, a common theme across disability categories is that the average girl with a given diagnosis has more severe disabilities than the average boy with the same diagnosis (Arms et al., 2008; Mandavilli, 2015). In other words, girls receiving special education services are more likely to fall on the severe or lower-functioning end of the disability spectrum (Arms et al., 2008). They generally have lower IQ scores at the time of referral, and are more likely to be placed in self-contained classrooms than their male counterparts (Wehmeyer & Schwartz, 2001; Szalavitz, 2016).

Girls with milder disabilities are often identified later than boys with similar disabilities, and generally only if they exhibit disruptive or inappropriate classroom behavior (Arms et al., 2008). For example, girls with mild autism are diagnosed on average two years later than boys, and it is not uncommon for girls to be misdiagnosed and/or identified with another disorder prior to being diagnosed with autism (Mandavilli, 2015).

Current studies suggest that there are many girls on the higher-functioning end of many disabilities, such as autism, that go unidentified. A 2012 study by Francesca Happé, for example, found that when girls and boys displayed similar autism-spectrum traits, girls had to either exhibit more behavioral problems or have significant intellectual disability, or both, in order to be diagnosed (as cited in Szalavitz, 2016). As

a result, the male-to-female ratio at the high-IQ end of the autism spectrum may be as high as ten-to-one, as compared to the overall average of four-to-one (Mandavilli, 2015).

The prevailing explanation for these trends is that students with significant disabilities are more easily identified, often at birth or early in life, and frequently experience comorbidity of disabilities (Wehmeyer & Schwartz, 2001). Referral and diagnosis of these more severe disabilities is less reliant on subjective opinion and personal bias, and less gender imbalance is therefore noted at the severe end of the disability spectrum (Wehmeyer & Schwartz, 2001; Arms et al., 2008).

### Conclusion and Future Study

This paper discussed some of the common theories that, either individually or together, account for the gender imbalance in special education referrals and identification. These include referral bias, gender bias in diagnostic tests and criteria, biased behavioral and academic expectations, behavioral differences between boys and girls, and severity of disability. Future research in this area may focus further on the intersectionality of gender and disability, as well as intersection with race, ethnicity, poverty, and other factors (Arms et al., 2008). In addition, research may be conducted in brain imaging and behavioral sciences to further explore the different ways in which disabilities manifest themselves by gender. Finally, research may look into how public policy can ameliorate the negative outcomes of female underrepresentation, which include school dropout, teenage pregnancy, underemployment, and lifelong poverty (Arms et al., 2008).

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