Preservice Teachers' Referral of Students for Special Education

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Preservice Teachers’ Referral of Students for Special Education

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Honors Thesis

Neag School of Education

University of Connecticut

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Abstract

The purpose of this study was to understand which students teachers nominate for special education services, and what student qualities influence the nomination. Specifically, in this study, we investigated whether a student’s ethnicity and classroom behavior influence his or her nomination for special education. We created six profiles in which we varied ethnic names and classroom behaviors, and asked juniors and seniors in a selected teacher preparation program to evaluate the profile they were given. They were then asked to indicate whether or not they would refer their given hypothetical student for special education services, and to provide justification for their choice. The major quantitative findings of this study were that, in the selected teacher preparation program, there was not a statistically significant influence of (a) student race, (b) student behavior, or (c) the interaction of the two on preservice teachers’ referral decisions. The participants’ qualitative responses agreed with the quantitative results with regards that student race did not have an impact on referral. However, many preservice teachers cited student behavior in their open-ended justification statements as a significant influencer of their referral choices. The information from this study will help better prepare teachers to serve students with diverse learning needs.
Chapter One

Statement of the Problem and Review of Literature

The purpose of this study was to understand which students preservice teachers refer for special education services, and what student qualities influence the referral. This information will help us prepare teachers to better serve students with different learning needs. We created six profiles in which we varied students' classroom behavior and race, and distributed the surveys to undergraduate preservice teachers in a teacher preparation program. We investigated whether either of these factors influenced pre-service teachers' attitudes about nominating the students for special education services. Specifically, we addressed the following questions:

- Are preservice teachers at the selected university influenced by race when referring students for special education services?
- Are preservice teachers at the selected university influenced by student behavior when referring students for special education services?
- Are preservice teachers at the selected university influenced by student behavior when considering students of different races?

Literature Review

History and Purpose of Special Education

The field of special education has made significant strides in ensuring students with disabilities procure their right to education—in fact, six million children with disabilities receive the benefits of special education services nationwide (Artiles, Kozleski, Trent, Osher, & Ortiz, 2010). Throughout history, young people with disabilities of all kinds were deprived of this right through isolation and institutionalization. And, even when public schools made literal and
figurative room for these students, receiving special education services often became a euphemism for being cast aside. Students in special education were segregated into classrooms that were not only separate from peers without disabilities, but were also categorized by inferior instruction, lower standards, and such a dearth of services that parents often needed to turn to outside service-providers at their own expense (Katsiyannis, Yell, & Bradley, 2001; Winzer, 2006). Now, positive changes instituted by researchers, educators, and advocates within the system of special education have provided new avenues to ensure that students with disabilities are receiving the research-based interventions that they need to succeed academically while also minimizing connotations and practices of stigmatization and separation (Connor, 2013). Such encouraging indicators of progress include legally-binding and legally-mandatory Individualized Education Programs (IEPs; Yell, Katsiyannis, Ennis, Losinski & Christle, 2016), implementation of multi-tiered systems of academic and behavioral support and Response to Intervention (Sailor, 2009), and ever-evolving models of push-in services, inclusive classrooms, and co-taught approaches.

The intention of IDEA—the Individuals with Disabilities Education Act, or the federal document that explicitly states the rights, responsibilities, and protections of students with disabilities (Katsiyannis, Yell, & Bradley, 2001)—and the spirit of the special education system as a whole are to serve and integrate students with disabilities and diversabilities into normative school culture through ensuring legal protections to students who, before IDEA, would have been confined to home or to an institution (Connor, 2013). In fact, after IDEA was passed into law, “advocates, educators, and policy makers believed that all children, no matter their race, language, or social class, would progress through a fair and equitable educational process” (Artiles et al., 2010, p. 283). The formation and implementation of IDEA was structured around
several core principles that promoted this idea of just protection and equitable service: unbiased assessment, FAPE (free and appropriate public education) that is structured around an IEP, dedication to educating students in the LRE (least restrictive environment), and participation of the parent and the student in the IEP process, to name a few (Artiles et al., 2010; Individuals with Disabilities Education Act, 2004; Katsiyannis, Yell, & Bradley, 2001). However, the system is not yet perfected. Special education does offer individualized services to the benefit of students with disabilities, and yet there are still trends of poor post-school outcomes: lower graduation rates, lesser likelihood of attending and completing college, and greater probability of being unemployed or arrested for these same students (Connor, 2013).

**Overidentification of Students of Color for Special Education**

*What is overidentification?*

While the purpose and main tenet of the special education system is to promote inclusion while simultaneously providing necessary individualized services, there exists a glaring inequity. The nation has seen a trend of overidentification of students of color for special education—and consequent disproportionate placement (Office of Special Education and Rehabilitative Services, 2016). In other words, the percentages of students of color receiving special education services is far greater than the proportion of students of color in the entire make-up of a given school’s student body. Students of color in special education are being excluded, being segregated, being marginalized, experiencing school as a place in which they are set up by an institutionalized structure to fail, and encountering discouraging post-school outcomes (Ferri & Connor, 2005; Kearns, Ford, & Linney, 2005).
What is the identification process?

To understand the potential weaknesses and biases in the special education system that might lead to the national occurrence of overidentification, it is first necessary to understand the procedures in place for referring and placing a student in special education. Several such structures exist. For instance, IDEA mandates Child Find, which requires that all children with disabilities be found, assessed, and offered a special education plan if necessary. It applies to children even before they enter school. This part of the law is broad enough to meet the needs of children both inside and outside the public school system—identification and evaluation is mandated for children who are homeless, children who are enrolled in private schools, and children who are wards of the state (Individuals with Disabilities Education Act, 2004). In addition to child find, IDEA also allows for a more organic referral to occur at any point within a child’s education once he or she is already enrolled in school—a teacher or a parent might notice a particular challenge a student is facing in the school or home environment, and can then request further discussion, testing, and inquiry into the possibility that the student has a disability (Lechtenberger, Griffin-Shirley, Hamman, & Hettler, 2013). Once one of these referral procedures have been initiated, a team of school personnel comes together and receives consent from the child’s parent to begin testing. Students must then undergo a panel of assessments that test all possible areas of need—this evaluation portion of the process then determines the student’s eligibility for special education (Bateman & Linden, 2012). The root of the overidentification problem may be located within this methodology for identifying, referring, and determining eligibility of students with disabilities.
Teacher Bias

Professionals in the field call into question the possibility of teacher bias and racial prejudice as a salient cog in the wheel of the overidentification problem. Proponents of the teacher bias theory examine the prospect that overidentification of students of color for special education might be catalyzed during referral. Many authors identify a fundamental problem at the educator level that manifests in possible inappropriate or unjustified referral of students of color for special education (Howard, 2003; Voltz, Brazil, & Scott, 2003).

For instance, in the current referral and placement model, the adults (namely, the school professionals alongside the parent) make the academic decisions for the student. In fact, most students—more than 80%—who are in special education receive services because a teacher took the first step of referring them to be assessed (Jordan, 2005). This process of referral and placement is never entirely nonbiased, impersonal, and empirical. It involves the input of many individuals (most predominantly, teachers) at many stages of testing and deliberating (Yell, Katsiyannis, Ennis, Losinski, & Christle, 2016). It is this human element, this reliance on professional opinion and experience, that causes the decision of whether or not a student is referred and placed in special education to be a highly idiosyncratic one (Togut, 2011). This subjectivity presents a dilemma: When the social construct of race factors into the referral and IEP process, does racial difference between the decision-making educators and the child in question adversely affect accurate placement in special education? In a societally-influenced and judgement-based system of recognizing, testing, categorizing, and placing a student with a disability, there is a connection between the way in which teachers view the student’s race and the way they make decisions regarding that student’s academic future (Jordan, 2005).
The majority of educators, nationally, are female and White. In 2012, 82% of teachers in public school settings were White, while only 51% of their students shared their race (Office of Planning, Evaluation and Policy Development, 2016). Several authors argue that teachers therefore might have crucial misunderstandings of cultures different from their own—misconceptions that then map onto the way in which they refer students to special education placements and services, causing the trend of disproportionate referral and placement in special education of African American students (Artiles, Harry, Reschly, & Chinn, 2002; Blanchett, 2006; Gravois & Rosenfield, 2006; Jordan, 2005; Kearns, Ford, & Linney 2005; Skiba, Simmons, Ritter, Kohler, Henderson, & Wu, 2006; Togut, 2011; Voltz, Brazil, & Scott, 2003). In other words, “an overwhelming number of special education students are poor, male, and ethnic minority; educators are primarily middle class, female, and White. When the cultural backgrounds of students and teachers are incongruent, it may result in interpersonal misunderstandings” (Artiles et al., 2002, p. 7).

Kearns and colleagues (2005), for instance, argued that African American students learn and engage in the classroom differently than their peers, and that teacher misunderstandings regarding learning styles can result in consequent cases of mistaken learning disabilities. Similarly, Artiles and colleagues (2002) contended that many White teachers allow racial and cultural bias to cloud their academic, social, and behavioral expectations of their African American students. When teachers set uninformed and unfair expectations for Black students that do not match the students’ own cultural backgrounds, they then perceive behavior or performance outside of their preconstructed norms to be divergent or deviant from that of the students’ White peers (Blanchett, 2006). When this discrepancy is seen as worthy of referral for special education, teacher bias thus perpetuates the phenomenon of overidentification.
Togut (2011) presented yet another angle, highlighting the fact that many students of color are referred to special education over behavioral concerns as opposed to academic issues. In other words, teachers who are “unfamiliar or uncomfortable” (Togut, 2011, p. 170) with a type of childhood behavior acceptable within African American culture might find this behavior “disruptive or threatening” (Togut, 2011, p. 170). A general education classroom teacher interviewed by Skiba, Simmons, Ritter, Kohler, Henderson, and Wu (2006), captured this phenomenon succinctly: “African American children seem to be more outspoken. They seem to be louder. They seem to be active. They seem to be what we would call 'disrespectful,' and for that reason, sometimes teachers don't want to deal with them” (p. 1434). Likewise, Voltz et al. (2003) and Gravois and Rosenfield (2006)—through their investigations into how targeted professional development and implementation of instructional consultation teams, respectively, influenced the issue of overidentification—both traced the problem of overidentification of students of color for special education back to discrepancies between teacher and student race and culture. Misinterpretations of the culturally and/or racially validated behaviors of students by the teacher can and do occur, and lead to overidentification. On its most extreme scale, the funneling of students of color into special education occurs, in essence, to “alleviate teachers’ problems in dealing with culturally diverse children” (Gravois & Rosenfield, 2006, p. 44).

The Role of Teacher Education Programs

Teacher education programs across the country are preparing preservice teachers for their future careers as elementary educators, secondary content-area educators, and special educators. Mimicking the national demographics of in-service teachers, preservice teachers are primarily White and female. They are young, speak English as their primary language, are originally from suburban hometowns, and often wish to teach in “schools whose children exhibited similar social
markers” (Abbate-Vaughn, 2006, p. 2). These university students are the ones who will eventually be referring students for special education services, and they will eventually take their prejudices and biases into the profession. Consequently, many experts believe that teacher preparation programs should mandate multicultural education coursework. They purport that “developing personal and professional critical consciousness about racial, cultural, and ethnic diversity should be a major component of preservice teacher education” (Gay & Kirkland, 2003, p. 181). While many teacher education programs have diversity requirements in their curriculum, the purpose of this study is to investigate whether or not racial and behavioral variables still influence how preservice teachers refer students for special education.

**Possible Solutions Identified by Current Research**

*Teacher-centered solutions: From professional development to changes in practice*

There is existing research that examines teacher bias as a cause of overidentification, and subsequently presents and purports possible solutions. For instance, Howard (2003), Gravois and Rosenfield (2006), and Voltz et al. (2003) look to changes in teacher practice and professional development as possible solutions to the overidentification problem. Howard (2003) situates the issue of overidentification of students of color for special education in the framework of changing national demographics. He argues that changes in the way teachers teach with regard to culture must occur parallel to trends of increasing proportions of students of color in American public schools. He suggests the specific culturally-sustaining pedagogy of teacher reflection for use by practicing teachers, preservice teachers, and education professors in order to affirm and support students’ race and culture. Being affirming of these aspects of identity will promote the academic success of racially diverse students, and therefore potentially intervene on the issue of overidentification of students of color for special education. Teachers’ reflection on their own
identities can function as a tool in order to “recognize how these identities coexist with the cultural compositions of their students” (Howard, 2003, p. 196). While teacher reflection has both positives (sensitivity to students, recognition of one’s own opinions regarding race and instruction) and difficulties (being honest and critical with oneself about one’s prejudices and -isms), a change in educator attitudes and practice might rectify the detrimental cycle of students of color not feeling as if they match their school environment, and therefore not succeeding.

Similarly, Voltz and colleagues (2003) focus on what the educator can do—as a firsthand influencer in the lives of students—to remediate the phenomenon of overidentification. In this study, researchers looked at teachers’ attitudes about their own cultural responsiveness, the way in which they refer their students for special education, and the level to which they feel confident in telling the difference between learning and behavior that is culture-specific and learning and behavior that might require referral. They wished to see how Project CRISP (Culturally Responsive Instruction for Special Populations) influenced these factors at the school faculty level. After Likert scale pre- and post- surveys, pre- and post- phone interviews, and pre- and post- examination of a mock lesson plan, 33 special and general educators’ survey numbers showed the efficacy of the CRISP program in changing teacher attitudes and competencies with regard to diversity and special education. Teachers felt more competent in collaborating with both students and parents, differentiating between culturally-motivated behaviors and ones that might indicate disability, and planning lessons and teaching with more cultural sensitivity.

Gravois and Rosenfield (2006) chose to approach overidentification from a more logistical, practice-based perspective, assigning 13 of 22 schools in one mid-Atlantic state to institute the training and implementation of an instructional consultation team plan, while 9 other schools were used as comparison schools lacking IC teams. The schools who opted to use IC
teams were provided in-person teacher training, online module training, and ongoing monitoring and support in order to help them develop the savvy and skillset necessary to execute consultation. The researchers then collected data on the numbers of referrals to and placements in special education of students of color specifically. They found that, because IC teams focus so much on collaborative, early intervention as a precursor to referral and placement, the schools that chose to implement the IC team plan saw a decrease in disproportionate referrals and placements of students of color (both in comparison to before they instituted the program and in comparison to the control schools without IC teams in place).

**School-wide solutions: MTSS**

Addressing the subjectivity of referral at a schoolwide level, many schools have found a solution in the implementation of a multi-tiered system of support (MTSS) for all students in the areas of academics (response-to-intervention, or RtI) and behavior (school-wide positive behavior supports, or SWPBS). MTSS models have been cited as a valuable alternative to the discrepancy model of evaluating and referring students, where teacher input and test scores alone might decide whether or not a student is placed in special education (Sugai & Horner, 2009). These tiered systems provide quality instruction for all students in the first tier. If students do not respond, increased, more individualized supports are offered at the second tier. If students do not respond, tier three offers even more intense, personalized supports (Greenwood, Horner, & Kratochwill, 2008). In this manner, students who struggle behaviorally or academically even with the implementation of quality instruction and scientifically-informed methodologies are identified and can be referred, eliminating much of the guesswork and opinion-based decision making within the referral process.
Conclusion

The existing literature expounds on the phenomenon of overidentification of students of color for special education as a problem that currently occurs in American public schools. Teacher bias is a potential cause of overidentification cited by researchers in the field, and authors like Howard (2003), Gravois and Rosenfield (2006), and Voltz et al. (2003) encourage a growing and strengthening emphasis on teacher-focused approaches to minimizing the prevalence of over-referral and overidentification for special education. At a more institutional level, the MTSS models are a different solution with the same intent—to provide a strategic, objective system that addresses the subjectivity of the referral process. There is, across the board, a consensus that solutions that would work to minimize biases and maximize educator awareness of multiculturalism and racial diversity in the classroom are necessary to achieve learning environments more conducive to the academic success of students of color. Future research, therefore, is needed to examine teacher perceptions of how their own racial biases interact and intersect with special education, and what they feel would help resolve the problem of overidentification.
Chapter Two

Methods

This study was conducted to investigate the student qualities that influence preservice teachers’ referral of students for special education services. Hard-copy surveys were given to preservice teachers in an undergraduate teacher preparation program at a large public university in the northeast United States.

Participants

A total of 81 third- and fourth-year undergraduate preservice teachers from a five-year integrated bachelor’s/master’s teacher preparation program participated in this study. Participants were both male and female, from a variety of racial and ethnic backgrounds and income levels. All of the participants were over 18 years of age.

The university at which this study was conducted is ranked among the top public research universities in the country. Similarly, the school of education in which all of the study participants were enrolled is currently ranked among the top public graduate schools of education in the country (U.S. News and World Reports, 2018). Participants were from a pool of juniors and seniors in a nationally-accredited teacher education program in which enrolled students earn their bachelor’s and master’s degrees in education, as well as licensure to teach in the state, in a 5-year period. The program requires all students to participate in semester-long clinical experiences, full-time student-teaching for an entire semester, and in-school internships where they conduct research. Preservice teachers in this program observe, research, and teach in a variety of education environments—multiple age and grade levels, and schools in both urban and suburban areas. Additionally, the integrated bachelor’s/master’s program requires rigorous
coursework in a wide range of academic areas such as exceptionality, classroom and behavior
management, assessment, educational psychology, teaching methods, and multicultural
education. In fact, the school lists equity and social justice as one of its primary areas of focus.

**Instrument**

In this study, surveys were comprised of a short profile for a hypothetical fifth-grade
student. Six different profiles were administered to participants. These mock profiles included a
student’s name, gender, age, grade level, race/ethnicity, primary language, present levels of
performance in the areas of reading and mathematics, and current services being received, as
well as the teacher’s name and comments provided by the teacher. Because the purpose of this
study was to investigate whether a student’s race/ethnicity and classroom behavior influence his
or her nomination for special education, the listed race and ethnicity, the ethnic names, and the
student behaviors were varied amongst the six profiles.

The first student profile (Profile #1) was written for “Josh M.” (see Figure 1). Josh M.
was a 10-year-old male in Mrs. Lambert’s fifth grade class. He identified as White, and had
English listed as his primary language. He was performing at grade level in math, but his scores
indicated that his reading performance was at a second-grade level. He was receiving Tier 1
instruction (i.e., core curriculum) in math, but was receiving Tier 3 intervention in reading
(individualized instruction with a reading coach 3 times per week). His teacher commented that
he was “a pleasure to have in class,” and that he was a hardworking, helpful, responsible, and
respectful student.
The second student profile (Profile #2) was also written for a “Josh M.” (see Figure 2).

This Josh M. was also a 10-year-old male in Mrs. Lambert’s fifth grade class. He also identified as White, and also had English listed as his primary language. Like in Profile #1, he was performing at grade level in math, but his scores indicated that his reading performance was at a second-grade level. He was receiving Tier 1 instruction (i.e., core curriculum) in math, but was receiving Tier 3 intervention in reading (individualized instruction with a reading coach 3 times per week). Unlike Profile #1, however, the student in this profile was described by his teacher as “off-task,” “disruptive,” and distracting to peers.
Profile #1 and Profile #2 were then replicated, and the variables of race/ethnicity and ethnic name altered, to create two entirely new profiles. These two profiles, like in profiles #1 and #2, featured 10-year-old, English-speaking males in Mrs. Lambert’s fifth grade class. They both were performing at grade level in math, but had scores indicating that their reading performance was at a second-grade level. They were both receiving Tier 1 instruction (i.e. core curriculum) in math, but were receiving Tier 3 intervention in reading (individualized instruction with a reading coach 3 times per week). One profile listed a student who exhibited predominantly appropriate classroom behaviors, and one profile detailed a student who exhibited inappropriate behaviors.

Figure 2. Profile #2, for White male with inappropriate behaviors
predominantly inappropriate classroom behaviors. However, unlike the “Josh” profiles, these profiles were written on Black students with the name “Darnell” (see Figures 3 and 4 below).

![Student Profile](image)

**Figure 3.** Profile #3, for Black male with appropriate behaviors
Two more profiles were produced, identical to Profiles #1 and #2—except the race/ethnicity and ethnic name variables were once again changed. These profiles were written on students named “Guillermo” who identified as Hispanic/Latino (see Figures 5 and 6 below).
Student Name: Guillermo C.
Student Gender: M
Student Age: 10
Student Grade Level: 5
Teacher: Mrs. Lambert
Student Race: ☐ American Indian or Alaska Native ☐ Asian ☐ Black or African American
☐ Native Hawaiian or Pacific Islander ☐ White ☐ Other
Student Ethnicity: ☑ Hispanic or Latino ☐ Not Hispanic or Latino
Primary Language: English
Present Levels of Performance (Reading): Guillermo, after assessment, is shown to be reading at a second-grade level (DIBELS Composite: 210).
Present Levels of Performance (Mathematics): At grade level
Services Received: Guillermo is receiving Tier 1 instruction in mathematics (core curriculum). He is receiving Tier 3 intervention in reading (individualized instruction with a reading coach 3 times per week).
Teacher Comments (optional): Guillermo is a hard worker and respectful student. He is always willing to help his classmates, and he comports himself with professionalism and enthusiasm for learning. He is performing at grade level in math. However, he is performing below grade level in reading. He struggles with phonics, and consequently struggles with the higher-level fluency and comprehension tasks that are part of the fifth-grade curriculum.

Would you refer this student for special education? Circle your choice.
Definitely Wouldn't  Probably Wouldn’t  Probably Would  Definitely Would
Indicate why you chose your answer: ________________________________

Figure 5. Profile #5, for Hispanic/Latino male with appropriate behaviors
At the bottom of each of the six student profiles, a Likert scale was provided. When prompted “Would you refer this student for special education?,” participants could select one of four closed-answer options: definitely wouldn’t, probably wouldn’t, probably would, or definitely would. Participants were then prompted to indicate why they chose their answer in the open-response space provided.
Procedures

The student profiles were created by the researcher and the research was approved by the Institutional Review Board. Permission was given by several professors of junior- and senior-level education courses at the university for the researcher to distribute surveys in their classes. Surveys were then distributed to third- and fourth-year undergraduate preservice teachers in those classes. The profiles were randomly distributed. Each participant received one student profile to evaluate.

The preservice teachers who received the survey were told that they were invited to participate in a research study to better understand nomination of students for special education services. They were instructed that the survey would take approximately 10 minutes to complete, and that participation was completely voluntary and anonymous. They were asked to read a hypothetical student profile, select their referral decision on the Likert scale, and indicate why they chose their answer—there were no right or wrong answers. They were told only that the study would look at which students teachers refer for special education services, and what student qualities influence the referral—the target variables of race/ethnicity and behavior were not identified.

Those who wished to complete the survey did so at some time during the class. The researcher placed a box near the exit, where students were asked to deposit both completed and uncompleted surveys.

Data Analysis

Each possible response on the Likert scale was given a numerical value, one through four (1 = Definitely Wouldn’t Refer, 2 = Probably Wouldn’t Refer, 3 = Probably Would Refer, 4 =
Definitely Would Refer). The results of the survey (the profile number and Likert scale rating for each preservice teacher response) were entered into SPSS, and the data were analyzed using a 2x3 ANOVA.
Chapter Three

Results

A total of 81 surveys were completed by participants. Table 1 delineates how profiles with the two target variables—race/ethnicity and student behavior—were spread across participants. A total of 41 of the distributed surveys contained an inappropriate student behavior profile, while 40 contained an appropriate student behavior profile. 27 of the distributed surveys were for “Josh,” the White student. 28 were for “Guillermo,” the student that identified as Hispanic/Latino, and the remaining 26 were for “Darnell,” the Black student.

Table 1
Distribution of Profiles to Participants

<table>
<thead>
<tr>
<th>Value Label</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>27</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>28</td>
</tr>
<tr>
<td>Black</td>
<td>26</td>
</tr>
<tr>
<td>Behavior</td>
<td></td>
</tr>
<tr>
<td>Inappropriate</td>
<td>41</td>
</tr>
<tr>
<td>Appropriate</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 2 provides the number of each behavioral profile distributed within each race/ethnicity, as well as the mean and standard deviation of the Likert scale data for each combination of the two independent variables (race/ethnicity and behavior). Additionally, it provides the mean and standard deviation for the total number of profiles distributed for each race. As shown below, the mean score of the profiles for “Josh” was 2.7778, the mean score of the profiles for “Guillermo” was 2.8214, and the mean score of the profiles for “Darnell” was
2.5769—all falling between the *Probably Wouldn’t Refer* and *Probably Would Refer* classifications.

Table 2
*Mean and Standard Deviation of Scores*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Behavior</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Inappropriate</td>
<td>2.8462</td>
<td>.68874</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Appropriate</td>
<td>2.7143</td>
<td>.61125</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.7778</td>
<td>.64051</td>
<td>27</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Inappropriate</td>
<td>2.7333</td>
<td>.79881</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Appropriate</td>
<td>2.9231</td>
<td>.64051</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.8214</td>
<td>.72283</td>
<td>28</td>
</tr>
<tr>
<td>Black</td>
<td>Inappropriate</td>
<td>2.6923</td>
<td>.48038</td>
<td>13</td>
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<tr>
<td></td>
<td>Appropriate</td>
<td>2.4615</td>
<td>.66023</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.5769</td>
<td>.57779</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>Inappropriate</td>
<td>2.7561</td>
<td>.66259</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Appropriate</td>
<td>2.7000</td>
<td>.64847</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.7284</td>
<td>.65216</td>
<td>81</td>
</tr>
</tbody>
</table>

Note: A higher score indicates that preservice teachers were more likely to nominate the student for special education services.

Table 3 shows the results of the 2x3 ANOVA. From the data displayed in this table, it is possible to discern whether or not the influence of either race/ethnicity or behavior (or both, or the interaction between the two) were statistically significant to preservice teachers’ referral of students for special education services. As shown below, there was not a statistically significant interaction between race and behavior (Race*Behavior) at the $p=.471$ level, $F(2,75)=.761$, $p=.471$, $\eta^2=.020$. Likewise, there was not a statistically significant influence of race on preservice teachers’ referral of students for special education, $F(2,75)=1.094$, $p=.340$, $\eta^2=.028$. 
There was also not a statistically significant influence of behavior on preservice teachers’ referral of students for special education services, $F(1, 75)=.155$, $p=.695$, $\eta^2=.028$.

Table 3
Results of 2x3 ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Significance Level ($p$)</th>
<th>Partial Eta Squared ($\eta^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>.946</td>
<td>2</td>
<td>.473</td>
<td>1.094</td>
<td>.340</td>
<td>.028</td>
</tr>
<tr>
<td>Behavior</td>
<td>.067</td>
<td>1</td>
<td>.067</td>
<td>.155</td>
<td>.695</td>
<td>.002</td>
</tr>
<tr>
<td>Race*Behavior</td>
<td>.658</td>
<td>2</td>
<td>.329</td>
<td>.761</td>
<td>.471</td>
<td>.020</td>
</tr>
<tr>
<td>Error</td>
<td>32.406</td>
<td>75</td>
<td>.432</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>637.000</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R$ Squared=.048 (Adjusted $R$ Squared = -.016).

The major quantitative findings of this study were that, at the selected university, there was not a statistically significant influence of (a) race, (b) behavior, or (c) the interaction of the two on preservice teachers’ referral decisions—as illustrated by the $p$ values in Table 3 above.

As will be discussed below, the average referral decision for all six profiles was between 2 and 3 (or between Probably Wouldn’t Refer and Probably Would Refer). The majority of the profiles were scored as either a 2 or a 3 on the Likert scale, and the scores were accompanied by justification statements for the referral decision that heavily featured four primary schools of reasoning. None of the justification statements mentioned the hypothetical student’s race or ethnicity, but all of the statements cited (a) the student’s present level of reading performance, (b) the provision of Tier 3 supports already in place, (c) the need for further assessment before decision-making, and/or (d) the student’s behavior in the classroom environment as motives for
referring or not referring the student for special education services. So, while neither student race nor student behavior, nor the interaction between the two, had a statistically significant influence on these preservice teachers’ referral decisions, the hypothetical students’ behavioral profile was the one independent variable that was mentioned frequently in participants’ open-ended justification responses.

**Referral Decisions: Josh (Profiles #1 and #2)**

As the data shows, there was no significant difference in referral of the White student profile as compared to the Black or Hispanic/Latino student profiles. Likewise, there was no significant difference in the referral of the Josh in Profile #1 (who exhibited appropriate classroom behaviors) as compared to the referral of the Josh in Profile #2 (who exhibited inappropriate classroom behaviors). However, the qualitative data in the form of the participants’ open-ended responses to the prompt, “Indicate why you chose your answer,” illustrate three common themes across both Profile #1 and Profile #2.

First, the student’s present level of reading performance was a shared concern that was prevalent in the justification statements of many preservice teachers who would probably (or definitely) refer Josh for special education services. A preservice teacher commenting on Profile #1 stated, “he [Josh] is performing below grade level in reading. He needs intensive intervention in order to learn the foundational skill of phonics.” Another agreed, writing, “his reading level is 3 grades lower than it should be so it would be more beneficial to get him up to par with other students sooner rather than later.” The focus on a grade-level and/or skill-level discrepancy in the area of reading was not limited to Profile #1. A preservice teacher making a referral decision for Profile #2 justified her *Definitely Would Refer* choice by saying, “since Josh lacks basic reading skills, and he is in fifth grade, he needs more intensive interventions and accommodations. He is
severely below grade level.” These preservice teachers focused primarily on their students’ academic performance with regard to grade-level and skill development when making their referral decisions.

Another common thread of the open-ended survey responses for Profiles #1 and #2 was the prevalence of the Tier 3 reading intervention being provided. Some participants believed the Tier 3 reading support already in place for the student was not effective, as the student was not responding to the intervention. “Tier 3 interventions don’t seem to be helping,” claimed one preservice teacher, while another stated, “Tier 3…doesn’t seem to be effective because he [Josh] is still struggling.” Conversely, other participants believed the provision of Tier 3 reading supports was reason enough to not refer the student. One participant captured this school of thought: “With the tier 3 instruction he is already receiving, I believe he can work on the phonics and fluency with them and stay in the Least Restrictive Environment.” These participants, instead of focusing solely on reading level, chose to focus on how the hypothetical student’s school already has a tiered support model in place. Their qualitative responses, however, differed in whether or not they believed the Response to Intervention, tiered model was functioning to serve the student’s needs.

A third commonality emerged in many of the justification responses—several preservice teachers maintained that they would require additional assessment data before making a final referral or eligibility decision. One preservice teacher, who indicated that she Probably Wouldn’t refer Josh for special education, openly claimed that he/she was “not qualified to refer him to special education without further evaluation.” Another participant, who indicated that she Probably Would refer Josh for special education, posited that the student may have a specific learning disability in reading, but would need assessment to confirm: “Josh needs an appropriate
assessment before he is recommended for special education services. His PLOP indicates he may have a disability in reading, but that must be diagnosed first.” These responses suggest that these preservice teachers require additional information before making eligibility decisions—present levels of academic performance, explanation of supports currently in place, and a behavioral profile were not comprehensive enough. These preservice teachers would seek further diagnostic testing.

Lastly, several preservice teachers who took part in the study included behavioral details in their justifications. One participant, in the response to Profile #1 (the student who exhibited appropriate classroom behaviors), claimed that she Probably Wouldn’t refer the student because, “he has good social skills.” Conversely, in response to Profile #2 (the student who exhibited inappropriate classroom behaviors), participant responses cited “frustration over his struggle to read,” “special ed could also potentially help him with strategies to work through his frustrations,” and “acting out during reading time” as reasons influencing their potential referral of the student. So, while the data gathered from the Likert scale ratings indicate no statistically significant influence of student behavior on preservice teachers’ referral decisions, behavior was frequently included in their reasoning.

Referral Decisions: Guillermo (Profiles #3 and #4)

The referral decisions reflected by responses on the Likert scale showed that there was no significant difference in referral of Guillermo (the student who identified as Hispanic/Latino) as compared to the White or Black student profiles. Additionally, there was no significant difference in the referral of the Guillermo in Profile #3 (who exhibited appropriate classroom behaviors) as compared to the referral of the Guillermo in Profile #4 (who exhibited
inappropriate classroom behaviors). However, once again, the participants’ responses to the prompt for rationalization of their answers illustrated the same four common arguments.

Several preservice teachers explained their choice to refer or not refer Guillermo using his below-grade-level reading performance and apparent lack of foundational reading skills as justification. One participant succinctly stated, “I would recommend him for special education because he is 3 grade levels behind in reading,” while another further explained that “since he is in 5th grade and is performing at a second grade level, that obviously means he is having trouble. He is also good at math, which could also mean that he has a learning disability.” Regardless of the hypothetical student’s race or behavioral profile, these preservice teachers looked only at the student’s reading performance in comparison to his at-grade-level peers.

Other comments provided by participants emphasize the use of tiered academic supports—some believing that Tier 3 reading interventions are adequate for the student’s reading development, while others believe that Guillermo’s lack of response to the current interventions is evidence that supports referral for special education services. For instance, two separate responders agreed that “Working with the reading coach individually will help—the student seems fine elsewhere and probably just needs more help” and “Tier 3 reading would continue to work well for him. I don’t think he needs special ed.” Both of these participants selected that they Probably Wouldn’t refer their target student for special education. On the other hand, another preservice teacher interpreted the same tiered intervention information as symptomatic of the presence of a disability, writing, “if he has continuously received individualized intervention and is still not responding, it may be prudent to consider a referral to see if the problem is a learning disability.” These preservice teachers all found the profile information regarding the student’s current reading interventions as vital to their rational, and yet, like in the
responses to Profiles #1 and #2, different participants used the information to support two converse arguments.

Thirdly, study participants who responded to a Guillermo profile did mention the need for further assessment information and context before making a well-justified referral decision. One person who claimed that he/she *Probably Would* refer Guillermo from Profile #3 (appropriate behavior) for special education said that “this student could at the very least be tested.” Another person who claimed that he/she *Probably Would* refer Guillermo from Profile #4 (inappropriate behavior) for special education responded that, “since the student lacks phonics and therefore cannot meet expectations in fluency and comprehension, I think the student should be tested.” Once again, in both the appropriate-behavior and inappropriate-behavior profiles, preservice teachers were requesting additional assessment information before making a referral choice.

Lastly, the responses that cited Guillermo’s behavior mimicked the behavior-based justification statements on the Josh profiles. A preservice teacher responding to Profile #3 (appropriate behavior) claimed that he/she probably would not consider referral simply because the Guillermo in Profile #3 was “a hard-working student.” However, responders to Profile #4 (inappropriate behavior) often included comments on Guillermo’s behavior when they rationalized why they probably would refer him. One preservice teacher explained that the academic and behavioral components of special education would benefit this student—"Guillermo could benefit from more individualized reading help and could also likely benefit from a behavior management plan”—while another simply wrote that, “because this student has uncontrolled behavioral outbursts because of his reading difficulties, I would most likely refer him.” While student behavior was not a significant influencer on referral decisions based on the
Likert scale data, there was a discrepancy in the positive nature of behavioral comments made on Profile #3 and the negative nature of behavioral comments made on Profile #4.

**Referral Decisions: Darnell (Profiles #5 and #6)**

The open-ended responses of preservice teachers who reviewed and made referral decisions on the Darnell profiles were consistent with the commonalities in the responses to the profiles of the White and Hispanic/Latino students. While the data showed no significant difference in referral of Darnell (the student who identified as Black) as compared to the White or Hispanic/Latino student profiles, and while there was no significant difference in the referral of the Darnell in Profile #5 (who exhibited appropriate classroom behaviors) as compared to the referral of the Darnell in Profile #6 (who exhibited inappropriate classroom behaviors), the justification statements of survey participants reflected that they considered the student’s reading grade-level, the presence of tiered supports, the need for additional testing data, and student behavior in their decision-making process.

Several participants who indicated that they would probably refer Darnell for special education services mentioned his below-grade-level performance in reading as suggestive of a need for an individualized education plan. Two teachers who made a referral decision regarding Darnell from Profile #5 (appropriate classroom behaviors) agreed that “Because Darnell’s reading level is below grade level somewhat significantly, I would recommend him for special education services,” and that, “special education would purely provide scaffolding to help him develop his reading/phonics.” Even the preservice educators who responded to Profile #6 (inappropriate classroom behaviors) provided strikingly similar responses. One claimed that, “He is 3 grade levels behind. Since he lacks fluency and comprehension, he may have an unidentified reading disability. It is worth looking into it as a possibility,” while another near-identical pro-
referral response was, “because Darnell is reading 3 grades below his grade and it says he lacks the basic competency in phonics.” Thus, regardless of the student’s behavioral report, many preservice educators rely heavily on grade-level academic information when making referral decisions.

Other preservice teachers cited the function of the hypothetical school’s tiered system of support in their rationalization for referral decisions. In most of the decisions regarding Darnell, however, the interpretation of his Tier 3 support was that it was not functioning to meet his needs. Several participants agreed that he “is receiving coaching 3x per week and is still very behind,” “intervention has taken place, however the student is still struggling,” and “his instruction is not working and he may need more one-on-one instruction.” Only two responders claimed that they would increase his in-class support without likely referral for special education.

Like in the previous four profiles, several participants—who responded to both the appropriate and inappropriate Darnell behavior profiles—claimed that they would require additional testing to make a sound referral decision. One preservice teacher concisely wrote, “I need more information,” while others extended their inquiry, writing, “more testing should be done to determine eligibility” and “I would recommend further testing to hopefully determine a more concrete explanation and help for further support.” In these cases, the preservice teachers felt that the provided profiles did not contain satisfactory diagnostic information—while, notably, many of their preservice peers did not share or cite this concern.

Lastly, while the quantitative data collected indicate no statistically significant influence of behavior on referral, many preservice teachers qualified their Likert scale decision with a qualitative statement on the student’s behavior. One teacher, who likely would not refer Darnell in Profile #5 for special education, claimed that her decision was based on the fact that he “has
no behavior issues.” Alternatively, the inappropriate behaviors included in Profile #6 were woven into the justification statements of several of the teachers who responded to that profile. One identified Darnell’s behavior as “disruptive,” while another positioned his behavior in the context of the whole-class environment, writing that “the behaviors have extended to disrupt the whole class.” Once again, the behavioral aspect of the students’ profiles were prevalent in the open-ended explanations of rationale—even though it had no statistical significance in the quantitative data analysis.
Chapter Four

Discussion

Major Findings

The guiding questions of this study targeted the influence of student race/ethnicity, student behavior, and the interaction of student race and behavior on preservice teachers’ referral of students for special education services. Were preservice teachers at the selected university influenced by race when referring students for special education services? Were preservice teachers at the selected university influenced by student behavior when referring students for special education services? Were preservice teachers at the selected university influenced by student behavior when considering students of different races?

After analyzing the Likert scale data utilizing a 2x3 ANOVA, it was determined that there was no statistically significant influence of student race/ethnicity on the referral of students for special education by preservice teachers at the selected university. There was also no statistically significant influence of student behavior on the referral of students for special education by preservice teachers at the selected university. Lastly, there was not statistically significant influence of behavior when considering students of different races for referral for special education.

When looking at the independent variable of race in isolation, the qualitative data agrees with the quantitative data—none of the referral justification statements mentioned race. However, the qualitative data provided by the preservice teachers’ responses to the open-ended prompt did not agree with the results of the 2x3 ANOVA data analysis when looking at the independent variable of student behavior. Many participants cited student behavioral profiles as a
significant factor in their referral decisions in their open-ended responses. This indicates that, perhaps, the issue of referral for special education services is more nuanced. The responses of participants in this study illustrate that the target independent variable of student behavior as described by the classroom teacher might have more impact than reflected by responses to the Likert scale. For several preservice teachers who Probably Wouldn’t or Definitely Wouldn’t refer their students for special education services, descriptors from the appropriate behavioral profiles like “hard worker,” “respectful,” “willing to help,” and “enthusiasm for learning” were reflected back in their justification statements. Similarly, the “off-task and disruptive” behaviors of Profiles #2, #4, and #6 were reflected often in the open-ended responses of preservice teachers who Probably Would or Definitely Would refer. Perhaps, for these preservice teachers, the presence of inappropriate behaviors that might serve as distractions to the student and to others in the classroom is grounds for referral—despite the diverse in-school clinical experiences and behavior-focused coursework required by the teacher preparation program.

Implications

The over-referral and overidentification of students of color for special education continues to be an issue in schools across the country. As discussed in the review of literature, a difference in race and cultural background between teacher and student—and the consequent prejudices and misunderstandings—could be contributing factors to this trend. However, the quantitative data analyzed in this study shows that overidentification does not appear to be an issue for this specific sample of preservice teachers. Contrary to the nationwide phenomenon of disproportionate referral of students of color for special education, student race/ethnicity had no statistically significant bearing on how participants referred hypothetical students for special education services. Perhaps this could be attributed to the purposefully-diverse variety of
professional development partner schools with which students in the teacher preparation program are matched for clinical experiences and student teaching. From large urban school districts to smaller suburban and rural placements, students in the selected program have taught learners of diverse race, ethnicity, family and cultural background, and language. The unimportance of race in the preservice teachers’ referral decision-making, both quantitatively and qualitatively, might also be connected to the attention the school of education pays to equity and social justice. These are themes in much of the program’s coursework, and all students must take a class in multicultural education. All preservice educators in the program are prompted to examine the pervasiveness of systemic issues of prejudice, identity, discrimination, privilege, and inequity in America’s schools. Perhaps their increased awareness of these issues had a positive effect on their referral decisions in this study.

However, while student behavior did not have a statistically significant influence on preservice teachers’ referral choices quantitatively, their open-ended responses showed that students’ behavioral profiles were considered and used as fodder for decision-making. While the quantitative data indicates that participants did not connect student race to their behavior (which, as discussed in the literature review, can occur when there is a discrepancy between the expected behaviors of a White teacher and the learned cultural behaviors of students of color), they did cite disruptive behavior as a reason to refer and positive behaviors as a reason to not refer. Instead of considering the possibilities of utilizing a tiered system of behavioral support—which, as described, is a data-driven model that relies on the student’s response to interventions of increasing intensity instead of on arbitrary opinion—the preservice teachers involved in this study factored the student’s present levels of behavioral performance immediately into their referral decisions. Conceivably, the participants would benefit from increased exposure to the
multi-tiered system of support (MTSS) model, through partner-schools that have embraced the system and through increased instruction on its importance. The program might also consider courses that highlight the fundamental importance of objective, impartial, data-based decision-making when confronted with a student’s behavioral concerns.

Universities across the country are preparing preservice educators for their future careers—and the obligation of referring students for special education services. The results of this study can be used to inform the curricular and professional development requirements of teacher education programs like the one from which our participants were selected. For example, the school’s extensive focus on diversity and equity in education—manifested in multicultural education coursework and boots-on-the-ground teaching experience in diverse partner schools—perhaps influenced the lack of disproportionate referral of students of color in the sample of preservice teachers from the program. Such attention and dedication to increased awareness of inequity and experience with diversity might be mimicked in teacher education programs throughout the country. Likewise, other universities might take into consideration the possibility that their preservice educators are not fully prepared to address disruptive and off-task behaviors appropriately. By offering classes, resources, and clinical experiences that target an evidence-based, data-informed, structured, and unbiased approach to responding to inappropriate classroom behaviors, teacher preparation programs might begin to stem the flow of improper, unjustified referrals for special education services.

This study is limited in that the results and consequent conclusions can only be applied to the participants from the chosen teacher preparation program. They cannot be applied to preservice teachers from other universities, nor can they be applied to practicing educators. It must also be noted that participant information—age, race/ethnicity, area of study, or previous
teaching experience—was not collected, so limited conclusions can be drawn related to the identity and background of the preservice educator.

In order to draw broader conclusions, more inquiries must be made and more studies done on the referral of students for special education—specifically, on the academic, racial/ethnic, behavioral/socioemotional student qualities that influence teachers’ referral decisions. This study was done with participants from a single teacher preparation program in the Northeast, but there is so much more to be learned about the referral decisions of preservice teachers (and practicing teachers) from universities and K-12 schools across the country. Does student race and/or student behavior influence the referral decisions of first-year teachers? Do these variables influence the referral decisions of veteran teachers? Does geographic area or socioeconomic status of the school district have a bearing on how teachers refer students for special education services? How are English Language Learners (ELLs) addressed in current systems of referral? Answers to these questions are potentially vital to solving the problem of overidentification of students of color for special education services, and thus more studies must be done in this area.

As long as the unequal referral of students for special education continues to be a national phenomenon, more investigation must be done, more questions answered, and more preservice teachers prepared for their field. These future educators will undoubtedly play a critical role in the provision of an appropriate education for all. Consequently, however, it will be their responsibility to refer students for individualized academic and behavioral interventions. If these referral decisions are to be data-driven and well-justified, teacher preparation programs like the one that participated in this study must think proactively and provide the experiences and supports necessary to successfully prepare preservice teachers to make them.
References


Appendix

The Institutional Review Board (IRB) reviewed the "Request for Exemption" for the research study referenced above. According to the information provided, the IRB determined that this research is exempt from continuing IRB review under 45 CFR 46.101 Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. Enclosed please find the validated information sheet. An approved, validated information sheet (with the IRB’s stamp) must be used to consent each participant.

All investigators at the University of Connecticut are responsible for complying with the attached IRB "Responsibilities of Research Investigators".

Any proposed changes that may affect the exempt status of the research study must be submitted to the IRB for review and approval prior to their implementation.

Attachments:
1. Validated IRB-5 Application and Protocol
2. Validated Information Sheet
3. Validated Appendix A Form
4. Validated Data Collection Form
5. "Responsibilities of Research Investigators"

Office of the Vice President for Research
Research Compliance Services
Responsibilities of Principal Investigators
The IRB holds the PI responsible for the overall management of an approved study. Management of the study encompasses the ethical, technical, administrative, and fiscal elements of a project. The PI may delegate certain tasks, but retains ultimate responsibility and accountability. Principal investigators are required to:

- Acknowledge and accept their responsibility for protecting the rights and welfare of human research participants, including the equitable selection of research participants, ensuring that risks to participants are minimized, and that the risks are reasonable in relation to anticipated benefits;
- Fulfill the training requirement for the protection of human participants in research (CITI on-line training modules, [www.citiprogram.org](http://www.citiprogram.org)), and to understand the ethical standards and regulatory requirements governing research activities with human participants;
- Supervise all study personnel and ensure that all personnel abide by the ethical principles of respect for persons, beneficence and justice, as outlined in the Belmont Report;
- Ensure that all study personnel are knowledgeable of, and conduct the study in accordance with the approved protocol (including approved amendments);
- Ensure that all research activities have IRB approval and other approvals required by the institution before human participants are involved, and implement the research activity as it was approved by the IRB;
- Report any real or potential conflicts of interests of the PI or any study personnel in compliance with conflict of interest policies and management plans;

- Obtain informed consent from participants before participants are involved in the research, and document consent as approved by the IRB. A copy of the IRB-approved informed consent document must be used. Participants must be provided with a copy of the form after it has been signed, unless the IRB has specifically waived this requirement. Documented evidence of informed consent of the participants or their legally authorized representative is to be retained in a manner approved by the IRB. The consent process involves two required elements: 1) a discussion of the study by the person obtaining consent and the participants, and 2) an opportunity for participants to read the consent form. Please note that it is never appropriate to forgo the discussion, even if participants will then read the consent form. Participants must be given the opportunity to have the consent form read to them if they have difficulty reading;

- Maintain written records of IRB reviews, decisions, research records and informed consent documents;

- Obtain IRB approval for and notify the sponsor (if applicable) of any proposed change to the research protocol prior to its implementation, except when necessary to eliminate apparent immediate hazards to the participants;

- Obtain re-approval by reporting progress of approved research to the IRB, in the manner prescribed by the IRB, but not less than once per year;

- Promptly report to the IRB any adverse events, protocol deviations or other unanticipated problems involving risks to participants or others. PIs should not undertake any action with an external funding
agency regarding an unanticipated problem or noncompliance without first contacting the IRB Chair or the DRC in order to determine the correct course of action,
Verify that IRB approval has been obtained from all participating institutions in collaborative activities with other institutions, and that continuing review by other institutions is maintained,

Version: May 2010

University of Connecticut Office of Research Compliance
Storrs and Regional Campuses

Ensure the confidentiality and security of all information obtained from and about human participants, and the privacy of participants is maintained,
Use the most current version of IRB forms and document templates, which can be downloaded from the IRB website (http://www.irb.uconn.edu/forms.html),
Oversee the budget and expenditures related to the study to ensure that adequate resources are available, including staff, equipment supplies, storage space etc., to conduct the study at the University and any other performance site for which the PI is responsible,
Ensure charges assessed to insurance carriers are for procedures for illness or injury directly resulting from the research procedures of the study, if applicable,
Provide the IRB with audit or inspection reports or findings issued by regulatory agencies, cooperative research groups, contract research organizations, the sponsor or the funding agency, Communicate, when applicable, the investigator's plans to meet with representatives of the community from which individuals will be recruited, about community concerns, values and expectations,
Maintain, when applicable, accurate records on the receipt, use and disposition of excess drugs/devices,

Responsibilities of All Key Personnel
The IRB holds all study personnel (including PI and co-investigators) responsible for meeting certain obligations. Study personnel are required to:
• Fulfill the training requirement for the protection of human participants in research (CITI on-line training modules, www.citiprogram.org), and understand the ethical standards and regulatory requirements governing research activities with human participants,
• Comply with applicable IRB policies and procedures,
• Document contact with participants, e.g., obtaining informed consent or informing participants of changes that may affect their willingness to continue participating,
  Provide a thorough explanation of the study in lay terms to the participant during the consent process,
  Provide the participant with an opportunity to ask questions and have them answered when obtaining informed consent and throughout their participation,
Understand the appropriate use of an investigational intervention (drug or device) as described in the protocol, investigator brochures, product information/drug labeling, and various other available sources such as newsletters, safety alerts, or communications from sponsors, if applicable,

- Be familiar with and follow the adverse event and protocol deviation reporting requirements.

Version: May 2010
Section I: Does this Form Apply?
- Are you conducting research involving prisoners? OYes üNo
- Are you conducting research involving the use of deception? DYes
- Are you recording data in such a way that it can be linked to the participants? OYes MNo
- Are you conducting research involving direct interaction with children? OYes YNo
- Are you audio or videotaping participants? DYes MNo
- Are you specifically recruiting HIV+ individuals? OYes gNo

SECTION II: General Information

Type of Research: Undergraduate

Study Title: Pre-Service Teachers' Nomination of Students for Special Education

Study Objective (2-3 sentence summary of study):

UCONN IRB

The purpose of this study is to understand which students teachers nominate for special education services, and what student qualities influence the nomination. This information will help us better prepare teachers to better serve students with different learning needs. We have created six profiles in which we vary students' classroom behavior and ethnicity. We hope to learn whether either of these factors influence pre-service teachers' attitudes about nominating the students for special education services.

Student Investigator, Faculty PI, Correspondent Information:

Student Investigator
Name: MacLachlan, Annie L
Department: EPSY
Preferred Phone #: 860-716-9972

Faculty PI
Name: Del Siegle
Department: EPSY
Preferred Phone #: 860-486-0616

Correspondent
Name: Annie MacLachlan
Department: EPSY
Preferred Phone #: 860-716-9972

Are there additional key personnel to be listed on this study? DYes

Section II: Collaborating Institutions/Facilities and Other IRB Reviews

The research will be conducted only at Storrs and/or the five regional campuses, School of Law, or School of Social Work with no involvement of a collaborating institution.

NOTE: You may need to obtain IRB approval at all sites where the research is taking place. Please see the Office of Research for additional information.

List Location(s) Name of Collaborating Facility Describe Involvement IRB/Ethics Approval and/or Site Institution/Permission Attached?
DYes ☐No
DYes ☐No
DYes ☐No

Provide additional comments as needed:
If the PI Student Researcher or other key personnel has an affiliation with an Institution listed above, please list:

SECTION III: Funding

It is the responsibility of the Principal Investigator to notify the IRB via an Amendment (IRB-3) form if the funding source changes.

- C] Human Rights Institute
- C] Research Incentive Account
- C] Graduate School DDE
- C] Office of Undergraduate Research Award

C] VPR Research Excellence Program

C] Faculty Start-Up Funds

C] g Investigator Out-of-Pocket

Office of Undergraduate Research Award

Unfunded

SECTION V: Human Participants

Total number of participants to be enrolled? 180

51
If you are enrolling more than one population describe the total enrollment for each.

Participant Population(s): Describe the participant population(s) including gender, ethnicity, income, level of education and age range. Participants will include juniors and seniors within the Neag School of Education’s IB/M program. Participants will be both male and female, from a variety of ethnic backgrounds and income levels. All of the students are over 18 years of age.

Recruitment: Describe how participants will be identified and recruited. Attach copies of all advertisement/recruitment materials for IRB review. Surveys will be distributed during junior and senior education classes. All students will receive the survey. Those who wish to complete the survey will do so at some time during the class. There will be a box near the exit, where students may deposit completed and uncompleted surveys, as well as completed forms for the gift certificate drawing as they leave class.

Special Population(s):

Identify any special participant population(s) that you will be specifically targeting for the study. Check all that apply.

- Minors
- Economically/ Educationally Disadvantaged
- Pregnant Women/ Neonates
- Members of the Armed Forces
- UConn Students
- Other (Please Identify): UConn Employees

UConn Students or Employees:
Are you recruiting students who are in a class or teach or for which you have responsibility? Yes No

Populations Selected (IRB Office Use Only) UConn Students
Introduction

You are invited to participate in a research study to better understand nomination of students for special education services. This will take about 10 minutes of your time to complete. Your participation is completely voluntary. You are being asked to participate because you are a junior or senior in the Neag School of Education, and we are interested in the opinion of pre-service teachers.

Why is this study being done?

We are conducting this research study to understand which students teachers nominate for special education services, and what student qualities influence the nomination. This information will help us better prepare teachers to better serve students with different learning needs.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will be asked to evaluate one short profile of a hypothetical student. This should take no more than 10 minutes of your time. You will then be asked to indicate whether or not you would recommend this student for special education services, and to indicate why you chose to recommend or not recommend the student. There are no right or wrong answers.

What are the risks or inconveniences of the study?

We believe that there are no known risks to participating in this study. A possible inconvenience might be the short time that it takes to complete the survey.

What are the benefits of the study?

You may not benefit directly from this research, however, the results of this survey may help increase our knowledge on Neag 1B/ M student preparation to identify different types of students.

Will I receive a payment for participation? Are there costs to participate?
There are no costs involved in this study, but you may choose to be entered into a drawing to receive one of five $20 gift certificates to the UConn Dairy Bar after completing the survey.

UCONN IRB

How will my personal information be protected?

Your identity for this study is anonymous. You will not record your name on the survey. We will not ask you for your name. If you wish to be entered into the drawing for a UConn Dairy Bar gift certificate, you will complete a separate form listing your name and contact information that is not linked to the survey. The results of the study will be published as an honors thesis. We will do our best to protect the confidentiality of the information we gather from you but we cannot guarantee 100% confidentiality. You should also know that the UConn Institutional Review Board (IRB) and the Office of Research Compliance may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Can I stop being in the study and what are my rights?

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. You do not have to answer any question that you do not want to answer. Only evaluate the profiles if you voluntarily wish to participate. You indicate your consent to participate in this study by evaluating the profiles.

Whom do I contact if I have questions about the study?

Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this study or if you have a research-related problem, you may contact the principal investigator, Del Siegle, at del.siegle@uconn.edu or at 860-486-0616, or the student researcher, Annie MacLachlan, at annie.maclachlan@uconn.edu or at 860-716-9972. If you have any questions concerning your rights as a research participant, you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802.

UCONN IRB
Appendix A — Personnel

Appendix A: Key Personnel and Study Investigators Log/ Personnel Amendment Form

Instructions: The IRB must review and approve all changes to the Key Personnel, before implementation in the field. Submit this log at the time of initial review and at continuing review if changes are being made. Include the complete list of UConn Key Personnel and non-UConn Investigators. In addition, submit this form and an IRB-3 Amendment Request Form, to add or remove individuals to the protocol throughout the approval period.

PI: Maclachlan, Annie L
Protocol Title: Pre-Service Teachers’ Nomination of Students for Special Education

UConn Key Personnel Engaged in Research (i.e. enroll participants, conduct consent process, collect or review data/identifiable information from participants, intervene/interact by performing invasive procedures, have access to information that links participants’ names or other identifiers with their data, or act as authoritative representatives for the investigators) - Provide the following information for each person:

Important: Please be specific. For example, the term "Co-Investigator" is not sufficient. You must describe the specific role (e.g. "Co-Investigator - train confederates"). For student directed research, the role of the PI may be described as "PI - oversee/mentor student researcher." For full board and expedited studies, include the specific procedures (e.g. blood draws, interview, survey distribution, acting as a confederate) each person will perform and his/her experience/training with this procedure.

<table>
<thead>
<tr>
<th>Name</th>
<th>Start Date</th>
<th>End Date</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maclachlan, Annie L</td>
<td>26-Sep-17</td>
<td></td>
<td>Student Investigator</td>
</tr>
</tbody>
</table>

- Role/Primary Function Performed in Study (see Important Note Above) Distribute survey, enter and analyze data.

<table>
<thead>
<tr>
<th>Name</th>
<th>Start Date</th>
<th>End Date</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single, Dr.</td>
<td>26-Sep-17</td>
<td></td>
<td>PI</td>
</tr>
</tbody>
</table>

- Role/Primary Function Performed in Study (see Important Note Above) Advisor to the student researcher. Will advise on data entry and assist with data analysis.

UCONN IRB Review (Add Personnel - Review)

Approved On: 10/25/17
Approved By: PELKL
UCONN IRB