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Examining Teachers' Referral and Placement Decisions of Hispanic Children for Gifted and
Talented Programs

A dissertation
presented to
the faculty of the Department of Early Childhood Education
East Tennessee State University

In partial fulfillment
of the requirements for the degree
Doctor of Philosophy in Early Childhood Education

by
Guillermo Ibarra Mendoza
May 2023

Dr. L. Kathryn Sharp, Chair
Dr. Ruth Facun-Granadozo
Dr. Amy Malkus

Keywords: gifted, underrepresentation, Hispanic, ELL

ABSTRACT

Examining Teachers' Referral and Placement Decisions of Hispanic Children for Gifted and Talented Programs

by

Guillermo Ibarra Mendoza

This quantitative survey design study examined whether children's ethnicity makes a difference in teachers' referral and placement decisions in gifted and talented (G/T) programs. A total of 524 teachers from all over the United States who have taught or currently teach pre-kindergarten through 5th grade participated. The participants were randomly given one of six vignettes adapted from a previous similar study (Elhoweris et al., 2005). Participants answered whether the child described should be referred and placed into gifted and talented programs. All six vignettes described gifted and talented characteristics; the only differences were the children's ethnicity and socioeconomic status. Data was collected via an online survey powered by Qualtrics® XM distributed via social media sites. A nonparametric test was conducted. Results showed no significant difference in preK-5th grade teachers' referral and placement decisions for G/T educational programs based on children's ethnicity. Kruskal-Wallis H test and Mann-Whitney *U* tests were computed among the dependent variables and teachers' school SES, Hispanic/Latino ethnicity, specialization, years of experience, and highest level of education. Teachers' level of education, years of experience, and their schools' SES were found to be significant. Findings are discussed in terms of limitations, future research, and application to the gifted and talented field.

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DEDICATION

This work is dedicated to my wife, Estrella, and our beautiful children Gabriel and Luna.

ACKNOWLEDGEMENTS

First, I would like to thank my lord and savior Jesus Christ, for giving me the strength and courage I needed throughout this process. Throughout this journey, many personal and global pandemics happened, but I can do all things through Christ who strengthens me. It was only through my faith and mercy of the Lord that I am here today.

Second, I want to recognize my family, who have supported me since the beginning of my academic journey. I would not have gotten as far as I have without the sacrifice, love, and support of my wife Estrella, and our two beautiful children: Gabriel and Luna Bella. To my wonderful parents, siblings, and extended family, thank you. I know your prayers have helped me over many years.

Third, I would like to thank my chair and friend, Dr. L. Kathryn Sharp. She is the greatest mentor I could have ever asked for. She has been a steady rock for me throughout many rough seasons. She has helped strengthen my academic abilities and has inspired me to become the best educator I can possibly be. Words could never be enough to thank her for her guidance and mentorship, so we asked her to become my children's godmother. I would also like to thank Dr. Granadozo and Dr. Malkus for their advice, counsel, and support.

Last, I would like to thank my First Baptist Church family and all my friends who have at one point in time encouraged me or have prayed over me. It really does take a village. I have seen the love of many throughout this process. I cannot end without thanking my committee members for being so patient with me. I know I am a better researcher because of their guidance and commitment in making this study possible.

And we know that all things work together for good to them that love God. -Romans 8:28

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Chapter 1. Introduction

“The main obstacle to the recruitment and retention of culturally and linguistically diverse students in gifted education appears to be a deficit orientation that persists in society and seeps into its educational institutions and programs” (Ford et al., 2008, p. 292).

Background of the Study

Education and identification for English language learners (ELLs) who are also gifted/talented (G/T) has been a growing concern in public school systems in the United States. The number of minorities who are ELL students has been increasing dramatically in the U.S., especially within recent years. Even though the number of ELL students are steadily increasing, the underrepresentation of G/T students in G/T programs remains the same (Ford et al., 2014).

The term ELL will be used because of its broad meaning to students trying to learn the English language. However, the use of the term culturally and linguistically diverse (CLD) will be used when using research that use that particular term in their work (Castellano, 2011; Castellano & Diaz, 2002). Another term that is sometimes used for ELLs is dual language learners (DLLs). A label that the federal government uses to describe ELLs is limited English proficient (LEP). In this study, ELLs will be used predominantly to describe the multiple labels stated above (see terminology section below).

Underrepresentation of G/T ELLs and other minority groups continues to be a considerable challenge in the public educational school system (Carman, 2011; Ford et al., 2008; U.S. Department of Education Office for Civil Rights, 2016; Yoon & Gentry, 2009). Data from Education Trust (2003) reported that Latino students were underrepresented in 16 states in G/T programs. Also, Ford (2014) said Black and Hispanic students were underrepresented in G/T programs across the U.S. by 50% and 36%. Mathematically, these percentage levels turn into an

average of 1½ million underserved students (Ford, 2010). Many schools may not be adequately prepared to deal with the needs of ELLs. Research by Harris et al. (2009) found that schools had an overrepresentation of ELLs in special education programs and an underrepresentation in talented and G/T programs.

Laws have been enacted, like the *Jacob K. Javits Gifted and Talented Students Act of 1988*, which provide financial support to state and local school systems and give priority to minority groups. Ethnic backgrounds, including limited English proficiency (LEP) and other at-risk minority students, are still overlooked. Even though students may meet G/T criteria, they may not be nominated by teachers.

In the last several years, there has been a general belief that teachers are not adequately identifying gifted and talented students (Powell & Siegle, 2000; Siegle et al., 2016). Ford and Whiting (2008) mention that a lack of teacher referrals significantly contributes to ELL students' under-representation in G/T programs. Hadaway and Marek-Schroer (1992) stated that “teachers might assume a student is not gifted based on a child’s language proficiency in their first and second language, their use of ‘nonstandard’ English, accent, differing values, aspirations, and levels of motivation” (p. 74). Most U.S. teachers are White, with almost 80% to 90% coming from middle class socioeconomic statuses (SES). However, student populations are very diverse in classrooms today. In fact, by the year 2040, children from diverse backgrounds (race, ethnicity, SES, etc.) are expected to be the majority in classrooms (Cushner et al., 2003). This mismatch between teachers and diverse students presents many communication challenges which may cause teachers to have a biased opinion and deficit mentalities for CDL students.

Many teachers agree that G/T children can be found in all socioeconomic status (SES) levels and all racial/ethnic groups (Clark, 1983; Kitano & Kirby, 1986); in reality, there is a small percentage of children from diverse backgrounds in G/T programs.

Another area of potential growth in the G/T field is students with learning disabilities and other learning challenges. Also among the underrepresentation students are students with physical or learning disabilities and students who come from low SES backgrounds (Burney & Beilke, 2008; Cotabish et al., 2007; Stormont et al., 2001). Many of the reasons why students who are CLD or have a physical disability do not get nominated or placed in G/T programs are because they do not “fit” the model of what a G/T student looks like from school educators. They face the challenge of the teachers’ personal bias of a “typical” G/T student model.

Statement of the Problem

Increasing ELLs Population

The National Center for Educational Statistics (2022) reported that ELLs are the fastest-growing population of learners in the United States. There is a demographic trend of substantial increases in ELL children; about 23% of 3- and 4-year-olds are DLLs (e.g., Latinx) (Nores et al., 2018). Data from The National Center for Educational Statistics (2022) shows a dramatic increase in the Latino student population. The percentage of public-school students in the United States who were English learners (ELLs) was higher in fall 2019 (10.4%, or 5.1 million students) than in fall 2010 (9.2%, or 4.5 million students). In fall 2019, the percentage of public-school students who were ELLs ranged from 0.8 % in West Virginia to 19.6% in Texas (National Center for Educational Statistics, 2022). Additionally, about 3.9 million Hispanic ELLs in public schools represented over three-quarters (76.8 percent) of ELLs enrollment overall. Comprised of 22 Hispanic cultural backgrounds, with the rising numbers continuing, the challenges in

identifying G/T Hispanic learners' needs also rise. Overall, there is a greater number of public-school students in lower grades (pre-K) than those in upper grades (middle and high school) were ELL students (National Center for Education Statistics, 2022).

Increase in Tennessee

According to TN.gov (2020), in Tennessee (TN), ELL populations increased significantly, with 45% growth from 2011 to 2017. In the 2016-2017 year, 132 TN districts and 1,451 schools served ELLs. Home languages spoken by TN ELLs in the 2015-2016 school year are as follows: 30,879 (76%) speak Spanish/Castilian, 2,782 (6.8%) speak Arabic, 494 (1.3%) speak Kurdish, 483 (1.2%), speak Somali, and 446 (1.1%) speak Vietnamese (Department of Education, 2017). This study was originally going to include east Tennessee early childhood teachers only, but due to the COVID-19 pandemic, adaptations had to be made, so participants from across United States were included (see Chapter 3 for more details).

An Education Trust (2020) report found that Black and Latino students (K-12th) are successful in advanced courses when given the opportunity. However, they are still not fairly represented in advanced classes. Lastly, inequities at a national level are primarily due to two reasons: 1) schools that tend to serve more Black and Hispanic students are not enrolling as many students in advanced classes as schools that serve fewer Black and Latino students; and 2) schools where there is lots of diversity are denying Black and Hispanic students' access to those classes, with Tennessee being one of them.

Challenges for G/T Placements

Teacher Bias and Implicit Bias

Recommendations, nominations, or ratings by the teacher to determine G/T educational opportunities for students has been a controversial topic for more than 200 years (Hunsaker et

al., 1997). In most cases, teacher nominations act in a “gatekeeper” fashion, as the first step on G/T educational programs (Ackerman, 1997; McBee, 2006). However, teachers’ beliefs, biases, attitudes, and expectations can determine whether students are in or out of G/T programs (Siegle, 2001). Relying so much on teachers to start a referral gives teachers significant control over ELLs’ G/T referral or placement decisions. Inevitably students who are not referred or placed in G/T programs will not have the chance to be selected for G/T education (Bernal, 2009; Milner & Ford, 2007). Scholars like Harris et al. (2009) and Olthouse (2013) suggest that many ELLs may not be nominated or qualify for G/T programs due to the language barrier or their learning in a way that is not valued by traditional teachers. A study by Geake & Gross (2008) explored teacher beliefs, found that educators tend to have negative beliefs towards G/T students and students who are from different racial/ethnic backgrounds. Teachers are often unaware of their bias and how it influences their decision on nomination and placement; this phenomenon is called implicit bias (Staats, 2016). A study by Kumar et al., (2015) found that teachers preferred White students over Black students for gifted referral and placement in G/T.

Teacher Training

Understandably, educators may find it challenging to identify G/T CLD students since they may not have proper training. Esquierdo et al. (2012) noted the need for teacher training in student abilities (for example, just because ELL students have not mastered the English language does not mean they are not G/T) as they contrast from the “typical” G/T student checklists, as well as the way educators view identification measures that analyze Hispanic G/T through different perspectives (Esquierdo et al., 2012). Allen (2017) stated that, “teachers need professional development to raise awareness about the issue of underrepresentation of culturally and linguistically diverse students in gifted programming” (p. 1). With more attention to teacher

training, teacher bias is possible to reduce over time. Ford et al. (2008) argue that with so very little to no opportunities for professional training in G/T education and identification, we should expect educators to not identify, refer, and teach G/T students effectively. This challenge then becomes more difficult by the lack of teacher training in multicultural education or cultural diversity. According to Ford et al. (2008), Not a lot of teachers receive professional and meaningful experiences in multicultural/multiracial educational settings, programs, and instruction, internships, and practicums in urban/rural environments. Research also suggests that targeted professional development can increase the understanding, awareness, and delivery of services to CLD gifted learners (Coronado & Lewis, 2017). One way that the school system has used to address this bias is by assessing students, however that has many challenges too.

Assessment Tools for Referral/Placement of G/T Students

The Cognitive Abilities Test (CogAT), Raven's Progressive Matrices (Raven), and the Naglieri Nonverbal Ability Test (NNAT) are specific assessment tools that may be used to identify and place CLD students in G/T programs. Some tests that are used for identification/placement, like the IQ test, are sometimes viewed as biased towards CLD students and not culturally sensitive. Standardized achievement tests and nonverbal assessments have often been tested to see if they are fair assessments to verify all students' intellectual abilities (Coronado & Lewis, 2017). The CogAT, Raven, and NNAT are all nonverbal assessments that educators use to see students' cognitive ability and have been used frequently for CLD/ELL student populations. Lohman et al. (2008) assessed the validity of the CogAT, Raven, and NNAT for identifying G/T ELLs and other CLD students. The study determined that they were not the best assessments of academic achievement for students. The study found that the Raven and NNAT were significantly overestimating the number of high-scoring students. That is why

Harris et al. (2007) recommended using multiple criteria besides using nonverbal assessments of ability to assess students in their primary home language, observe their problem-solving skills, and review their schoolwork portfolios, as well as including teacher observations, behavioral checklists, seeking parental involvement, or other forms that provide other enrichment projects that recognized giftedness (Zhbanova et al., 2015). Another challenge to assessment tools is the language barriers and the cultural difference in communications. For example, CLD may possess a dialect or accent, which may cause them to pronounce words a little differently or may transfer some grammatical rules or phonemic sounds not typical in the English language.

Underrepresentation Theories

Deficit Thinking

One factor which may affect educators' nomination and academic potential is the belief that ELLs have a deficit and are not on par with their native English-speaking peers. Ford and Grantham (2003) proposed that teachers have low expectations for CLD/ELL students, which in turn lead to negative stereotypes and misconstrued beliefs about CLDs/ELLs. The same study suggests that educators may focus more on ELLs' deficits (e.g., not speaking English fluently) than the unique qualities or strengths (e.g., learning two or more languages simultaneously). Educators having a deficit mentality about ELLs could lead to discrimination that would lead to resources, like extra government funding, not being allocated to ELL children who may need them. According to Ford & Grantham, 2003, a deficit view of CLDs/ELL students contributes heavily to this issue. Many current teachers are not professionally prepared to teach in the schools' ever-changing demography and focus more on finding solutions rather than exploring and enhancing the positives (Ford & Grantham, 2003). Another contributor to deficit thinking could be that school systems place labels on children. In addition to the "Limited English

Proficient (LEP)” label officially used by the U.S. Department of Education, frequently, schools categorize students and give them labels, such as “ELL,” “E.L.,” or “CLD learner,” These labels sometimes unintentionally cause deficit thinking which overshadow the unique personal backgrounds of students’ personalities and only focus on speaking or not speaking English (Lee & Anderson, 2009). Valencia (1997) stated, “. . .the deficit thinking paradigm posits that students who fail in school do so because of alleged internal deficiencies, such as cognitive or motivational limitations, or shortcomings socially linked to the youngster—such as familial deficits and dysfunctions” (p. xi). Based on the relationship between implicit bias and reported behaviors towards ELLs, one can speculate that the two variables' projection can only be negative. If teacher expectations are lower for CLD/ELL students and their attitudes are harmful, theoretically, one can expect that situations like this can persist over time. Menchaca (1997) implies that deficit thinking contributed to past and current views about race, culture, achievement, and intelligence. When CLD students who do not fit that picture enter the classroom, educators might have lower expectations of those students’ ability to achieve. This phenomenon is not just something that happens in schools; it happens in multiple fields, as previously mentioned.

The deficit theory can be a huge risk in education because a teacher can have tremendous expectations that could negatively influence how CLD students perform. Based on the literature stated previously, if a teacher believes that students that are from a high SES family and can do well in G/T programs, then the teacher most likely teach in a manner that only the students from high SES can achieve.

With so many challenges that CLD students increasingly face in public schools, research should continue looking into why CLD students face such a steep challenge to get

nominated/referred to G/T programs. A small amount of research specifically looks at the Hispanic/Latinx community when referring to G/T opportunities in the U.S. The following study focuses on teachers' bias when referring to or placement in G/T children who are Hispanic and are ELLs. The following questions were closely aligned and extend the work of Elhoweris et al. (2005) with his research on African American students.

Research Questions

1. Is there a difference in preK-5th grade teachers' referral decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.)?
2. Is there a difference in preK-5th grade teachers' placement decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.)?

Null Hypotheses

- 1 There is no difference in preK-5th grade teachers' referral decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).
- 2 There is no difference in preK-5th grade teachers' placement decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).

Significance of the Study

Need for the Study

There is limited research to try to understand all the conditions that effect the teacher's decision-making in regard to educational and behavioral placements in G/T programs (Frey,

2002; Glassberg, 1994), particularly in Hispanic ELL students. The National Association for Gifted Children (NAGC; 2011) recognizes, in their website, the importance of identifying and serving ELLs/CLD gifted students and issued the following position statement:

“As the nation becomes more and more diverse, gifted education programs should reflect changing U.S. demographics. Equitably identified gifted students represent cultural and linguistic diversity as well as a wide range of socioeconomic groups and geographic areas, yet these populations are too often overlooked. Reversing the underrepresentation of culturally and linguistically diverse students (CLD) in gifted education will require that educators have a thorough understanding of the reasons that CLD students have traditionally been excluded from participation in gifted programs” (p. 1).

Castellano (1998) and the Iowa Department of Education (2008), state that the process for identifying G/T students should begin as soon as possible, even if the student is just beginning to learn the English language, as to not hinder the growth in other academic areas. Unless districts decide to screen for G/T students’ potential in all students to reduce bias (Castellano, 1998), the initial step towards identification may be the teacher or in some instances, the parents’ nomination. Vast amounts of studies and research have focused on the role of the teacher and how they identify and place G/T children from CLD backgrounds, very little has been investigated in the effects of the child’s cultural background or ethnicity on teachers’ referral and placement decisions in G/T programs other than Elhoweris, (2008). A small number of studies have focused on teacher referral and identification of G/T students who are also CLD (Ford et al., 2008). This study addresses a significant gap in the literature by investigating students’ ethnicity and if it affects teachers’ referral and placement ratings for G/T programs.

Benefits for Early Identification and Placement

Early detection and assessment of G/T children are essential in helping students learn during their first years in school and preventing boredom and negative attitudes and behaviors toward school and teachers. Identification of gifted children from low-income, racially, linguistically, and culturally different backgrounds are particularly overlooked. (Wright & Ford, 2017). According to Wright and Ford's (2017) research keeping untapped potential in mind, teachers in the pre-K and primary schools need to know G/T children's characteristics and traits. The NAGC (2011) position statements on giftedness in early childhood mentions that G/T education focuses on recognizing, developing, and nurturing the strengths and talents of all children aged 3 through 8. Educators in early childhood will be able to set up environments to help support these learners. Research suggests that an interactive environment in early childhood programs encourages cognitive growth and establishes a learning pattern that children can build on over their lifetime (Clark, 2002; Smutny & vonFremd, 2004). Johnsen (2009) mentioned that identifying students' gifts early is crucial for children from low SES backgrounds. When they are given challenging learning activities that require them to use their skills and talents, the children will, later on, perform at higher levels than children who are provided a skill-based curriculum that focuses on their weaknesses.

Definition of Terms

- English Language Learner (ELL): The term culturally and linguistically diverse (CLD) students will also be used to represent those students commonly referred to as ELLs or English learners (E.L.s; Lee & Anderson, 2009). The term ELL will be used because of its broad meaning to students trying to learn the English language. However, the term CLD will be used when other studies that used that particular term (Castellano & Diaz, 2002). Another

term that is sometimes used for ELLs is dual language learners (DLLs). A label that the federal government uses to describe ELLs is limited English proficient (LEP). In this study, ELLs will be used predominantly to describe the multiple labels stated above. Other modern terms may apply, i.e., Latinx. The main point to the terminology is not necessarily focused on the language(s) but rather the ethnicity.

- Gifted and Talented: There is no federal definition for G/T, so each state can define G/T. Many states focus on the meaning of giftedness related to academic abilities only (Coronado & Lewis, 2017). According to Siegle et al. (2016) “Characteristics of gifted ELLs are often different from the characteristics of students who were born in U.S. culture. Identification requires a holistic approach, as they may not perform English language tests yet but may have the potential for incredible gifts” (p. 106).
- Implicit Bias: Staats et al. (2015) described it as “attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner” (p. 29). Such bias can unintentionally lead to unfair or unjust treatment of people. In this study, the focus is on implicit bias towards Hispanic/Latinx ELLs.
- Stereotypes: Stereotyping is defined, for this study, as the unconscious or conscious thought of accurate or inaccurate knowledge of a group in judging a member of a particular group(s). (Banaji & Greenwald, 2013).
- Referral to G/T Programs: A decision by the teacher to examine or “screen” closer to assess whether a student demonstrates skills or abilities of being gifted.
- Placement to G/T Programs: A decision by the teacher to finalize the results of the screening or investigation to deem a child eligible/ineligible for gifted education.

Chapter 2. Literature Review

“It is long overdue that we disrupt inequity in gifted education to ensure no child’s intellectual, academic, and artistic promise and potential go untapped” (Wright & Ford, 2017, p. 115).

Underrepresentation

Ford (1993) and Ford and Harris (1991) have pointed out that less than 2% of more than 4,000 articles written about gifted and talented students since 1924 were about students from different culturally and linguistically diverse (CLD) backgrounds (e.g., ELLs). However, there has been a growing body of research that focuses on the underrepresentation of English language learners (ELLs) in gifted and talented (G/T) programs (Ford et al., 2008; Yoon & Gentry, 2009). In a sampling of education reports from 30 states, African American students were underrepresented in G/T programs in 22 states. Latino Hispanic students were underrepresented in 16 states, and Native Americans were underrepresented in 3 states (Education Trust, 2003). Coronado and Lewis (2017) examined the 2015-2016 student data in Texas and found a disproportional representation of ELLs in G/T programs across the state. The same researchers also found that “...limited English proficient (LEP), students who demonstrate advanced abilities are persistently underrepresented in advanced classes and programs for students identified as gifted” (Coronado & Lewis, 2017, p. 1). McBee (2006) reported that teacher referrals were more accurate for White and Asian students than for African American and Hispanic/Latino students. McBee (2006) implies that his results found inequalities in nomination, rather than assessment, may be the primary source of the underrepresentation of minority students in G/T programs.

Assessments

Lewis (2001) implies that a referral for gifted programs requires that an educator observe a student's strengths. Those who are referred for G/T programs face the challenge of assessments that rely on knowing the English language. Researchers have tested and analyzed nonverbal assessments don't require a lot of verbal or written instructions and tasks that do not involve reading, writing, or speaking of English words (Shaunessy et al., 2004). Traditional screening tools and instruments often fail to identify G/T students from CLD backgrounds for G/T education, and many G/T programs depend on a single, English test (Gentry et al., 2008). Gentry et al. (2008) analyzed studies that used multiple assessments and other options, including active assessments, portfolios, teacher and peer nomination, and tryout procedures for the whole class. Johnsen (2009) also would suggest that no single test can capture a G/T student's dynamic abilities.

Other scholars believe that reliance on nonverbal assessments may not be necessary (Matthews & Kirsch, 2011). Others like Lohman (2005) warn that relying too much on nonverbal assessments could prevent G/T students of all ethnicities because the tasks would still include linguistic and cultural symbols. Regardless of an assessment, which is still clearly crucial to placement, a teachers' judgment is where it all begins. As mentioned in Chapter 1, teachers are the "gatekeepers" to whether a student gets nominated or placed in G/T programs.

Ethnicity and G/T Nomination

An impediment to good teacher judgment about G/T nominations for CLD students is not having exposure to culturally different students, which may lead to negative teacher attitudes toward minority children (Elhoweris et al., 2005). The main challenge with this situation is that teachers tend to evaluate African American, Hispanic/Latino, and low SES students' academic

performance and behavior in a biased manner (Frey, 2002; Haller & Davis, 1980; Prieto & Zucker, 1981; Zucker & Prieto, 1977). Woods and Achey's (1990) study implied that teachers may have negative attitudes or expectations of children from different culturally and linguistically diverse backgrounds and are often overlooked for the G/T program referral. Other studies have suggested that teachers have negative stereotypes and perceptions of the abilities of children who are CLD (Delpit, 1995; Grossman, 1995; Jensen & Rosenfeld, 1974; Ogbu, 1992). Another challenge is because teachers hold deficit views on students from diverse backgrounds, minority students (e.g., ELLs) are most likely placed in special education classes than G/T programs. A study by Zucker and Prieto (1977) found that where teachers were given the same information about students except for their ethnic backgrounds, results showed that teachers view programs serving students with “mental retardation” as a better placement option for Mexican American children than for European American children. In a different study by Prieto and Zucker (1981), they found that educators viewed Mexican American children's placement into programs serving students with emotional disorders as more appropriate than for European American children. The only minority group that seems not to be influenced by negative stereotypes for G/T programs is students from Asian backgrounds.

McBee (2006) examined a dataset from the state of Georgia containing demographic information, G/T nomination status, and G/T identification status for 705,074 elementary school students. The results indicated that automatic (referrals that occur automatically when a student scores in the 90th percentile or higher on a standardized test) and teacher referrals were much more valuable than other referral sources (e.g., parent, self, and other referrals). Data showed that Asian and White students were much more likely to be nominated than Black or Hispanic students. In addition, students receiving free or reduced lunches were much less likely to be

nominated than their counterparts. The results suggest that disparities in nomination, rather than assessment, may be the primary source of the underrepresentation of minority and low-SES students in gifted programs.

Plata and Masten (1998) conducted a study with 115 Hispanic and 119 non-Hispanic fifth grade students and 12 teachers in a public school district in the Southwest. The study was planned to determine teachers' nomination rates of Hispanic and non-Hispanic students to G/T programs and to see if there were any differences in teachers' ratings using the Scales for Rating Behavior Characteristics of Superior Students (SRBCSS) across ethnicity and gender groups for those who were nominated and those who were not. The results revealed that ethnicity was a factor of influence in teachers' nomination rate and that these differences were more distinct between Hispanic and non-Hispanic females. They also found that teachers' ratings on the SRBCSS for nominated Hispanic and non-Hispanic students were similar, but that ratings for non-nominated students differed significantly by ethnic group.

Socioeconomic Status (SES)

There is a vast amount of research that suggests that educators hold different attitudes toward children due to children's SES (Frey, 2002; Guskin et al., 1992; Mutua, 2001; Siegle et al., 2015). Boyce (1997) found that teachers who taught in high SES schools had higher/greater expectations in academic achievement for their students than teachers who teach in low-SES schools. Mutua (2001) implied that social class may also lead to stereotyping, and several investigations have documented the negative stereotypes which portray low-SES students. Guskin et al. (1992) found that students from low SES incomes were deemed less confident by teachers who were from higher-SES incomes. Based on the literature, one can conclude that there is a difficult challenge for CLD G/T students who come from a low SES. To add to the literature,

this study will look at student SES and students who come from diverse backgrounds, like race and ethnicity. McBee (2006) and Siegle et al. (2015) both report that students were less likely to be identified as G/T if they were Black or Latino students, if they received free/reduced lunch at school, or if they had ever been classified as ELLs. Siegle et al. (2015) suggested that the odds of being identified as G/T were 3.5 times higher for White students than for Black students who were not eligible for free/reduced lunch. They were also around 12 times higher for these White reference students than for Black students eligible for free/reduced-price lunch programs. This study seeks to answer the overall question of the relationship between SES and background characteristics regarding placement and referral decisions for G/T.

ELLs G/T Nomination and SES

There is sufficient evidence that supports that ELLs face challenges when being nominated for G/T programs. Frey (2002), Moon and Brighton (2008), and Rohrer (1995) imply that a student's SES has been shown to have significant effects on teachers' perceptions of their minority students and the placement decisions those teachers make for G/T nominations.

Moon and Brighton's (2008) study focused on the first phase of the National Research Center on Giftedness and Talented project, which used surveys for primary grade teachers ($N = 6,062$) to measure their beliefs and practices about G/T development in young students and how they responded to the vignettes describing four different types of students (traditional student, minority students, ELLs, and children with other exceptionalities). Results showed that elementary school teachers tend to hold more traditional views about G/T students and had difficulty seeing a G/T student who was a minority or a low-SES background. The same researchers also found that a third of the teachers believed that a student's SES was a predictor of students being G/T.

Rohrer (1995) conducted a study using a qualitative, multisite, single-case study design to analyze the conception of G/T held by four experienced teachers. Teacher interviews were triangulated by multiple sources. Results indicated that SES was a factor teacher in early grades perception of their G/T students. They also found that teachers were more likely to nominate a student for G/T services if they came from two-parent households, had educated parents, and shared other high-SES traits.

McKenzie (1986) examined surveys from 461 New Jersey school districts. The study sought to determine if G/T programs were more likely to serve wealthy, White students and those from high SES backgrounds than disadvantaged students, minorities and those from low SES backgrounds. The results found significant relationships between participation in G/T programs and SES. The study also found significant associations between G/T programs and race and SES factors.

Frey's (2002) explored the association of teachers' efficacy, child's SES, ethnicity, and G/T nomination recommendations in regard to the student with behavioral/emotional behaviors using vignettes that were exactly the same, except the only difference was the child's ethnicity and SES. Participants were special education educators ($N = 350$) who were randomly selected from 10 school districts from a city area. Results suggest that classroom behavior, external influences, and the child's SES were significant predictors of the teachers' G/T placement recommendations. It is apparent from the literature that SES is a significant factor that affects teachers' educational decision-making.

Gender

There is also research on how gender plays a role in whether educators perceive a person as appropriate or qualified for G/T program referral. Educators hold different attitudes toward

children based on their gender (Gagné, 1993). House (1979) found that stereotypes related to the gender of G/T students exist among educators specifically interested in G/T education. One study by Powell and Siegle (2000) found that when teachers were asked to nominate students for G/T programs based on hypothetical student profiles, teachers were more likely to select profiles when their behavior did not match expected gender stereotypes. For example, teachers were more likely to expect “high-achieving” students, regardless of gender, to be more masculine, and “low-achieving” students, regardless of gender, to be more feminine.

Teacher Experience

Rubenzler and Twaite (1979) conducted a study to provide recommendations for teacher preparation in G/T education to directors of in-service and university training programs. A total of 1,220 kindergarten through 12th educators responded using a Likert attitude scale regarding G/T identification, programming, behavioral characteristics, and teacher recommendations for G/T programs and teacher preparation. Significant differences in attitudes were related to number of years of teaching experience, grade level and gifted/talented in-service experience. Teachers with 6+ years of teaching experience were significantly more likely to identify a G/T student in their classroom than those with lower years of teaching experience. Also, teachers with at least one training period on G/T characteristics were also significantly more likely to identify G/T students than teachers with no training. Perhaps with more training and guidance from professional development, the numbers can reflect G/T programs accurately.

Neumeister et al. (2007) examined the views of G/T and identification procedures held by experienced teachers of G/T minority students of 27 fourth grade teachers. Results showed that more experienced teachers still had limited conceptions of G/T and were not aware of how

culture and environments could impact the development of G/T in minority and low SES students.

Teacher and CLD Student Intelligence

It is crucial to understand implicit bias and the potential negative impact it has on educators. Findings from research studies provided vital insight into how implicit biases and beliefs can influence teachers' classroom practices. Kumar et al. (2015) looked at how Teacher Implicit Association Test (IAT) performance demonstrated a significant preference for White over non-White adolescents overall. Another study by Cvencek et al (2015) reported students who participated in an IAT to test the strength of the association between the terms "Asian" and "Math." Their results indicated that the terms "Asian=Math" association correlated positively with explicit measures of stereotype awareness. Another study by Hannon (2014) found that Hispanic respondents with the lightest skin were several times more likely to be seen as high intelligence than their darker skin counterparts.

The Deficit Theory

Deficit Theory in Education

Eller (1989) used the term deficit theory in her study for use in an educational setting, which suggested that students from low SES backgrounds enter school without any linguistic support for the student's success. It also means that teachers should avoid labeling children as verbally inept when their language does not conform to the teachers' linguistic model. It is the automatic assumption that some students are more prone to academic success than others. Some teachers have in mind a picture of the perfect student.

Deficit Theory and CLD Students

Much of the research attributes the underrepresentation of ELLs in gifted programming to deficit mindsets from educators that affect referrals and nomination (Allen, 2017; Baldwin, 2005; Ford, 2013; Ford & Grantham, 2003; Ford et al., 2008; Frasier et al., 1995; Harris et al., 2009; Milner & Ford, 2007; Olthouse, 2013). It could be that educators may hold a deficit view of CLD children because they were never trained to handle the ever-changing demographics in public schools; therefore, they operate from a deficit mentality that focuses on deficits rather than exploring for strengths and enhancing their abilities (Baldwin, 2005; Ford & Grantham, 2003). Other studies also imply that many ELLs may not be referred to or qualify for G/T programs because of the language barrier and will not be able to communicate their learning in a way that some educators value (Harris et al., 2009; Olthouse, 2013).

The deficit theory by Ford and Grantham (2003) implied that educators and administrators have low expectations for minority students, which results from negative stereotypes about the students. Thus, a CLDs student may be missed in the G/T identification process because of a language barrier. Ford (2010) attributed this bias of CLD and SES diverse students in G/T programs to four categorical roadblocks. These are: lack of teacher referral, students' discrepancy performance on traditional intelligence tests, out-of-date policies and procedures for labeling and placement of G/T students and lastly, social-emotional concerns and eventual decisions of teachers of Black and Hispanic students and their primary caregivers about G/T education participation.

Valencia (1997) mentioned that the deficit-thinking mentality suggested that students who fail in school occurs because of deficiencies in cognitive and motivational limits, or deficiencies socially linked to the CLD children, such as "familial deficits and dysfunctions." Harry (2008)

suggests that deficit mentality is more than thoughts, attitudes, and values; deficit-based mentality is seen and heard in behaviors and actions, which affects how students from diverse backgrounds and languages get treated. Ford et al. (2008) mentioned how the influence of deficit thinking on G/T education and CLD underrepresentation should be clear when educators consider how the terms giftedness and intelligence are used interchangeably and how both are subjective to what society deems necessary and valuable. Ultimately deficit thinking/mentality obstructs educational changes and reform because teachers are not willing to take any responsibility for CLD students' low academic achievement (Berman & Chambliss, 2000; Garcia & Guerra, 2004).

Methodology for Study

The use of vignettes has become a popular method for analyzing implicit bias. Renowned researcher and professor Walter S. Gilliam used vignettes to help identify teachers' implicit bias. Gilliam et al. (2016) asked participants to read an identical vignette of a pre-K student with challenging behavior. The teachers were randomized to receive the vignette with the child's name that suggested either a Black male/female or a White male/female and were randomized to receive the vignette with or without background information on the child's family background. They found that when expecting challenging behaviors, teachers gazed longer at Black children, especially the Black boys. Another interesting find was that implicit biases may change depending on the teacher's race.

Frey (2002) also used this design, as mentioned before. The participants in the study also completed the Educational Placement Vignettes. After reading the descriptive case study of a fourth-grade boy identified as having behavioral or emotional disorders, special educators indicated the placement option they would recommend for the student. Vignettes were identical

except for variations regarding the child's SES and ethnicity. Results suggested that classroom management/discipline, external influences, and child SES are significant predictors of special education teachers' placement recommendations.

Researchers Goff et al. (2014) also used vignettes as instruments. The study used 132 undergraduate students who were given a vignette of a child with challenging behavior that was randomly assigned to a picture of an approximately 10-year-old child. They rated the Black child as significantly less innocent and more guilty. Other studies outside of education have also used this design, particularly in business, to see labor market discrimination among companies that utilize resumes (Bertrand & Mullainathan, 2004).

Elhoweris et al. (2005) examined the effect of students' ethnicity on teachers' educational decision making for G/T programs. Elementary school teachers ($N = 207$) from 16 elementary schools in a midwestern urban area participated. Participants were randomly assigned to one of three treatment conditions. Each teacher group was presented with a vignette describing a G/T child. A third of the group of teachers read a vignette describing a student with a White ethnicity, a third of the group read another vignette describing a student with an African American/Black ethnicity, and the third group of teachers were used as the control group and had no information about the student's ethnicity. After the groups read all the vignettes, the teachers were asked to respond to two questions (Likert scale). The results revealed that the students' ethnicities did make a difference in the teachers' referral decisions for G/T programs. The use of vignettes has helped examine attitudes, beliefs, or biases of educators; thus, the present study used the same method.

Conclusion

Academically G/T students require educational rigor more than what is currently offered in the school systems and districts so students can maximize their abilities and skills, so G/T students must get identified as soon as possible. The literature review provides valuable insights into the problem of teacher nomination/placement into G/T programs and teachers' personal deficit bias toward Hispanic (or other ethnicities) ELL students. It is also evidence to support the need for this research project. There is very little research on how a teachers' implicit bias affects (or not) Hispanic, ELL children (or CLD) from getting nominated or placed in G/T programs.

Chapter 3. Methodology

Design

The current study is a quantitative survey design, that used an online questionnaire via Qualtrics® XM, to measure teachers' referral and placements in gifted and talented (G/T) programs based on students' ethnicity. Qualtrics® is a simple web-based survey tool to create and conduct survey research, evaluations, and collect data. This research study used an already existing instrument by Elhoweris et al. (2005) with some modifications to analyze the two dependent variables: 1) teachers' referral and 2) placement decision into gifted and talented programs. The researcher sought permission from Elhoweris et al., (2005), to use and to modify the instrument for this study. Moreover, the researcher conducted power analysis, and it was concluded that a minimum of 350 participants were required for the study.

Research Questions

Below are the questions that guided the quantitative study:

1. Is there a difference in preK-5th grade teachers' referral decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).
2. Is there a difference in preK-5th grade teachers' placement decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).

Participants

A total of 524 survey responses were recorded and verified from all over the United States (US). For inclusion criteria, participants had to be 18 or older, had to be physically present in the US, and taught/teaching pre-K through 5th grade in the US. Teacher characteristics and

demographics were collected, including teachers' race, gender, age, educational level, and teaching experience. Table 1 below breaks down demographic characteristics.

To ensure validity of responses to the online survey, Qualtrics® XM used reCaptcha verifications and bot detection; both use Google's reCAPTCHA technology. The reCaptcha question requires the respondent to successfully interact with it and complete the proposed challenge in order to continue the survey. Bot detection uses reCAPTCHA V3 to flag responses that are likely to have been submitted by a bot.

Data Removal

A total of 560 survey responses via online questionnaire were initially recorded. Out of all the survey responses 36 were flagged as bots. After analyzing the data responses of the flagged surveys, it was determined that the data were actual bots, based on timing of responses (duration of reading and answering the survey), and on a reCAPTCHA score below a 0.5 of a 0-to-1 scale. The total number of participants/respondents used in the study was 524 after removing bots, and the survey was given a 94% response quality score from Qualtrics® XM. Response quality from Qualtrics® XM is a lot like an expert review, but instead of assessing the quality of the survey, it shows the quality of the data collected. It also helps filter data, making it easier to clean data that has a high probability of being a bot response.

Sampling

With respect to federal and state social distancing requirements due to the COVID-19 pandemic, the researcher determined that a snowball sampling procedure (teachers sharing/reposting the survey link to other teachers) was used to recruit pre-K through 5th grade teachers via an online survey was most suitable/feasible. Because most schools had substantial restrictions, the best plan of action was to distribute the survey online via social media outlets

(e.g., Facebook, Instagram, Twitter, etc.) and email (Boas et al., 2020). According to Creswell (2015), by using this process, one gives up knowing exactly who the individuals may be in the sample and eliminates the possibility of identifying individuals who did not complete the survey. Additionally, those responding may not be representative of the population. To help prevent the challenges mentioned by using snowball sampling, the survey was distributed to social media groups with participants who identified as early childhood and elementary school teachers.

Power Analysis

According to Creswell (2015), power analyses need to be conducted to determine the number of participants needed to measure the probability of detecting a “true” effect. Two power analysis were conducted using a statistical software, G*Power Version 3.1.9. Based on the data information from the published study (Elhoweris et al., 2005), for the first question it was comparing African Americans to the control group, which had an $N = 207$. The effect size for the first question is Cohen’s d of .44 and the effect size for the second question is $d = .31$, using Cohen's (1988) criteria. With an $\alpha = .05$ and power = 0.80, the projected sample size needed with this effect size is approximately $N = 166$ for the first question and $N = 328$ for the second question for the simplest between-group comparison. Thus, it was proposed that an $N = 350$ would be more than adequate for this study's main objectives and should also allow flexibility for any incomplete data responses.

Instruments

Vignettes

The instrument that was used and created by Elhoweris et al. (2005) included short descriptive vignettes about a student who met the research-based qualities of an individual who could be classified as G/T and, therefore, would qualify for placement in a G/T program (see

Appendix A). According to (Elhoweris et al., 2005) To support content validity, all the student personal G/T traits in the vignette were derived from descriptions of G/T children in special education introductory textbooks by Hallahan and Kauffman (2000); Kirk (2000); and Piirto (1999) and from a professional journal article by Minner et al. (1987). To test the instrument's reliability, Elhoweris et al. (2005) conducted a test-retest reliability for the two questionnaires, and the items were adequate for the purpose of the study ($r = .75, p < .05$; $r = .76, p < .05$). All social and behavioral traits of the child described in the vignette were held constant except for ethnicity.

Immediately after reading one of six randomized vignettes, participants responded to two questions. Each question was rated on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree) (see Appendix B). Reading the vignettes and responding to the two questions takes approximately 10-15 minutes to complete. In addition to the information gathered from the two questions, other information on respondents' characteristics were collected by the researcher, including teachers' race, gender, age, educational level, years of experience, Hispanic identity specialization, and school's SES (see Table 1 below).

Table 1*Participant Demographics*

	<i>n</i>	%
<hr/>		
Gender		
Males	173	33
Females	348	66.4
Race*		
American Indian or Alaska Native	113	21.6
Asian	33	6.3
Black or African American	52	9.9
Native Hawaiian or Pacific Islander	19	3.6
White	316	60.3
Other	10	1.9
Hispanic		
Yes	188	35.9
No	336	64.1
Age		
25 or less	30	5.7
26-35	235	44.8
36-45	156	29.8
46 or more	103	19.7

Degree			
	Doctorate	49	9.4
	Master's	216	41.2
	Bachelor's	235	44.8
	Associate's	17	3.2
	High School Diploma/GED	7	1.3
Specialization*			
	General Education	264	50.4
	Special Education	93	17.7
	Gifted Education	123	23.5
	Early Childhood Education	157	30
Years of Experience			
	7 or More	212	40.5
	5-6	119	22.7
	3-4	132	25.2
	1-2	61	11.6
School SES			
	Low	180	34.4
	Medium	252	48.1
	High	92	17.6

Note. * = Allowed participants to choose more than one response.

Procedure

Upon receiving permission from IRB and page administrators from social media sites, a link to the survey was posted on social media sites, pages, or groups. The posts had some basic information about the survey and the survey link (see Appendix C). The survey did not ask for identifiers to help increase confidentiality. After the participants read the approved IRB consent form, and clicked on consent, they were prompted to answer a few demographic questions (see Appendix D) about gender, race, if they considered themselves Hispanic, age range, education, specialization, years of experience, and their school's socioeconomic level (SES). Once participants completed the demographic questions, they would proceed to read one of six randomized vignettes.

All completed surveys and data were only accessible to the primary investigator (PI). The data was saved in Microsoft OneDrive under a security password only available to the PI. Any work related to this study was done on a password-protected PC under lock and key. The survey took approximately 10-15 minutes to read and answer. Once participants completed the survey, they were asked if they would like to enter a drawing for one of two \$100 Amazon gift cards. The response window to complete the survey remained open until the required number of participants had been reached. Once the data was collected, all data were analyzed using the SPSS statistical program installed in the PI's password-protected PC.

Data Analysis Plan

The original plan for the analysis was to replicate the original study by Elhoweris et al. (2005) and see the effect of students' ethnicity for the two dependent variables: teachers' referral and placement decisions, using one-way, multivariate analysis of variance (MANOVA). However, after running descriptive statistics and cleaning the data (e.g., identifying

outliers/errors, looking for odd responses, etc.), the researcher determined that the data collected was not normally distributed and needed to be analyzed using a Kruskal-Wallis H Test (Creswell, 2015).

Dummy Variables

Two of the demographic questions had to be separated as dummy variables due to the nature of the question allowing participants to choose more than one response. The teacher demographic questions asking about teachers' race and specialization were the only questions that allowed multiple responses. To be able to be distinguished as multiple responses by participant, the researcher coded in the SPSS code book a 1= yes and 2= no; the process continued for all the response options for each question that allowed multiple choice options (Creswell, 2015). For example, a participant identified as Black/African American and Asian. The participant would be coded as 1 (= yes) for Black/African American, 1 (= yes) Asian and 2 (= no) for all the other race options. The same process occurred for the teachers' area of specialization. If participants chose more than one race or specialization, they were put into a multiple race and multiple specialization category.

All 6 vignettes were randomly assigned to participants which meant they did not all receive the same vignette with the same conditions. The vignette variables are as follows:

- Independent Variable 1: Child's Socioeconomic Status: High or Low.
- Independent Variable 2: Child's Ethnicity: White, Hispanic, or Control (participants who received no information about the student's ethnicity).
- Dependent Variable 1: Teachers' Referral Decision.
- Dependent Variable 2: Teachers' Placement Decision.

Chapter 4. Results

The purpose of this quantitative survey design study was to examine the effect of children's ethnicity on teachers' referral and placement decisions in gifted and talented (G/T) programs. The target populations were teachers all over the United States that taught or are currently teaching pre-kindergarten through 5th grade. The data were collected via online survey powered by Qualtrics® XM. The online surveys were distributed via social media sites (e.g., Facebook, Instagram, Twitter, etc.) and email.

This chapter presents results based on 524 survey responses that were verified using reCAPCHA and bot detection, to answer the following questions:

1. Is there a difference in preK-5th grade teachers' referral decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).
2. Is there a difference in preK-5th grade teachers' placement decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).

Descriptive Statistics

Upon completion of cleaning the data and organizing the code book on SPSS, descriptive statistics were analyzed to detect any data abnormalities such as outliers, skewness, etc. Results from the test indicated that the data was not normally distributed. According to Hair et al. (2017) there are two ways of seeing if data is normally distributed: 1) graphically and 2) statistically. Figures 1 and 2 illustrate visually how both referral and placement distribution data are negatively skewed.

Figure 1

Referral Distribution Skewness

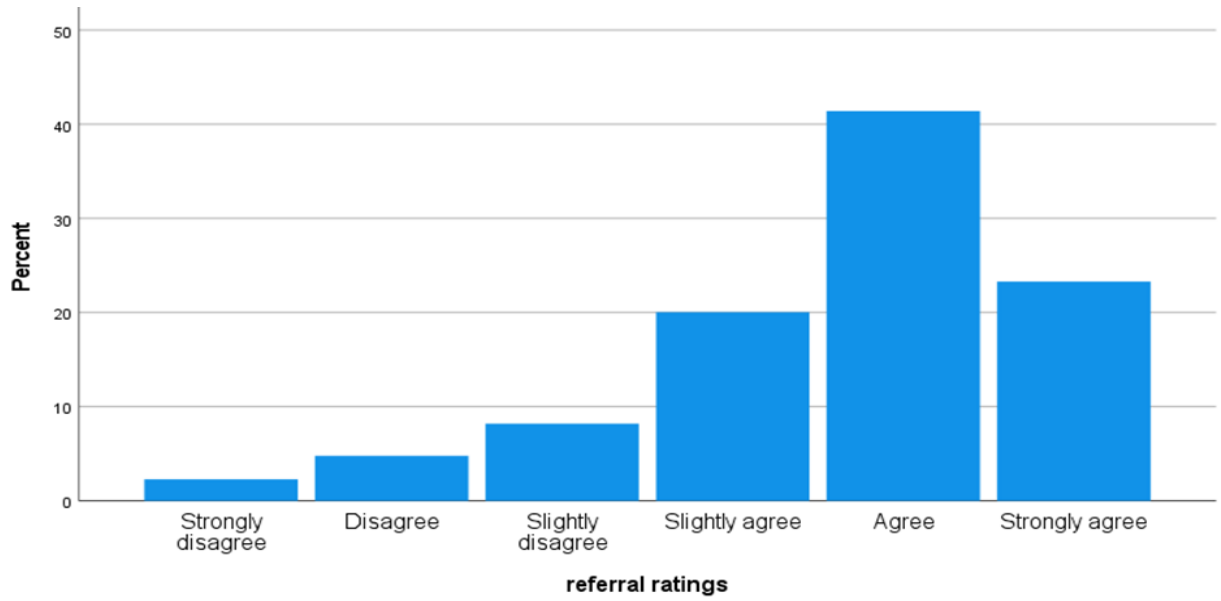
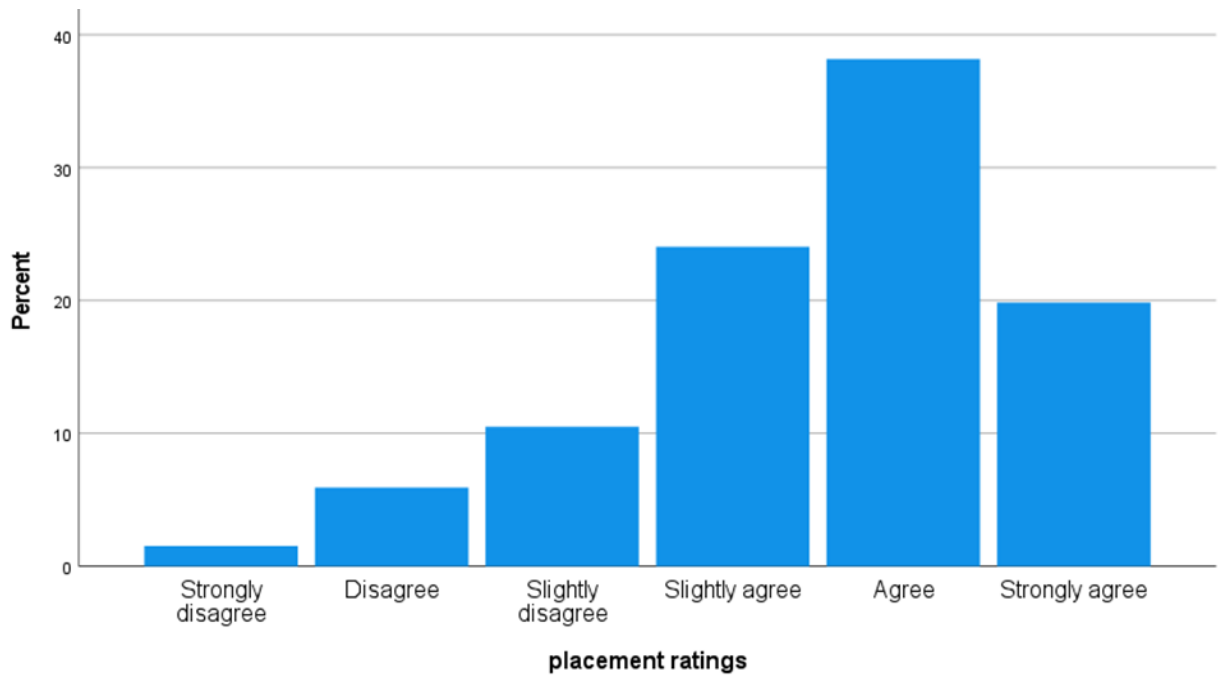


Figure 2

Placement Distribution Skewness



Another visual indication is that a nonnormal distribution will have extreme outliers.

Figures 3 and 4 illustrate how there are extreme outliers in the data.

Figure 3

Referral Distribution Outliers

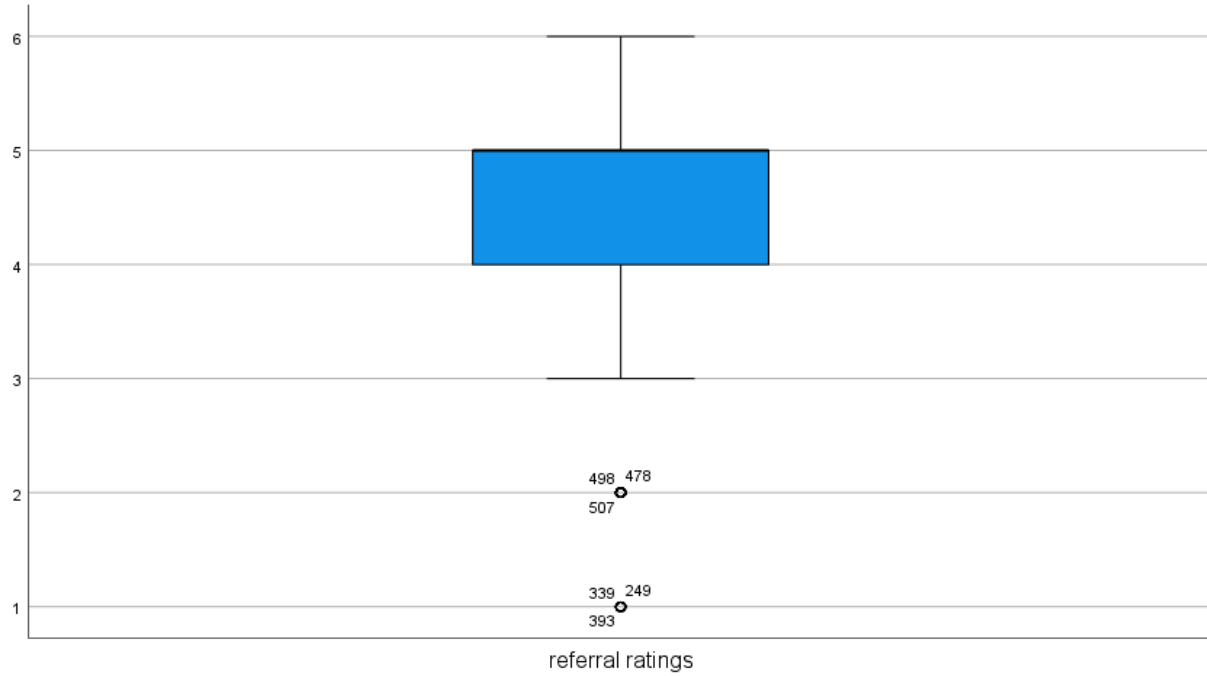
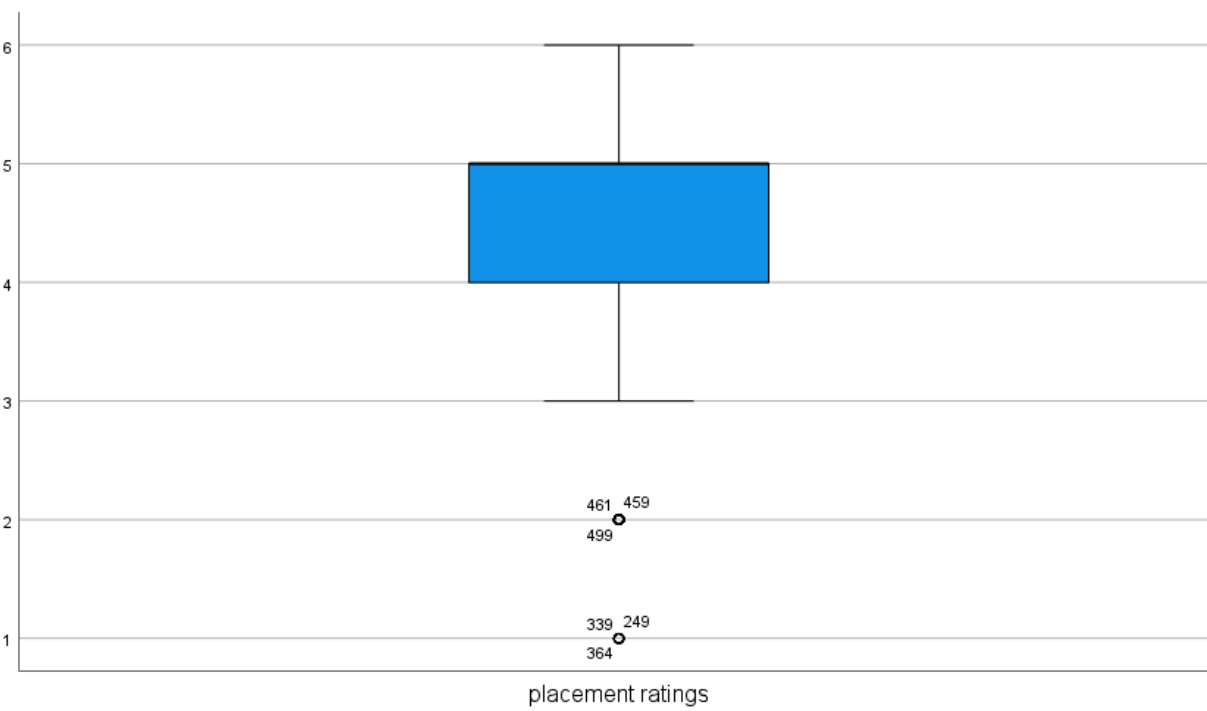


Figure 4

Placement Distribution Outliers



The best indicator to determine if the data is not normally distributed is statistically (Creswell, 2015; Hair et al., 2017). Table 2 provides an outlook on the data, specifically on the skewness and the kurtosis ranges.

Table 2

Descriptive Statistics of Participants

	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	Skewness	<i>SE</i>	Kurtosis	<i>SE</i>
Referral	524	1	6	4.63	1.194	-1.042	0.107	0.833	0.213
Placement	524	1	6	4.51	1.182	-0.783	0.107	0.213	0.213

After examining the graphs, a Kolmogorov-Smirnov test was used to determine if the data comes from a normal distribution. Results indicated that data was not normally distributed (see Table 3).

Table 3

Test of Normality

	Kolmogorov-Smirnov ^a		
	Statistic	<i>df</i>	<i>p</i>
Referral Ratings	.267	524	< .001
Placement Ratings	.241	524	< .001

a. Lilliefors Significance Correction

The hypotheses used for the Kolmogorov-Smirnov test are as follows:

Ho: The sample data are not significantly different than a normal population.

Ha: The sample data are significantly different than a normal population.

When testing for normality, $p > .05$ indicate that the data are normal and $p < .05$ indicate that the data are not normal. The Kolmogorov-Smirnov test indicates that the data set was not

normally distributed. What the test demonstrates is that if the results are statistically significant then the data is not normally distributed. Mean ratings for referral and placement by vignette groups were also computed (see Table 4).

Table 4

Mean Ratings by Vignette Groups

		<i>n</i>	<i>M</i>	<i>SE</i>	<i>SD</i>	Skewness	Kurtosis
<hr/>							
Referral							
Ratings	White-Low SES	85	4.45	0.135	1.249	-0.647	-0.25
	White-High SES	85	4.42	0.136	1.257	-0.927	0.301
	Hispanic-Low SES	86	4.72	0.123	1.144	-1.213	1.699
	Hispanic-High SES	91	4.60	0.136	1.299	-1.091	0.91
	Control-High SES	92	4.83	0.122	1.173	-1.365	2.135
	Control-Low SES	85	4.76	0.107	0.984	-0.967	0.817
<hr/>							
Placement							
Ratings	White-Low SES	85	4.33	0.130	1.199	-0.286	-0.614
	White-High SES	85	4.29	0.134	1.233	-0.702	0.295
	Hispanic-Low SES	86	4.60	0.116	1.077	-1.059	1.172
	Hispanic-High SES	91	4.62	0.128	1.218	-0.878	0.412
	Control-High SES	92	4.59	0.130	1.251	-1.064	0.603
	Control-Low SES	85	4.61	0.117	1.081	-0.730	0.135
<hr/>							

Data was also examined to compute the mean differences among teachers who identified as Hispanic/Latino by the teachers' referral and placement ratings (see Table 5).

Table 5*Mean Referral and Placement Ratings by Teachers' Hispanic/Latino Ethnicity*

Do you consider yourself to be Hispanic/Latino?		Referral ratings	Placement ratings
Yes	<i>M</i>	4.44	4.53
	<i>n</i>	188	188
	<i>SD</i>	1.148	1.176
	<i>SE</i>	0.084	0.086
	Kurtosis	0.522	0.181
	Skewness	-0.863	-0.735
	No	<i>M</i>	4.74
<i>n</i>		336	336
<i>SD</i>		1.208	1.187
<i>SE</i>		0.066	0.065
Kurtosis		1.190	0.245
Skewness		-1.190	-0.812
Total		<i>M</i>	4.63
	<i>N</i>	524	524
	<i>SD</i>	1.194	1.182
	<i>SE</i>	0.052	0.052
	Kurtosis	0.833	0.213
	Skewness	-1.042	-0.783

Other important descriptive statistics to note are frequency tables. Tables 6 and 7 indicate the frequency of participant responses to the vignettes.

Table 6*Frequency of Referral Ratings*

	Frequency	Percent
Strongly disagree	12	2.3
Disagree	25	4.8
Slightly disagree	43	8.2
Slightly agree	105	20
Agree	217	41.4
Strongly agree	122	23.3
Total	524	100

Table 7*Frequency of Placement Ratings*

	Frequency	Percent
Strongly disagree	8	1.5
Disagree	31	5.9
Slightly disagree	55	10.5
Slightly agree	126	24.0
Agree	200	38.2
Strongly agree	104	19.8
Total	524	100

Table 8 shows the frequency of all six conditions of the vignettes that were distributed.

Table 8*Frequency of Vignettes- All 6 Conditions*

	Frequency	Percent
White - Low SES	85	16.2
White - High SES	85	16.2
Hispanic - Low SES	86	16.4
Hispanic - High SES	91	17.4
Control - Low SES	92	17.6
Control - High SES	85	16.2
Total	524	100

Data Analysis

Because the data was not normally distributed, there were two options for handling the data: 1) Transform the data or 2) use a non-parametric test (Judd et al., 2009).

Data Transformation

The first option is to use the data transformation Log10 tool on SPSS, which in short calculates the exponent to which 10 must be raised to equal a given number. When you multiply a number by 10, you increase its log by 1; when you divide a number by 10, you decrease its log by 1. This option can be very useful for large data sets; however, this option did not help to normalize the distribution. Figures 5 and 6 show a histogram table of what the transformation looked like. Table 9 also shows that the skewness and kurtosis were still negative. Lastly, Table 10 statistically shows that there would be no difference in transforming the data set.

Figure 5

Log 10 Transform Data for Referral Decisions

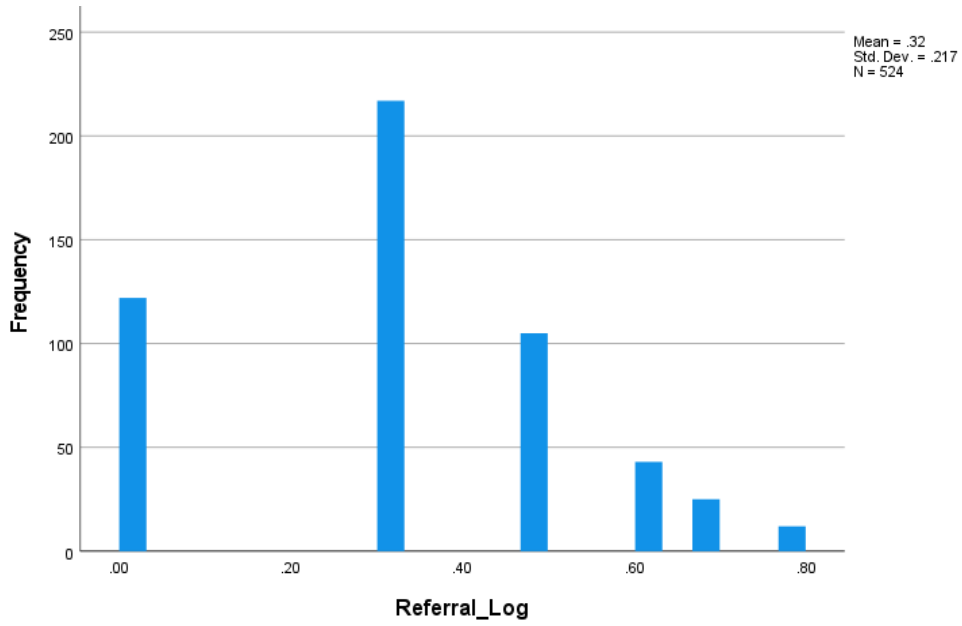


Figure 6

Log 10 Transform Data for Placement Decisions

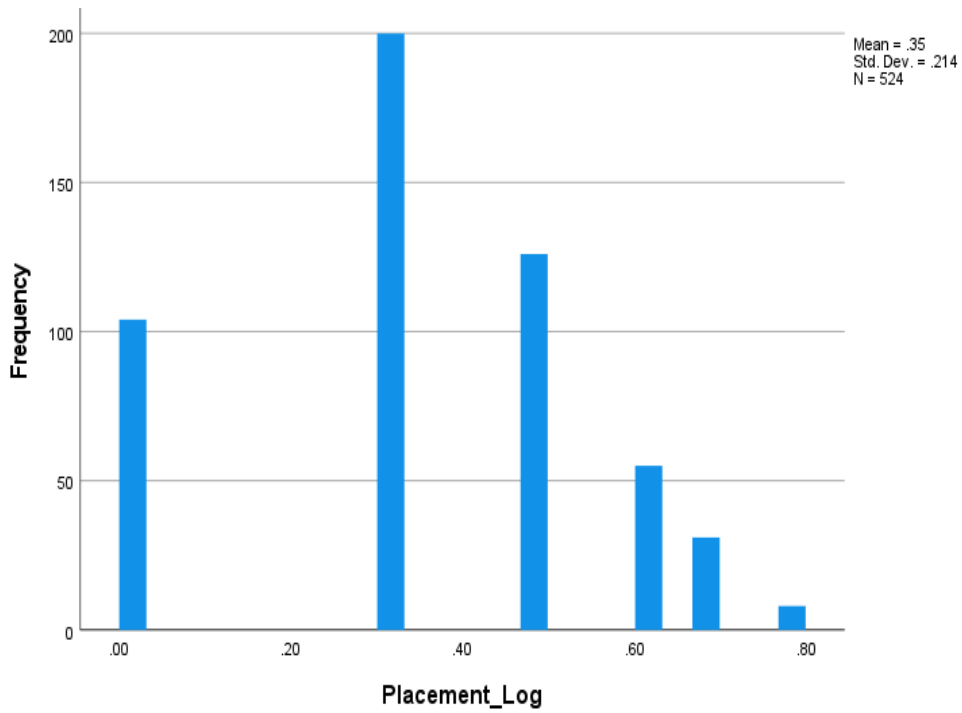


Table 9*Descriptive Statistics Using Log 10 Transformation*

	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	Skewness	<i>SE</i>	Kurtosis	<i>SE</i>
Referral	524	.00	.78	.3208	.21729	-.03	.107	-.71	.213
Placement	524	.00	.78	.3469	.21414	-.22	.107	-.69	.213

Table 10*Test of Normality Using Log 10 Transformation*

	Kolmogorov-Smirnov ^a		
	Statistic	<i>df</i>	Sig.
Referral Ratings	.231	524	<.001
Placement Ratings	.218	524	<.001

^a. Lilliefors Significance Correction**Non-Parametric Test**

According to Creswell (2012), a Kruskal-Wallis H test is the best non-parametric test option to use in group comparison analysis because there is more than one dependent and independent variables. Another justification for using this analysis is because the dependent variables are not continuous but ordinal variables.

According to Glen (2022), in order to use a Kruskal-Wallis H test there were some assumptions to be met:

1. Dependent variables should be measured at the ordinal or continuous level.
2. Independent variables should consist of two or more categorical, independent groups.

3. Have independence of observations, which means that there is no relationship between the observations in each group or between the groups themselves. For example, there must be different participants in each group with no participant being in more than one group.
4. Determine whether the distributions in each group (i.e., the distribution of scores for each group of the independent variable) have the same shape (which also means the same variability).

Assumption one was met because of the single-item Likert Scale: it provides ordinal data. The second assumption was also met because there are two independent variables that include a child's SES (low, high) and child's ethnicity (White, Hispanic, or control group). The third assumption was met because participants would only be given one of the six randomized vignettes. Lastly, assumption 4 is met because they all have the same shape (see Figures 1 and 3).

The Kruskal-Wallis H Test

The results of the analysis are shown in Table 11. A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral decisions based on a child's ethnicity. The results for teachers' referral indicate non-significant difference, $H(5) = 8.815, p = .12$. Results for teachers' placement also indicated a non-significant difference, $H(5) = 8.964, p = .11$. Because there was no significant difference between the groups, a pairwise comparison (Mann-Whitney U test) among all groups was not conducted.

Table 11*Teachers' Referral and Placement Based on Child's Ethnicity and SES*

	Vignette Conditions	<i>N</i>	<i>M</i> Rank	<i>df</i>	<i>SD</i>	χ^2	<i>p</i>	Sig. Difference
Referral								
Ratings	White - Low SES	85	238.83	5	1.194	8.815	.12	-
	White - High SES	85	237.26					
	Hispanic - Low SES	86	271.96					
	Hispanic - High SES	91	262.92					
	Control - Low SES	92	289.16					
	Control - High SES	85	272.54					
	Total	524						
Placement								
Ratings	White - Low SES	85	235.64	5	1.182	8.964	.11	-
	White - High SES	85	234.91					
	Hispanic - Low SES	86	273.03					
	Hispanic - High SES	91	278.32					
	Control - Low SES	92	278.25					
	Control - High SES	85	272.31					
	Total	524						

Note. The Kruskal-Wallis H test “-” indicates no statistical difference between groups.

Other Findings: Covariates

In addition, other tests were conducted to see differences between the covariate groups such as teachers' gender, level of education, school's SES, Hispanic ethnicity, years of experience, age, race, and specialization. Kruskal-Wallis H tests were conducted to see if there were significant differences between the groups. For results that were significant, a Mann-Whitney *U* test was also computed to see which specific group was statistically significant.

Teachers' Gender

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral decisions based on teachers' gender. The results indicated a significant difference between the gender groups in referral ratings only $H(2) = 9.993, p < .001$. A Mann-Whitney *U* test was conducted to analyze where the difference was among the groups. The results indicate a significant difference between the gender groups male and female for referral ratings. $z = -3.082, p < .001$. Teachers who identified as female had an average rank of 274.65, while males had an average rank of 233.55. Results of the analysis indicated that females were more likely refer the students in the vignettes into G/T programs than other genders.

Teachers' Level of Education

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral decisions based on teachers' level of education. The results indicated a significant difference between teachers' level of education for both referral $H(4) = 10.630, p < .05$, and placement ratings $H(4) = 10.559, p < .05$. Multiple Mann-Whitney *U* tests were conducted to analyze where the differences were among the groups. The results indicated a significant difference between the following levels of education:

Master's and bachelor's degree: For referral ratings: $z = -2.734, p < .001$. Teachers who had a master's degree had an average rank of 242.63 than those who had a bachelor's degree with an average rank of 210.72. For placement ratings: $z = -2.034, p < .05$. Teachers who had a master's degree had an average rank of 238.44 than those who had a bachelor's degree with an average rank of 214.56. Results of the analysis indicated that teachers with a master's degree were more likely to place the students in the vignettes into G/T programs than teachers with a bachelor's degree.

Master's degree and high school (HS) diploma/GED: For placement ratings only, $z = -2.310, p < .05$. Teachers who had a master's degree had an average rank of 113.73 than those who had a HS diploma/GED with an average rank of 58.50. Results of the analysis indicated that teachers with a master's degree were more likely to place the students in the vignettes into G/T programs than teachers with a HS diploma/GED.

Bachelor's degree and HS Diploma/GED: For placement ratings only, $z = -2.034, p < .05$. Teachers who had a bachelor's degree had an average rank of 123.05 than those who had a HS diploma/GED with an average rank of 69.50. Results of the analysis indicated that teachers with a bachelor's degree were more likely to place the students in the vignettes into G/T programs than teachers with a HS Diploma/GED.

Associate's degree and HS Diploma/GED: For placement ratings only, $z = -2.601, p < .001$. Teachers who had an associate degree had an average rank of 14.79 than those who had a HS diploma/GED with an average rank of 6.93. Results of the analysis indicated that teachers with an associate's degree were more likely to place the students in the vignettes into G/T programs than teachers with a HS diploma/GED.

Teachers' School SES

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on school's SES. The results indicated a significant difference between the school's SES and teachers' referral $H(2) = 7.017, p < .05$ and placement ratings $H(2) = 11.447, p < .001$. Mann-Whitney U tests were conducted to analyze where the differences were among the groups. The results indicated a significant difference between all levels of SES:

Low and High SES: For referral ratings, $z = -2.085, p < .05$. Teachers who were from high SES schools had an average rank of 149.85 compared to teachers who were from low SES schools with an average rank of 129.68. For placement ratings, $z = -3.262, p < .001$. Teachers who were from high SES schools had an average rank of 157.50 compared to teachers who were from low SES schools with an average rank of 125.77. Results of the analysis indicated that teachers who teach at a school with a high SES were more likely to refer and place the students in the vignettes into G/T programs than teachers from a low SES school.

Medium and High SES: For referral ratings, $z = -2.693, p < .001$. Teachers who were from high SES schools had an average rank of 195.11 compared to teachers who were from medium SES schools with an average rank of 164.25. For placement ratings, $z = -2.679, p < .001$. Teachers who were from high SES schools had an average rank of 195.32 compared to teachers who were from medium SES schools with an average rank of 164.17. Results of the analysis indicated that teachers who teach in schools with high SES were more likely to refer and place the students in the vignettes into G/T programs than teachers from a medium SES school.

Teachers' Hispanic Ethnicity

A Mann-Whitney U was conducted to determine whether there was a significant difference in teachers' placement and referral ratings based on teachers who identified as Hispanic from those who did not identify as Hispanic. For referral ratings only, the results indicated a significant difference between $t < .001$. Teachers who did not identify as being Hispanic had a higher average rank score of 278.69 than teachers who did identify as being Hispanic 233.56. Results of the analysis indicated that teachers who are not Hispanic were more likely to refer the students in the vignettes into G/T programs than teachers who identified as Hispanic.

Teachers' Years of Experience

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' years of experience. The results indicated a significant difference between teachers' years of experience and their referral ratings, $H(3) = 16.717, p < .001$. Mann-Whitney U tests were conducted to analyze where the differences were among the groups. The results indicated a significant difference between the following years of experience and referral ratings only:

7 or more & 5-6 years: $z = -1.958, p < .05$. Teachers who had 7 or more years of experience had a higher average rank of 173.34 than teachers who had 5-6 years of experience with a rank average of 152.92. Results of the analysis indicated that teachers with 7 or more years of experience were more likely to refer the students in the vignettes into G/T programs than teachers with 5-6 years of experience.

7 or more & 3-4 years: $z = -3.986, p < .001$. Also, teachers who had 7 or more years of experience had a higher rank average of 188.54 than teachers who had 3-4 years of experience

with a rank average of 146.73. Results of the analysis indicated that teachers who had 7 or more years of experience were more likely to refer the students in the vignettes into G/T programs than teachers with 3-4 years of experience.

3-4 & 1-2 years: $z = -2.419, p < .05$. Teachers who had 1-2 years of experience had a higher average rank of 110.61 than teachers who had 3-4 years of experience with a rank average of 90.71. Results of the analysis indicated that teachers with 3-4 years of experience were more likely to refer the students in the vignettes into G/T programs than teachers with 1-2 years of experience.

Teachers' Race

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' race. The results indicated a significant difference between teachers' race and their referral ratings $H(7) = 21.427, p < .001$ and placement ratings $H(7) = 16.334, p < .05$. Mann-Whitney U tests were conducted to analyze where the differences were among the groups. The results below indicated a significant difference between the following teacher races and their referral and placement ratings:

American Indian/Alaskan Native & Asian: For referral ratings, $z = -2.653, p < .01$. Teachers who identified as American Indian/Alaskan Native had an average rank of 61.44 compared to teachers identified as Asian with an average rank of 40.61. For placement ratings, $z = -2.467, p < .001$. Teachers who identified as American Indian/Alaskan Native had an average rank of 61.11 compared to teachers who identified as Asian with an average rank of 42.26. Results of the analysis indicated that teachers who identified as American Indian/Alaskan Native were more likely to refer and place the students in the vignettes into G/T programs than teachers who identified as Asian.

American Indian/Alaskan Native & Native Hawaiian/Pacific Islander: For referral ratings, $z = -2.350, p < .01$. Teachers who identified as American Indian/Alaskan Native had an average rank of 62.77 compared to teachers identified as Native Hawaiian/Pacific Islander with an average rank of 45.25. For placement ratings, $z = -2.651, p < .001$. Teachers who identified as American Indian/Alaskan Native had an average rank of 63.13 compared to teachers who identified as Native Hawaiian/Pacific Islander with an average rank of 43.68. Results of the analysis indicated that who identified as American Indian/Alaskan Native were more likely to refer and place the students in the vignettes into G/T programs than teachers who identified as Native Hawaiian/Pacific Islander.

American Indian/Alaskan Native & White: For placement ratings only, $z = -2.419, p < .01$. Teachers who identified as American Indian/Alaskan Native had an average rank of 220.91 compared to teachers who identified as White with an average rank of 189.96. Results of the analysis indicated that teachers who identified as American Indian/Alaskan Native were more likely to place the students in the vignettes into G/T programs than teacher who identified as White.

American Indian/Alaskan Native & Multiple Races: For placement ratings only, $z = -2.655, p < .001$. Teachers who identified as American Indian/Alaskan Native had an average rank of 74.44 compared to teachers who identified as multiple races with an average rank of 56.26. Results of the analysis indicated that teachers who identified as American Indian/Alaskan Native were more likely to place the students in the vignettes into G/T programs than teachers who identified with multiple races.

Asian & White: For placement ratings only, $z = -2.403, p < .01$. Teachers who identified as White had an average rank of 160.75 compared to teachers who identified as Asian with an

average rank of 131.50. Results of the analysis indicated that teachers who identified as White were more likely to place the students in the vignettes into G/T programs than teachers who identified as Asian.

Asian & Other: For referral ratings, $z = -2.504$, $p < .01$. Teachers who identified as other had an average rank of 20.00 compared to teachers identified as Asian with an average rank of 11.89. For placement ratings, $z = -2.508$, $p < .001$. Teachers who identified as other had an average rank of 19.94 compared to teachers who identified as Asian with an average rank of 11.92. Results of the analysis indicated that teacher who identified as other race were more likely to refer and place the students in the vignettes into G/T programs than teachers who identified as Asian.

Black/African American & Other: For placement ratings only, $z = -1.960$, $p < .05$. Teachers who identified as other had an average rank of 31.78 compared to teachers who identified as Black/African American with an average rank of 22.16. Results of the analysis indicated that teachers that identified as other race were more likely to place the students in the vignettes into G/T programs than teachers who identified as Black/African American.

Native Hawaiian/Pacific Islander & White: For placement ratings only, $z = -1.960$, $p < .05$. Teachers who identified as White had an average rank of 163.15 compared to teachers who identified as Native Hawaiian/Pacific Islander with an average rank of 124.66. Results of the analysis indicated that teachers who identified as White were more likely to place the students in the vignettes into G/T programs than teachers who identified as Native American/Pacific Islander.

Native Hawaiian/Pacific Islander & Other: For referral ratings, $z = -2.656$, $p < .001$. Teachers who identified as other had an average rank of 22.33 compared to teachers identified as Native Hawaiian/Pacific Islander with an average rank of 13.41. For placement ratings, $z = -2.737$, $p <$

.001. Teachers who identified as other had an average rank of 22.61 compared to teachers who identified as Native Hawaiian/Pacific Islander with an average rank of 13.30. Results of the analysis indicated that teachers who identified as other race were more likely to refer and place the students in the vignettes into G/T programs than teachers who identified as Native Hawaiian/Pacific Islander.

White & Other: For placement ratings only, $z = -2.238$, $p < .05$. Teachers who identified as other had an average rank of 216.94 compared to teachers who identified as White with an average rank of 152.10. Results of the analysis indicated that teachers who identified as other race were more likely to place the students in the vignettes into G/T programs than teachers who identified as White.

White & Multiple Races: For referral ratings only, $z = -2.347$, $p < .05$. Teachers who identified as White had an average rank of 174.43 compared to teachers who identified as Multiple Races with an average rank of 152.10. Results of the analysis indicated that teachers that identified as White were more likely to refer the students in the vignettes into G/T programs.

Other & Multiple Races: For referral ratings, $z = -2.680$, $p < .001$. Teachers who identified as other had an average rank of 36.56 compared to teachers identified as multiple races with an average rank of 23.07. For placement ratings, $z = -2.128$, $p < .05$. Teachers who identified as other had an average rank of 34.50 compared to teachers who identified as multiple races with an average rank of 23.52. Results of the analysis indicated that teachers who identified as other race were more likely to refer and place the students in the vignettes into G/T programs than teachers who identified with multiple races.

Teacher's Specialization

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' specialization. The results indicated no significant difference between the teachers' specialization and their referral, $H(4) = 7.512, p = .11$ and placement ratings, $H(4) = 7.637, p = .10$.

Teacher's Age

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' age. The results indicated no significant difference between the teachers' age and their referral, $H(3) = 3.662, p = .30$ and placement ratings, $H(4) = .662, p = .88$.

The results mentioned in this chapter were based on 524 survey responses from Pre-Kindergarten through 5th grade teachers, who have taught or are currently teaching in the US. Once the data was inspected, it was determined that the data was not normally distributed. Kruskal-Wallis H tests were conducted to answer the research questions. Kruskal-Wallis H tests and a Mann-Whitney U tests were also run to see group differences in covariates and the dependent variables based on teachers' referral and placement decision. Chapter 5 provides discussions about the results from the analyses that were conducted. The next chapter also covers implications, possible explanations of the results, limitations of the study, and future recommendations.

Chapter 5. Discussion

The objective of this study was to explore a research gap that exists in the gifted and talented (G/T) field in early childhood education and elementary education. Most of the research has focused primarily on African American and White disparities and little on Hispanic students. As mentioned in Chapter 1, Hispanic students who are also English Language Learners or ELLs, are the fastest growing population in schools (Ford et al., 2014). The disparities are profound in gifted referral and placement decisions for Hispanic/ELL children. There is a vast amount of research that indicates that underrepresentation of G/T ELLs and other minority groups continues to be a considerable challenge in the public educational school system (Carman, 2011; Ford et al., 2008; Yoon & Gentry, 2009; U.S. Department of Education Office for Civil Rights, 2016). Teachers, for the most part, are the “gatekeepers” who decide whether a child should be nominated for gifted and talented programs. Hadaway and Marek-Schroer (1992) stated that “teachers might assume a student is not gifted based on a child’s language proficiency in their first and second language, their use of ‘nonstandard’ English, accent, differing values, aspirations, and levels of motivation” (p. 74). Other researchers like Geake and Gross (2008) suggested that teachers hold negative attitudes toward referral and placement of diverse learners, and that most of the time it is an implicit bias, meaning they are not aware of their biases. Others, however, suggest that teachers hold a deficit mentality towards ELLs and their “lack” of English proficiency (Ford & Grantham, 2003).

The purpose of this quantitative survey design study was to investigate the extent to which a child’s ethnicity could impact a teachers’ referral and placement decision for gifted and talented programs; socioeconomic status of the children was also analyzed. The following research questions framed this research study:

1. Is there a difference in preK-5th grade teachers' referral decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).
2. Is there a difference in preK-5th grade teachers' placement decision for gifted and talented programs based on children's ethnicity (Hispanic ELL, White non-Hispanic, or control), accounting for other covariates (e.g., child's SES, teacher experience, etc.).

The data was collected from a total of 524 teachers (pre-kindergarten through 5th grade) around the U.S. They participated in answering one of six randomized vignettes (see Appendix A) via online survey (Likert scale) through teacher social media groups (e.g., Facebook). The survey used was from an already existing instrument by Elhoweris et al. (2005) with some modifications to analyze the two dependent variables 1) teachers' referral and 2) placement decision. Permission was granted by Elhoweris et al. (2005) to use and modify the instrument for this study. Along with the vignettes, participants were asked demographic questions as well as given an opportunity for a prize drawing.

Discussion of Findings

Based on the data collected, no significant differences were found in referral or placement decisions based on ethnicity. The results of both research questions were not consistent with most of the literature discussed. As mentioned previously, in past years, there has been a general opinion that teachers are not adequately identifying G/T students (Powell & Siegle, 2000). Ford and Whiting (2008) mentioned that a lack of teacher referrals significantly contributes to ELL students' underrepresentation in G/T programs. In fact, some researchers like Hunsaker et al. (1997) would go further to say that determining advanced educational opportunities for students has been a controversial issue for well over 200 years.

One possible explanation for the results is that all of the vignettes, regardless of ethnicity, have gifted characteristics, meaning they all should be referred and placed in gifted programs or have high referral and placement ratings. Most teachers in this study chose more frequently that they agreed or strongly agreed that the vignettes demonstrated characteristics of giftedness regardless of ethnicity.

Another explanation is that gifted and talented education has become a popular field of study, and teachers are getting more professional development opportunities and training. Most of the participants were veteran teachers with many years of experience (see Table 1). Thus, with new opportunities for professional development on referral and placement for G/T services, one could argue that it is making an impact on the field. This would also be in line with some research that suggested that targeted professional development can increase the understanding, awareness, and delivery of services to culturally and linguistically diverse (CLD) gifted learners (Coronado & Lewis, 2017). Either way, these are good signs that the interventions are useful and help educators identify G/T students.

Other Findings

Other tests were conducted to see differences between the covariate groups such as teachers' gender, level of education, school's SES, Hispanic ethnicity, years of experience, age, race, and specialization. Kruskal-Wallis H tests were conducted to see if there were significant differences between the groups. For results that were significant, Mann-Whitney *U* tests were also computed to see which specific group were statistically significant.

Teachers' Gender

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral decisions based on teachers' gender. The results indicated a

significant difference between the gender groups in referral rating decisions. Teachers who identified as female had higher referral ratings than teachers who identified as males. A possible explanation is that there are a lot more female early childhood educators in the field than there are males. According to the data by The National Survey of Early Care and Education (2022), early childhood educators are 97 percent women and non-Hispanic White men constituted 1.3 percent. The present study there were almost twice as many women as men in this study.

Teachers' Level of Education

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral decisions based on teachers' level of education. The results indicated a significant difference between teachers' level of education for both referral placement ratings. Multiple Mann-Whitney U tests were conducted to analyze where the differences were among the groups. The results indicated a significant difference between the following levels of education. Teachers who had a master's degree had higher referral and placement ratings than participants who had bachelor's degrees. Participants who had a master's, bachelor's, or associate's degree also had higher placement ratings than participants who had a high school diploma/GED. These findings align with the existing literature that the more specialized training, the better teachers are at identifying gifted students (Allen, 2017).

Teachers' Age and Specialization

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' age and specialization. The results indicated no significant difference between the teachers' age or specialization and their referral and placement ratings. The results for specialization were not expected. These results do not align with some of the literature that suggests targeted professional development can increase the

understanding, awareness, and delivery of services to CLD gifted learners (Coronado & Lewis, 2017). The specialized groups: general education, special education, gifted education, early childhood education, and multiple specializations are trained and specialize in their area of study, so one could assume that gifted teachers would be more likely to have higher referral or placement ratings. One possible explanation is that regardless of the specialization, teacher prep courses/trainings cover the same amount of information since most require licensure certification. There is no literature about teachers' age regarding gifted and talented education.

Teachers' School SES

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' school socioeconomic status (SES). The results indicated a significant difference between the school's SES and teachers' referral and placement ratings. Teachers who were from high SES schools had higher referral and placement ratings than teachers who taught in medium and low SES schools. These findings align with Boyce (1997), who found that teachers in high SES schools had higher or greater expectations for student academic achievement than their counterparts in low-SES schools. In the study by Moon and Brighton (2008), they found that primary-grade teachers tend to hold more traditional beliefs about G/T students and had difficulty seeing a G/T student who was a minority or a low-SES background. Lastly, the results align with Podell and Soodak (1993), who found that student SES and teacher efficacy played a role in their influence on special education referral decisions, both for G/T programs and special education classes.

Teachers' Hispanic Ethnicity

A Mann-Whitney U was conducted to determine whether there was a significant difference in teachers' placement and referral ratings based on teachers who identified as

Hispanic from those who did not identify as Hispanic. For referral ratings only, the results indicated a significant difference between the groups. Teachers who did not identify as Hispanic had higher referral ratings than teachers who did identify as being Hispanic. This was not expected. Research of implicit bias by Gilliam et al. (2016) would suggest that teachers who are of the same race are more empathetic towards students. This, however, is not aligned with literature. According to Grissom and Redding (2016), even at the elementary level, teachers' race (holding constant previous assessment scores, sex, age of kindergarten entry, SES) plays a large role in whether or not CLD students are identified for G/T programs.

Teachers' Years of Experience

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' years of experience. The results indicated a significant difference between teachers' years of experience and their referral ratings. Mann-Whitney U tests were conducted to analyze where the differences were among the groups (years of experience). Results indicated that teachers with 7 or more years of experience had higher referral ratings than teachers with 5-6, 3-4, and 1-2 years of experience. These results are aligned with literature. Rubenzer and Twaite (1979) found many teacher characteristics that resulted in higher identification rates of G/T students. In their study teachers with 6+ years of experience were significantly more likely to identify a G/T student in their classroom than those with lower years of teaching experience.

Teachers' Race

A Kruskal-Wallis H test was conducted to determine whether there is a difference in teachers' placement and referral ratings based on the teachers' race. The results indicated a significant difference between teachers' race and their referral and placement ratings. The most

interesting results were from teachers who identified as White; they had the highest referral and placement ratings from each group. This matches with literature (Plata & Masten, 1998).

Another interesting result is that teachers' who identified as Asian had one of the lowest referral and placement ratings besides teachers who identified as Black/ African American. In other studies Whites and Asian students were more likely to be identified for G/T programs (McBee, 2006).

Limitations of the Study

Demographic Questions

More questions could have been added to the demographic questionnaire that would provide more explanations and detail to the data. For example, another variable that should have been included is teachers' specific grade level in which they currently teach or last taught. Also, more inclusive terms should have been added to the Hispanic/Latino such as Latinx. When asking for the teachers' age, it would have been optimal to have used a method that would have a better range option. It was hard to pick apart who is 18-20 years of age from those who were 21-25 years of age from the response options given on the survey. On multiple questions, the option of other should have been included (e.g., highest level completed, Hispanic, specialization, etc.). Lastly, it is not certain to say definitively if teachers know what their school SES level could be.

Vignettes

The randomized vignettes that were used were of gifted male students. The reason only males were used was because of the existing literature that suggested that males, specifically minority students, were more prone to teacher biases than females (Gilliam et al., 2016). However, after analyzing the data, it would have been an interesting comparison to document if there were any difference between the sexes.

Pilot Study

A pilot study was not performed on the modified vignettes. Had a pilot study been performed, improvements and modifications could have been made to the vignettes. Although there were no disruptions, a pilot study would have also added strength to the study design when using online survey distribution and collection of responses.

Online Survey

Due to COVID-19, an online survey became the best solution to present to teachers throughout the nation in an efficient and practical way. However, because it was an online survey there were greater chances for “bots” to take the survey. Security measures by Qualtrics® XM and Googles reCAPTCHA technology detected or flagged bot responses. These were deleted from the data.

Online survey data collection also has limitations. These include, but are not limited to:

- Knowing if the target population is really answering the survey.
- Participants may not feel encouraged to provide accurate, honest answers.
- Surveys with closed-ended questions may have a lower validity rate than other question types.
- Survey question answer options could lead to unclear data because certain answer options may be interpreted differently by respondents. For example, the answer option “slightly agree” may be interpreted differently by respondents.

Likert Scale

The survey tool used a Likert scale for teacher responses, which did not provide much variance in the data. This may have resulted in data that was not normally distributed. In the

future, using a tool with more variance could tell us more about how teachers feel about a student's ethnicity and placement/referrals in gifted education.

Hypothetical Children

The vignettes used hypothetical children and were not actual students in the participants' classrooms. There is a possibility that teachers would have responded differently if it were actual children from their classrooms. Many teachers view children holistically and having children every day compared to just reading about one could have an impact on referral and placement ratings.

Implications of the Study

The findings of the study suggest that students' ethnicity did not significantly affect G/T referral and placement nomination ratings for this data. These results do not align with existing literature that highlight the huge disparities in nominating gifted and talented diverse students for gifted programs. Most of the literature (see Chapter 2) imply that teachers play a huge role in referral and placement; they are seen as "gatekeepers."

Future Research

Based on the findings of the current study, future studies could more closely examine some of the findings of this study. The researcher would like to know why teachers who identified as being Hispanic/Latino had significantly lower placement ratings than teachers who did not identify as Hispanic/Latino. Most of the existing literature implied that teachers who share the same ethnicity as their students tend to not have a deficit mentality of CLD G/T students. To be clear though, that literature is focused more on African American students and teachers.

It would also be of particular interest to explore the difference in teacher specializations. It would help expand the literature to see the preservice teacher training/education programs in early childhood, gifted and talented, and special education. Could it be that the training to identify gifted and talented diverse learners is different depending on program type? If so, it would be an interesting area of research to investigate.

Conclusion

The purpose of this study was to investigate the extent that a child's Hispanic ethnicity affected teachers' placement and referral decisions for gifted and talented programs. A nonparametric analysis was performed, and results indicated that there were no statistical differences between them. These results do not align with previous or current literature, implying that a student's ethnicity influences a teacher's decision for gifted education programs. The results of this research study may be a sign of a changing deficit mentality. There has been an increase in research and interest in equity and inclusion. Perhaps the results are a small snapshot of the result of these interventions, training, and professional development. There is still a need to further investigate this relationship because there is a vast amount of literature that suggest how CDL or ELLs are underrepresented in gifted and talented programs and an overrepresentation of them in special education for speech and learning disabilities. Other future research ideas that could be implemented using this design would be to include a picture of the children in the vignettes (or if possible, a video), along with the description of G/T characteristics. It would also be of great interest to include both sexes, SES, and multiple races/ethnicities for both children and participants.

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APPENDICES

Appendix A: Vignettes

Case Vignettes

Vignette 1

John is 8 years old and in the third grade. John is a White, American male who lives with his natural mother and father in a lower-middle class neighborhood. John is a healthy boy and rarely misses school. His teachers feel that John is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. John has a keen sense of humor and high level of self-confidence. John is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, John scored above his grade level in all subjects and scored significantly high in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of 125. He is regarded by teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Vignette 2

Juan is 8 years old and in the third grade. Juan is Hispanic, English Language Learner (ELL) male who lives with his natural mother and father in a lower middle-class neighborhood. Juan is a healthy boy and rarely misses school. His teachers feel that Juan is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. Juan has a keen sense of humor and high level of self-confidence. Juan is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, Juan scored above his grade level in all subjects and scored significantly higher in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of

125. He is regarded by teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Vignette 3

There is an 8-year-old male student and in the third grade. He lives with his natural mother and father in a lower middle-class neighborhood. He is a healthy boy and rarely misses school. His teachers feel that the student is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. The student has a keen sense of humor and high level of self-confidence. He is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, the student scored above his grade level in all subjects and scored significantly high in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of 125. He is regarded by teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Vignette 4

John is 8 years old and in the third grade. John is a White American male who lives with his natural mother and father in an upper-middle class neighborhood. John is a healthy boy and rarely misses school. His teachers feel that John is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. John has a keen sense of humor and high level of self-confidence. John is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, John scored above his grade level in all subjects and scored significantly high in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of 125. He is regarded

by teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Vignette 5

Juan is 8 years old and in the third grade. Juan is a Hispanic, ELL male who lives with his natural mother and father in an upper-middle class neighborhood. Juan is a healthy boy and rarely misses school. His teachers feel that John is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. Juan has a keen sense of humor and high level of self-confidence. Juan is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, Juan scored above his grade level in all subjects and scored significantly higher in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of 125. He is regarded by teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Vignette 6

There is an 8-years-old male student in the third grade. He lives with his natural mother and father in an upper-middle class neighborhood. The student is a healthy boy and rarely misses school. His teachers feel that he is emotionally healthy. He has the normal problems all boys experience, but he typically handles them quite well. The student has a keen sense of humor and high level of self-confidence. The student is sensitive to others' needs. He is very popular with his peers and is well liked by teachers. On the last achievement test, he scored above his grade level in all subjects and scored significantly high in reading and math compared to his peers. He was given an individualized intelligence test and earned a score of 125. He is regarded by

teachers as bright, inquisitive, and highly verbal. He has demonstrated leadership abilities in school and in the community.

Appendix B: Survey Questionnaire

A. This student should be referred for a comprehensive evaluation for possible placement in a gifted and talented student program.

1. Strongly disagree
2. Disagree
3. Slightly disagree
4. Slightly agree
5. Agree
6. Strongly agree

B. I feel this student should be placed in a gifted and talented student program.

1. Strongly disagree
2. Disagree
3. Slightly disagree
4. Slightly agree
5. Agree
6. Strongly agree

Appendix C: Social Media Recruitment Post

Hi [Name of Social Media Group]!

My name is Guillermo I Mendoza, and I am a Ph.D. candidate at East Tennessee State University. I am conducting my dissertation research study on Latino gifted education. This study focuses on identifying challenges in referrals and placements.

I am looking for full-time educators who work as Early Childhood Education (ECE) teachers (Pre-K through 5th grade) to participate in my research.

In order to participate you must meet the following criteria to participate in the research:

- Be 18 years old or older
- Be physically present in the U.S.
- Must have taught or currently teaching Pre-K through 5th grade in the U.S.

If you decide to participate, you will be asked to complete a short survey about your perspective on gifted/talented referral/nomination. You do not have to answer any questions that you do not wish to answer. The survey should take 10-15 minutes to complete. Participation is confidential.

As compensation to participate, you can choose voluntarily provide your name, email address, and phone number at the end of the survey to enter a drawing to win one of two \$100 Amazon gift cards.

If you are interested in participating, please click on the following link to route you to the online survey link: https://etsuclemmer.iad1.qualtrics.com/jfe/form/SV_3OAF3Lm5U1cdTXE.

Thank you for your consideration!

Appendix D: Demographic Questionnaire

Background Information

- A) What is your gender?
1. Male
 2. Female
 3. No-binary/ third gender
 4. Prefer not to say
- B) Do you consider yourself American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, or White?
1. American Indian or Alaska Native
 2. Asian
 3. Black or African American
 4. Native Hawaiian or Pacific Islander
 5. White
 6. Other
 7. Prefer not to say
- C) Do you consider yourself to be Hispanic or Latino?
- 1) Yes
 - 2) No
- D) What is your age range?
- 1) 46 or more
 - 2) 36-45
 - 3) 26-35
 - 4) 25 or less
- E) What is the highest level of school that you completed?
- 1) Doctorate
 - 2) Master's
 - 3) Bachelor's
 - 4) Associate's
 - 5) High School Diploma/ GED
- D) What is your area of specialization?
- 1) General Education
 - 2) Special Education
 - 3) Gifted Education
 - 4) Early Childhood Education
- F) How long have you been teaching (years)?
- 1) 7 or More
 - 2) 5-6
 - 3) 3-4

4) 1-2

G) What is your school's Socioeconomic status (SES)?

1) Low

2) Medium

3) High

VITA

GUILLERMO IBARRA MENDOZA

- Education: Ph.D. Early Childhood Education, East Tennessee State University, Johnson City, TN, 2023.
- M.A. Early Childhood Education, East Tennessee State University, Johnson City, TN, 2016.
- B.S. Clinical Psychology, East Tennessee State University, Johnson City, TN, 2014.
- Professional Experience: Doctoral Fellow, Southern Region Education Board (SREB) Scholar. 2016-2020.
- Graduate Assistant, East Tennessee State University, Clemmer College of Education, Department of Early Childhood Education, 2016-2020.
- Publications: Mendoza, G. I. (2016) Exploring Gesturing as a Natural Approach to Impact Stages of Second Language Development: A Multiple Baseline, Single Case Study of a Head Start Child. Electronic Theses and Dissertations. Paper 3121. <https://dc.etsu.edu/etd/3121>.
- Honors and Awards: ETSU Graduate School Dissertation/Thesis Scholarship, 2022
- Commendations for Doctoral Comprehensive Exam, 2019
- Outstanding Doctoral Student for Teaching, 2018-2019
- ETSU Clemmer College of Education Thesis Award, 2017
- ETSU Graduate School Thesis Award, 2017

SREB-State Doctoral Scholars Fellowship, 2016-2019

ETSU Graduate Assistantship (Doctoral), 2016-2020

ETSU Graduate School Dissertation/Thesis Scholarship, 2016

ETSU Graduate Assistantship (Masters), 2014-2016

ETSU James H. Quillen Scholarship , 2015-2016

Omnisource Scholarship, 2014-2015