EFFECT OF STUDENTS' ETHNICITY ON TEACHERS' CULTURAL SENSITIVITY

AND TREATMENT RECOMMENDATIONS IN A TEXAS SCHOOL DISTRICT

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DEDICATION

My dissertation is dedicated to several people. First, in the loving memory of my grandfather, who raised me as a child, and never gave up on me even when others thought I would fail. Your encouragement and inspirations made me strong. Thank you for believing in me. I miss you with all of my being and I will never forget your gentle heart. Next, I would like to acknowledge my family who provided me with an excellent education abroad. Thank you for providing me the opportunities to be successful in life. Next, I would like to dedicate this work to my partner who moved to New York with me for my internship. Thank you for all your love and support. You made this challenging process easier to bear. Lastly, this dissertation is also dedicated to my cohorts in the program. Thank you for not allowing me to give up when stress surpassed my sanity. There is light at the end of this long tunnel. Yes, WE did it. I will never forget the hardship and struggles we all shared, but our friendship made this journey more feasible to achieve. Thank you everyone for helping me achieve my dreams.

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when the light to the end of the tunnel seemed far. Thank you everyone for helping me

achieve the impossible.

ABSTRACT

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EFFECT OF STUDENTS' ETHNICITY ON TEACHERS' CULTURAL SENSITIVITY
AND TREATMENT RECOMMENDATIONS IN A TEXAS SCHOOL DISTRICT

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Parents and teachers alike are especially concerned about the growing dropout
rates among Latino and African American minority students. Empirical data suggests
student biases continue to be problematic in terms of the discrepancy between teacher
referrals for special education. Students' ethnicity played a significant role on certain
patterns of teacher referrals. Caucasian and Asian American students were more likely to
be nominated by teachers for gifted and talented programs, whereas Latino and African
American students were more likely to be referred for special education services.
However, it is unclear what type of school related services are affiliated with each ethnic
group. This study was designed to examine if students' ethnicity influences teachers'
decisions for treatment recommendations.

The sample consisted of 99 teacher participants from Irving Independent School
District (ISD) located in the state of Texas. After completing an online demographic
background questionnaire, participants were randomly assigned to one of five stimulus
conditions (student vignettes). Immediately after reading the vignette, teachers were
instructed to answer two questions regarding their conceptualization of the student's

problem and specific treatment recommendations. Participants were then instructed to complete the Teacher Multicultural Attitude Survey (TMAS) to measure their self-reported level of cultural sensitivity. The study utilized two separate 5 X 2 (students' and teachers' ethnicity) and 3 X 2 (number of multicultural trainings and level of self-reported cultural sensitivity) MANCOVA designs to analyze the relationship between the independent variables and the two dependent variables (treatment planning and teachers' TMAS scores).

Analysis of the results suggested that the ethnicity of the students in the vignette had no impact on how the teachers responded. However, there was a statistically significant difference between the ways White and non-White teachers responded to the dependent variables. Significance of .05 (academic), .02 (counseling), and .04 (parental) interventions were observed in this study. Additionally, there was a statistically significant difference among the TMAS scores of teachers who rated themselves as having High versus Middle or Low level of cultural sensitivity. Length of time spent teaching and the number of multicultural trainings did not have an effect on how participants' responded to the dependent variables. Implications, limitations, and directions for future research are presented at the end of the paper.

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CHAPTER I

INTRODUCTION

Julián is an eight-year-old Mexican boy who is loud, funny, and somewhat impulsive at school. His teachers described him as "the class clown" who is eager to get any kind of attention from others around him, "the unmotivated child" who has the cognitive abilities to excel in school but is somehow struggling in all academic areas, "the trouble maker" who gets sent to the principal's office many times a week, and "the loner" who has difficulty forming positive relationship with other classmates. Julián has a low tolerance for frustration paired with a lack of coping strategies, so his initial reaction to challenging social situations is to verbalize through screaming, yelling, and sometimes cursing at other students. Not surprisingly, his classmates disapprove of his negative behaviors and distance themselves from him. Consequently, he reported feeling rejected by his peers. In the 3rd grade, Julián demonstrated a strong negative attitude towards school, during which he repeatedly made comments regarding his desire "to skip school and never come back."

Academically, he is failing all classes due to low performance scores and consistently incomplete work. When his teachers were asked what factors contributed to his problem behaviors at school, they collectively responded with the same answer -- "he is just lazy and his mother does not value his education". It is common to blame external factors without the context or knowledge of a child's family background at home.

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Julián's father was incarcerated when he was very young, leaving him, his older brother, and his mother without any means for financial support. Consequently, his mother had to maintain three jobs to support her family. A language barrier is a crucial factor impeding the home-school alliance, because it limits the amount of communication between his teachers and his mother to effectively improve Julián's progress at school.

At a macro level, Julián is symptomatic of a growing problem facing the education system and, more broadly, the society as a whole with the challenges of an America continuing to expand in its ethnic, cultural, and linguistic diversity. On a more micro level one controversial concern regarding the achievement gap between minority and nonminority students is receiving growing attention in topical literature. Numerous research studies have demonstrated that students from minority backgrounds are more prone to drop out of high school and experience higher levels of psychological distress (Beauvais, Chavez, Oetting, Deffenbacher & Cornell, 1996; Carpenter & Ramirez, 2007; Cole, Matheson, & Anisman, 2007; Kataoka, Langley, Stein, Jaycox, Zhang, Sanchez, &Wong, 2009; Sullivan, Riccio, & Reynolds, 2004). Among the major minority groups, the Latino population is most likely to drop out of school (Beauvais et al., 1996; Cebollero, Cepeda, Emanuel, Gabb, Gonzalez, Heintz, & Rosario, 1993, 1994; Chang & Le, 2010; Ream & Rumberger, 2008; Sullivan et al., 2004). The Latino population in the United States (U.S.) is largely composed of individuals of Mexican, Puerto Rican, Salvadoran, and Cuban descent (U.S. Census Bureau, 2011b). Statistically, they are the largest and fastest growing minority group in the U.S. composing 16 percent of the total population with approximately 50.5 million residents, (U.S. Census Bureau, 2011b). It is

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essential that the educational needs of this significant proportion of the community are addressed while ensuring that the appropriate services are employed.

Historically, students that drop out of school encounter many social issues and potential problems such as unemployment, violence, and crime (Beauvais et al., 1996; Cebollero et al., 1993, 1994; Miller, 2009), which has an economic impact at local, state, national, and even international levels, while directly impacting the individuals' emotional well-being (Beauvais et al., 1996). As the U.S. continues to evolve into a knowledge-centric workforce and the job market becomes increasingly competitive, graduating from high school has become a necessary prerequisite for any type of job security (Miller, 2009). In 2009, only 55.7% of Mexican students graduated from high school as compared to 88.2% for Asian and Pacific Islanders, 87.1% for Caucasians, and 84.1% for African Americans (U.S. Census Bureau, 2011a). Similarly, many studies have identified Latino students as the at-risk minority group most prone to dropping out of school (Beauvais et al., 1996; Cebollero et al., 1993, 1994; Chang & Le, 2010; Hirschfield, 2009; Ream & Rumberger, 2008; Sullivan et al., 2004). Given the current and projected growth of the Latino population coupled with one of the highest reported rates of school dropouts, effective prevention and intervention programs are urgently needed.

The story of Julián illustrates a common response and approach to dealing with low-achieving minority students and raises questions about the potential effects of racial biases in the classroom teaching climate. In an effort to better understand the effect of students' ethnicity on teachers' mode of service delivery, it is necessary to examine

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teacher perceptions of students' problems, their decisions, and their decision making process in determining the appropriate treatment plan for each student. Researchers have demonstrated the significance and importance of multiculturalism within the school climate and its impact on minority students' academic motivation (Chang & Le, 2010; Gonzalez-Espada, 2004; Wu & Bilash, 1998). Perceived multiculturalism in a supportive school environment that values cultural diversity fosters better academic outcomes (Chang & Le, 2010). Latino students, in particular, are more negatively affected by the school climate as compared to other minority subgroups (Chang & Le, 2010). As a result, there is a need for more research into the effects of multiculturalism within the classroom and how best to harness its positive impact. Having a clearer understanding of multicultural and multilingual students will lead to the more appropriate deployment of educational services supporting both mainstream and special needs students.

Statement of the Problem

It is the researcher's belief that some teachers' reasons for student referrals or recommendations are influenced by students' ethnicity. In fact, this assertion is supported by several recent research findings (Coutinho, Oswald & Best, 2002; Cullinan & Sabornie, 2004; Elhoweris, Mutua, Alsheikh, & Holloway, 2005; Fletcher & Navarrete, 2003; Langdon, 1989; McBee, 2006; MacMillan, Gresham, Lopez & Bocian, 1996; Moore, 2002; Ortiz & Yates, 1988; Redden, Forness, Ramey, Ramey, Zima, Brezausek & Kavale, 1999; Rueda, 1993; Sullivan, 2011; Yeh, Forness, Ho, McCabe & Hough, 2004). Elhoweris et al. (2005) and McBee (2006) studied the effect of children's ethnicity on teachers' tendency for referral and recommendations for gifted and talented

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programs. The findings indicated that students' ethnicity impacted teachers' referral decisions, suggesting racial attitudes play a mediating role in minority students' placement in gifted programs.

Latino students are more likely to be referred for Learning Disability (LD) evaluations (Coutinho, Oswald & Best, 2002; Fletcher & Navarrete, 2003; Langdon, 1989; Ortiz & Yates, 1988; Rueda, 1993; Sullivan, 2011); African American students are more likely to be referred for Emotional Disturbance (ED) evaluations (MacMillan et al., 1996; Yeh et al., 2004), Asian students are more likely to be referred for speech/language and/or anxiety based evaluations (Illinois State Board of Education, 1991; Na, 2007; Zin & Rafik-Galea, 2010); Caucasian students are more likely to be referred for depression and/or anxiety (physical symptoms or fear) based evaluations (Cullinan & Sabornie, 2004; Redden, Forness, Ramey, Ramey, Zima, Brezausek & Kavale, 1999).

Available data suggests that pre-service teachers (student teachers) have greater cultural sensitivity due to newer training programs focusing on multiculturalism (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). However, studies of regular teachers have found they have more negative attitudes toward students from different ethnic and socioeconomic statuses (SES) (Crawford, 2007; Elhoweris, Mutua, Alsheikh, & Holloway, 2005; Hinojosa & Moras, 2009). A review of the literature also suggests that teachers' racial biases continue to influence their perception of ethnic students (Bigham, 2010; Clifton, Perry, Parson, & Hryniuk, 1986; Edl, Jones, & Estell, 2008; Jensen, 1973; Richardson, 2002; Roseberry-McKibbin & Eicholtz, 1994; Tenenbaum & Ruck, 2007). Two separate

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studies found that teachers have negative attitudes towards minority and especially Latino students (Edl et al., 2008; Tenenbaum & Ruck, 2007).

As the largest minority, the current and projected Latino population growth demographic alone demands attention and clearly demonstrates the enormous complexity faced by students and teachers alike. As educators it is incumbent to not only understand the myriad complexities of culture and language, but also to assure students that bias and discrimination, conscious or unconscious, does not belong in the classroom. It is therefore essential to first test educational systems and methods to fully understand the scale of the problem and identify the best strategies to address identified concerns.

Research Questions

The purpose of the study was to examine the role of students' ethnicity in teachers' decisions regarding treatment planning. An operational definition of teacher bias was constructed to minimize the ambiguity of the term. Therefore, teacher bias was defined as any belief systems that adversely affect teachers' perception and treatment of the students in school. Specific research questions are: 1) Does level of cultural sensitivity influence teachers' perception of students' academic and/or behavioral problems? and 2) If so, does their self-perceived cultural sensitivity influence their treatment recommendations?

Research Hypotheses

Two hypotheses were tested in this research study:

H_1: Teachers who scored high on the Teacher Multicultural Attitude

Survey (TMAS) are likely to be sensitive to cultural diversity. Therefore, it is

expected that teachers with high TMAS scores are less likely to be influenced by students' ethnicity when making treatment referrals and recommendations.

H_2: Teachers who share the same ethnic background as the student understand cultural challenges, and are less likely to be negatively influenced by students' ethnicity when making treatment referrals and recommendations.

Summary

Research indicates that minorities and more specifically Latinos are disproportionately represented in special education programs (Coutinho, Oswald & Best, 2002; Richardson, 2002; Sullivan, 2011). As a result, this study examined those factors, with a focus on student bias that may influence teachers' decisions to refer students for special education services and to identify reasons that may contribute to this overrepresentation. In Chapter 2, the multiple and varied teacher influences are discussed with references from previous research to identify those areas where teacher bias may affect the student. Lack of achievement and school dropout rates are examined in some detail, as well as causation factors. Teacher training is discussed in the context of the younger more recently trained teachers being more multicultural in their attitudes and teaching. Finally a series of vignettes are presented with control questions to illicit decision drivers and motivators. The purpose of the research study was to examine the role of students' ethnicity in teachers' recommendations regarding treatment planning, and to identify what, if any biases, influenced those treatment recommendations.

Definition of Terms

The following terms are used throughout this study and a brief definition is provided for clarification:

Academic Achievement: Students' academic performances across different areas of school-related subjects (e.g., Language Arts, Mathematics, Science, and Social Studies).

Achievement Motivation: A tendency to develop intrinsic (e.g., learning for pleasure) or extrinsic (e.g., learning for rewards) motivation to be successful in school (Wang, 2008).

At-Risk: Vulnerable group of students most prone for potential school drop-out or failing school.

Ethnicity: A set of cultural characteristics commonly shared by a group of individuals.

Home-School-Community Alliance Intervention: A process designed to modify a student's affect, cognition, or behaviors.

Latino: "A descriptor for students and families of Spanish and Latin American descent, such as Cuban, Colombian, Dominican, Hispanic, Mexican, Mexican American, and Puerto Rican" (Villalba, Akos, Keeter, & Ames, 2007, p. 464).

Multiculturalism: "Multiculturalism is a system of beliefs and behaviors that recognizes and respects the presence of all diverse groups, acknowledges and values their socio-cultural differences" (Rosado, 1996, p. 2).

Prevention: A program designed to reduce the occurrences of different student behavioral problems (e.g., bullying, drug addiction, and life skills).

Racial Bias: A set of racial attitudes (bias) with cues of one racial group eliciting more negative evaluations than cues from other racial groups (Barden, Maddux, Petty & Brewer, 2004).

Socioeconomic Status (SES): A term that measures a family's economic and social position as compared to others based on family income, parental education, and parental occupation. Privilege, power, and control are often associated with SES (American Psychological Association, 2010).

Treatment Planning: A generic term to assess teachers' decisions for students' school related services (e.g., counseling, reading recovery and parental involvement).

CHAPTER II

LITERATURE REVIEW

It is postulated that there exists a situation in the education system where special needs education is being misemployed through general misunderstanding or indeed in some cases due to racial or cultural bias by the teacher toward the student. These circumstances may have contributed to a significant imbalance in the numbers of minority students receiving learning disability support, especially for Latino students (Coutinho, Oswald & Best, 2002; Fletcher & Navarrete, 2003; Langdon, 1989; Ortiz & Yates, 1988; Rueda, 1993; Sullivan, 2011). With the projected growth of minority populations over the next decade, particularly in the Latino community, it quickly becomes clear that urgent attention is required to affirm the causation of the numerical imbalance, to understand the root causes and consequences, and thereafter to take corrective actions. The aggregate scale of this endeavor is beyond the scope of this dissertation; however, a better understanding of the existing situation as it influences the largest minority segment, the Latino community, will compel further investigation and conceivably drive change.

Given the existing and projected growth of Latino immigrant families, school enrollment of Latino students will not only continue to rise but swell rapidly, demanding substantial resources to accommodate their educational needs. Taking into consideration the disproportionate number of Latino students receiving learning disability support and

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that studies have identified Latino students as the at-risk minority group most prone to dropping out of school (Beauvais, Chavez, Oetting, Deffenbacher, & Cornell, 1996; Cebollero, Cepeda, Emanuel, Gabb, Gonzalez, Heintz, & Rosario, 1993, 1994; Chang & Le, 2010; Hirschfield, 2009; Ream & Rumberger, 2008; Sullivan, Riccio, & Reynolds, 2004) this an area of significant concern for school psychologists. Consequently, a review of contributing factors that influence the academic success of Latino students is necessary and is discussed in the following sections.

The disproportionately high percentage of minority students receiving learning disability support is likely to lead to an overburdening of resources from the education system (Coutinho et al., 2002; Richardson, 2002; Sullivan, 2011). The potential scale of this issue is not to be underestimated. Over the past decade or so, the minority population grew rapidly in Texas from 48% to 55% (U.S. Census Bureau, 2011b), making Texas the state with the third highest minority population in the U.S. The Latino population accounted for over half of this nation's total population increase (U.S. Census Bureau, 2011b). As a "majority-minority" state, Texas continues this population growth pattern in both size and in the diversity of that population. The greatest increases continue to be seen in the Latino communities where an increased birth rate and higher rates of immigration have resulted in their representing 38% of the total state population. This growth rate is projected to continue.

Struggles with Language

Immigrants travel from around the globe to settle in the U.S., the majority coming from Latin America and Asia (Miller, 2009). Available data suggested more than four

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million students with Limited English Proficiency (LEP) are enrolled in U.S. schools, composing 10% of the total Pre-kindergarten through 12th grade school enrollment (Guzman, 2002). In 2010, an estimated $24.4 billion (an approximately 7% increase from the prior year) was allocated to the cost of public education in Texas (Texas Education Agency, 2010), indicating a trend in the increase of resources needed to educate the growing diverse student population. Understanding these demographics as well as the underlying educational needs of this fast growing community is the key to deploying the appropriate and effective educational resources and programs. Recent Latino immigrants and indeed those already living in the U.S. face many challenges (e.g., poverty, language barriers, racial discrimination, unemployment, etc.) when compared to their non-LEP peers (Smith-Davis, 2004). Children from these families require additional support from school due to their lack of exposure to the English language.

Studies have shown that LEP students may be conversationally fluent within two years of English language acquisition but five years behind in academic performance as compared to their non-LEP peers (Smith-Davis, 2004). To better understand these circumstances, the term Basic Interpersonal Communicative Skill (BICS) is used to describe those students with conversational fluency, whereas the term Cognitive Academic Language Proficiency (CALP) refers to the apparent gap in academic performance (Smith-Davis, 2004). Because LEP students with BICS may appear conversationally fluent, an illusion of academic grade-level proficiency may be created. Hence, teachers without adequate multicultural training may impose unrealistic academic expectations on LEP students, creating unnecessary academic impediments (Roseberry-

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McKibbin & Eicholtz, 1994). Research has shown a decline in students' perception of competency as they advance in school (Wigfield & Eccles, 2001), possibly attributed to more norm-referenced grading, less individualized teacher attention, and increased school-related stressors (Wigfield & Eccles, 2001). A supportive school environment with realistic teacher expectations can influence self-efficacy and academic achievement in struggling student populations.

Latino Immigrant Students

Many studies identified Latino students as the at-risk minority group most prone to dropping out of school (Beauvais et al., 1996; Cebollero et al., 1993, 1994; Chang & Le, 2010; Hirschfield, 2009; Ream & Rumberger, 2008; Sullivan et al., 2004). To better understand such phenomena, it is important to examine different contributing factors for this group of students.

Socioeconomic Status (SES)

SES is a term used to measure a family's economic and social position as compared to others based on family income, parental education, and parental occupation. Privilege, power, and control are often associated with SES (American Psychological Association, 2010). SES is typically classified under three categories: high SES, middle SES, and low SES. In 2009, an estimated 42.9 million (approximately 14.3%) people in the U.S. had income below the poverty thresholds (U.S. Census Bureau, 2010). Not surprisingly, the Latino and African American minority subgroups had the highest poverty rates as compared to any other race (U.S. Census Bureau, 2010).

Low SES contributes to many of the minority students' school-related academic and behavioral problems (Thomas & Stockton, 2003). The explanation for the correlation between low SES and low academic achievement is unclear. On the one hand, students with low SES appear to be at a disadvantage in their home environment, which limits the type of resources they have available for academic success. On the other hand, the students' schools and neighborhood environments (e.g., exposure to violence, gangs, and substance abuse) can also influence students' academic outcomes (Rothman, 2003). It is likely that all of these factors mediate the low SES and low academic outcomes, which stresses the importance of the home-school-community alliance.

Students from low-income families have a higher risk for violence exposure due to poverty and limited resources, which can lead to impaired school functioning as well as increased school absences (Kataoka, Langley, Stein, Jaycox, Zhang, Sanchez, &Wong, 2009; Solberg, Carlstrom, Howard, & Jones, 2007). Latino students, in particular, have a higher tendency of getting into fights at school, missing school due to safety concerns, and having lower academic achievement and graduation rates as compared to their Caucasian counterparts (Kataoka et al., 2009). Consequently, many of them experience psychological distress, such as depression and anxiety, as a direct result of their exposure to violence in the community (Kataoka et al., 2009; Solberg et al., 2007).

Level of Acculturation

Interestingly, research has shown a direct link between level of acculturation and higher exposure to violence and greater health risk concerns among Latino youth (Kataoka et al., 2009; Saint-Jean & Crandall, 2008). Two versions (English vs. Spanish)

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of self-report measures (the Life Events Scale and the Child Posttraumatic Symptom Scale [CPSS]) and a demographic questionnaire were administered to 1,601 Latino students from seven middle schools in California. The findings suggested that the more fluent students are in the English language the more likely they are to experience violence within the community (Kataoka et al., 2009). Perhaps the level of English fluency mediates the likelihood of Latino students engaging in high risk behaviors (e.g., substance abuse), which in turn affects higher levels of violence exposure both at school and within the community (Kataoka et al., 2009). In addition, higher level of English fluency also mediated higher level of reported symptoms similar to those found in Post Traumatic Stress Disorder (PTSD) among Latino students (Kataoka et al., 2009).

Saint-Jean and Crandall (2008) found a significant relationship between English fluency and students' tendency for drug use and antisocial behaviors. A review of the literature also suggests that level of acculturation affects Latino students' tendency for drug and alcohol use (Kataoka et al., 2009; Myers, Chou, Sussman, Baezconde-Garbanati, Pachon, & Valente, 2009; Saint-Jean & Crandall, 2008). Available data indicated that Latino students who speak English (as compared to those who speak Spanish) are more likely to interact with other deviant peers with greater influences on drug and alcohol consumptions (Kataoka et al., 2009; Myers et al., 2009; Saint-Jean & Crandall, 2008). Furthermore, there is a pattern of English speaking Latino students with families that have greater tolerance for drug and alcohol related delinquent behaviors (Saint-Jean & Crandall, 2008).

Peer Influences

Peer influences continue to be a heated topic. Two separate studies examined the effect of peer influences on substance use. Jinez, Souza, and Pillon (2009) concluded that minority students without family support may engage in substance use to enhance peer acceptance. Similarly, Myers et al. (2009) suggested peer social influences mediated Latino youth's development of alcohol, cigarette, and hard drug use. The data suggested low SES and level of acculturation as mediating factors for exposure to violence, deviant behaviors, and substance abuse (Kataoka et al., 2009; Loukas, Prelow, Suizzo & Allua, 2008; Myers et al., 2009; Saint-Jean & Crandall, 2008; Solberg et al., 2007). Interestingly, another study examined the effects of deviant peer associations in Latino youth's internalizing (e.g., depression and anxiety) and externalizing (e.g., aggression and delinquency) problems (Loukas et al., 2008). A total of 449 Latino families participated in a longitudinal study (16 months). Pre-post data indicated that deviant peer associations mediated a higher level of Latino youth's externalizing and internalizing problems (Loukas et al., 2008). Negative peer associations appear to affect both internalizing and externalizing problem behaviors among Latino youth. Social relationships may also affect Latino students' level of adjustment in school.

Student-Peer Relationships

Student-peer relationships have been studied across the literature, suggesting a positive correlation between adaptive achievement motivations and having healthy peer groups (Berndt, Laychak, & Park, 1990; Nelson & DeBacker, 2008). Berndt et al. (1990) examined the influence of friends on adolescents' motivation to achieve in school.

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Students were randomly assigned to separate discussion groups and asked to make decisions based on their readings of six school-based dilemmas. More specifically, those dilemmas assessed students' preferences for schoolwork or other fun activities (e.g., going to a rock concert or studying for an exam on the same evening). Students who chose the high achievement motivation alternatives were assumed to have strong educational values with high priorities on school-related tasks, while the others who chose the low achievement alternatives were assumed to have less academic interest and to set lower priorities on school-related tasks (Berndt et al., 1990). The results of this study suggest that the similarities of students' responses with friends' decisions indicated friends' abilities to influence their attitudes toward achievement motivation. Furthermore, the study concluded that the quality of the friendship itself can affect motivational outcomes (Berndt et al., 1990). Similarly, Nelson and DeBacker (2008) investigated the role of perceived peer relationships on achievement motivation through self-report questionnaires and found the quality of friendship influenced the level of achievement motivation in the student sample.

Brown, Herman, Hamm, and Heck (2008) suggested Latino and Asian American youth tend to have strong cultural affiliations with their own ethnic groups, which influences their tendency to form friendship with members of the same ethnic backgrounds. Latino youth tend to affiliate more with their own crowd when they have lower SES and higher levels of ethnic discrimination (Brown et al., 2008). It was suggested that affiliation with other youth from their own ethnic background serves as a protective buffer against negative experiences with other peers and adults (Brown et al.,

2008). Similarly, DeGarmo and Martinez (2006) indicated that Latino youth as well as other ethnic minorities benefit from positive support from peers, which can act as a buffer against discrimination and lead to better academic outcomes.

Latino students have also been found to benefit from having positive peer interactions (DeGarmo & Martinez Jr., 2006; Goza & Ryabov, 2009; Karcher & Sass, 2010; Riegle-Crumb & Callahan, 2009). Mixed findings exist for co-ethnic interactions. Riegle-Crumb and Callahan (2009) conducted a study examining the effect of friendship on Latin boys and girls. The findings suggested Latino girls tend to have better academic outcomes when they have interactions with other Latino girls, whereas Latino boys tend to benefit academically when they have co-ethnic ties. Additionally, having friends who have parents with higher educational attainment promoted achievement for both genders (Riegle-Crumb & Callahan, 2009). However, Goza and Ryabov (2009) found negative co-ethnic group results for Latino students, serving as a predictor for lower academic outcomes. Nonetheless, having positive peer associations can influence better achievement motivation and thus better academic results (DeGarmo & Martinez Jr., 2006; Goza & Ryabov, 2009; Karcher & Sass, 2010; Riegle-Crumb & Callahan, 2009).

Parent-Student and Teacher-Student Relationships

Positive role modeling of parent-child and student-teacher-peer relationships can promote increased student participation, compliance, and motivation to learn in schools (Maqsud & Coleman, 2001; Matheson & Shriver, 2005). Achievement motivation is a complex process involving many variables influencing a student's academic achievement. Three separate studies examined the roles of parent-child and teacher-

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student relationships on achievement motivation (Gottfried, Marcoulides, Gottfried, & Oliver, 2009; Maqsud & Coleman, 2001; Regner, Loose, & Dumas, 2009). Regner et al. (2009) studied the perceptions of teacher and parent academic involvement in students' achievement goals adaptation and achievement motivation outcomes. Results of the study indicated that the academic support of both teachers and parents positively correlated with students' mastery goals on academic performances. Regner et al. further suggested that perceived academic support influences students' intrinsic motivation for learning, whereas perceived academic monitoring promotes extrinsic motivation for learning. Similarly, Gottfried et al. (2001) and Maqsud and Coleman (2009) examined the effects of parents' motivational practices on students' achievement motivation and academic outcomes. The findings from both studies suggested that combined task-intrinsic and task-extrinsic parental motivational practices were positively correlated to students' intrinsic achievement motivation to be successful in school. In addition, the studies concluded both teachers and parents play a crucial role in students' development of achievement motivation and self-esteem (Gottfried et al., 2001; Maqsud & Coleman, 2009). The above findings emphasize the importance of teacher-parent-student relationships for academic achievement across all ethnic domains.

Many studies have found significant improvement in Latino youth's academic performance when there is an increase in parental involvement and teacher-student relationship (DeGarmo & Martinez Jr., 2006; Gottfried et al., 2009; Guli, 2005; Maqsud & Coleman, 2001; Niemeyer, Wong, & Westerhaus, 2009; Regner et al., 2009). Three studies examined the issue of parental involvement. Guli (2005) conducted a meta-

analysis of 18 studies that examined using parental consultation to increase positive behavioral changes. The results indicate moderate to large treatment effects, suggesting that increasing parental involvement is an effective tool for changing students' behaviors. Similarly, Niemeyer et al. (2009) examined the effect of parental involvement on Latino students' academic performance. Better academic outcomes were noted when 163 Caucasian and Latino rated their parents' level of involvement both at home and at school. Positive parental involvement was found to lead to improved academic performance for both Caucasian and Latino students. However, when compared to Caucasian parents, Latino parents tend to be more involved at home than at school (Niemeyer et al., 2009).

Patel and Stevens (2010) included parent-teacher beliefs on students' academic ability as a mediating factor in level of parental involvement. A total of 437 parents/guardians and their children were recruited to participate in this study. All parties completed self-report questionnaires designed to study caretakers' and students' perceptions of school performances. Additionally, parents/guardians also provided their ratings of home-school communication and teachers' invitations for them to participate in different school programs. The findings suggested that the more discrepancy there was between teacher-parent or parent-student academic ability beliefs, the lower the tendency for parental involvement at school. Additionally, teachers tend to provide fewer activities to enhance parental involvement when greater discrepancy exists between parental beliefs and students' actual school performance (Patel & Stevens, 2010).

Studies have shown the importance of students' bonding with teacher for greater life satisfaction and better academic outcomes (Brewster & Bowen, 2004; Brok, Tartwijk, Wubbels, & Veldman, 2010; Crosnoe, Johnson, & Elder, Jr., 2004; Paxton, Valois, Huebner, & Drane, 2006; Saft & Pianta, 2001). Paxton et al. (2006) examined the role of adult bonding with adolescents' life satisfaction, indicating greater life satisfaction with positive adult relationships. Two studies from Crosnoe et al. (2004) and Brewster and Bowen (2004) found similar results when investigating student-teacher relationships at school. The results indicated that stronger teacher-student bonding in school mediates better academic achievement and fewer behavioral problems. Another study also yielded support for the importance of teacher-student relationships especially for immigrant students (Brok et al., 2010). Saft and Pianta (2001) examined the role of teachers' and students' characteristics in relational satisfaction. The findings suggested when teachers and students shared the same ethnicity, there were greater relational outcomes, and lower conflicts were reported. Strong evidence regarding the role of relationships in Latino students' school success suggests the need for both teachers and parents to maintain quality relationships with them. Latino students tend to value positive adult and peer relationships, so improving these relationships may serve as a protective factor against negative influences.

Academic Achievement

Multiculturalism serves as an important element of school climate, helping students to feel safe at school. Recent research has shown that negative perspectives contribute to Latino students' failure to reach academic expectations because many

educators perceive bilingualism in a negative context. This negativity is reinforced by parents celebrating English language achievements at the expense of their own linguistic and cultural heritage (Brown & Souto-Manning, 2008). Furthermore, the nature of the support structures for minority students and potential impacts on academic engagement and achievement point to a demeaning schooling process in which minority culture is devalued by administrators and teachers who sort, select, and reward students based on their proficiency with dominant cultural attributes (Flores-Gonzalez, 2005). This curricular bias devalues the minority culture and languages while focusing on compliance with the dominant culture and language, marginalizing expressions of diversity or multiculturalism as evidence of an unintelligent low achiever (Flores-Gonzalez, 2005). Those students that deviate face serious consequences inclusive of expulsion or dropping out of school altogether (Flores-Gonzalez, 2005). A review of the literature suggests that the stronger the students' relational ties to families, teachers, peers, and their own cultural affiliations, the better the academic outcomes for Latino youth (Perreira, Fuligni, & Potochnick, 2010; Taylor & Graham, 2007).

Research has shown that Latino students can have high achievement when they have a positive school climate and supportive home-school relationships (Jesse, Davis & Pokorny, 2004). A study was conducted with 251 middle schools in Texas to examine common factors in high achieving schools for Latino students in poverty. The findings revealed several important school characteristics for better academic outcomes: strong leadership, clear focus on achievement, positive school climate, supportive relationships,

and good communication with parents (Jesse et al., 2004). The findings suggested that positive school climate mediates better academic outcomes for Latino students.

A review of the literature suggests that Latino students can also be successful when they have a strong sense of ethnic identification and support from school (Garrett, Antrop-Gonzalez & Velez, 2010; Ibanez, Kupermine, Jurkovie & Perilla, 2004; Perreira et al., 2010). Two studies have examined the effect of cultural influences on Latino students' achievement motivation (Ibanez et al., 2004; Perreira et al., 2010). Perreira et al. examined 459 Latino students' educational values and beliefs in achievement motivation. All participants completed two questionnaires and a daily checklist (e.g., academic engagement, negative events, and stressors) for a period of two weeks. The findings from this study indicated that Latino immigrants tend to be more academically motivated than U.S. born Latino students, suggesting they may have stronger ethnic identification and family obligations that influence their perceptions of the school environment. Additionally, Ibanez et al. (2004) conducted a study with 129 Latino adolescents (immigrant vs. U.S. born), during which they were instructed to complete three questionnaires that measure academic competence, school belonging, and parental involvement in school. Academic competence and parental involvement were found to be strongly related to achievement motivation among U.S. born students who spoke fluent English. Although all three areas (i.e., academic competence, school belonging & parental involvement) were positively related to achievement motivation for Latino immigrants, sense of school belonging was important for their academic success (Ibanez et al., 2004).

Sense of School Belonging

It is well documented that Latino students' sense of school belonging (e.g., acceptance from teachers and peers) influences their academic motivation and academic achievement (Faircloth & Hamm, 2005; Hurtado & Carter, 1997; McMahon, Parnes, Keys & Viola, 2008; Morrison, Cosden, O'Farrell & Campos, 2003). McMahon et al. (2008) examined the effects of school belonging on academic success and psychological well-being among 136 low-SES African American and Latino students with disabilities (e.g., learning or emotional disabilities). All students completed several questionnaires that measured school stressors, sense of school belonging, academic self-efficacy, school satisfaction, depression, and anxiety. The results of this study indicated sense of school belonging was associated with both academic self-efficacy and school satisfaction (McMahon et al., 2008). More specifically, students with a higher sense of school belonging had fewer depressive symptoms (McMahon et al., 2008).

Faircloth and Hamm (2005) examined students' sense of belonging and found significant effects on academic motivation and achievement. A total of 5,494 students from 7 high schools were recruited for this study, during which they completed rating scales on school belonging, efficacy beliefs, and valuing of school. Students' actual grade point averages (GPA) were obtained to measure their academic success. The findings suggested that Latino students reported higher school engagement and academic motivation when they had a strong sense of school relatedness (Faircloth & Hamm, 2005).

Students' sense of school belonging can change over time and adversely affect their academic outcomes (Morrison et al., 2003). A study was conducted to measure changes in Latino students' sense of school belonging over a 2-year period. A total of 57 Latino students (26 were English learners) were studied from the beginning of fourth grade to the end of sixth grade. Students completed questionnaires about their sense of school belonging and academic achievement throughout the study. The results indicated that Latino students who were English language learners demonstrated a more significant decrease in school belonging than their counterparts, suggesting a need to enhance resources to increase their sense of being connected at school (Morrison et al., 2003). Overall, the literature supports the notion that Latino students perform better when they have a stronger sense of school belonging and relatedness to others in the school environment.

Perceived Racial Discrimination

Students' perceived racial discrimination also has an effect on their academic performances (Brown, Alabi, Huynh, & Masten, 2011; Hwang & Goto, 2009; Rivas-Drake & Mooney, 2009; Stevens, Hamman, & Olivarez Jr., 2007; Tosolt, 2008; Wayman, 2002). Brown et al. studied 350 Latino, African American, and Caucasian students across six elementary and middle schools in California. Students completed interviews and self-report measures on ethnic/gender identity and then answered questions about their awareness of biases. The results indicated that African American and Latino students were more aware of ethnic biases than Caucasians (Brown et al., 2011). Awareness of ethnic biases may influence students' awareness of racial

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discrimination at school. Hwang and Goto (2009) examined the impact of perceived racial discrimination on the mental health of Latino students with negative outcomes. A total of 186 Asian American and Latino students were recruited for this study. All participants completed several self-report measures on perceived racial discrimination and levels of psychological distress (e.g., depression and anxiety). The findings suggested that racial discrimination mediated higher levels of psychological distress such as suicidal ideation, anxiety, and depression (Hwang & Goto, 2009). Consequently, when students are more aware of ethnic biases and racial discrimination, they are more prone to develop psychological distress and difficulties in school (Hwang & Goto, 2009).

Two studies examined students' perception of teachers' behaviors based on their ethnicity. Wayman (2002) conducted a study of 2,409 students' opinions of their teachers' biases (e.g., ethnicity and gender) at school. The results suggested that students' ethnic background was the highest predictor for higher levels of perceived biases. Furthermore, Latino students were more likely to perceive biases than Caucasian students (Wayman, 2002). Similarly, Tosolt (2008) examined students' perceptions of teachers' behaviors based on their ethnicity and gender. A total of 825 sixth graders participated in this study, during which they completed self-report questionnaires about their perceptions of teachers' behaviors. The results indicated both ethnicity and gender play a mediating role in students' perception of teachers' behaviors in school (Tosolt, 2008). Available research data suggests strong relational ties, ethnic affiliation, positive school climate, and sense of school belonging can influence Latino students' academic

achievement. Teachers' characteristics also have an influence in students' academic outcomes.

Teachers' Characteristics

According to existing research, minorities are disproportionately represented in special education categories and/or programs. Many studies have attempted to examine those factors that influence teachers' decisions to refer students for special education support and to identify those reasons that may contribute to the overrepresentation of minorities (Bigham, 2010; Roseberry-McKibbin & Eicholtz, 1994; Richardson, 2002; Smith-Davis, 2004). Bigham (2010) found teachers without specialized training (e.g., special education) tend to have negative attitudes towards students with special needs and were against the inclusion of special needs children in mainstream education. The findings suggested the increase of minority students in special education may be due to a lack of specialized training for teaching the more challenging student population. Consequently, different teachers' characteristics may hinder students' academic achievement. More specifically, teacher bias and non-academically based factors are explored in greater detail.

Pre-service vs. Regular Teachers

Available data suggests that pre-service teachers (student teachers) have greater cultural sensitivity due to newer training programs focusing on multiculturalism (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). Diuguid (2010) studied pre-service teachers' readiness for high poverty schools. A total of 130 pre-service teachers were asked to complete a 31-

item questionnaire. The results suggested that they are "aware, prepared, and have general positive attitudes" towards racial and SES challenges in high poverty schools (Diuguid, 2010). Similarly, Rowland et al. (1999) conducted a study examining pre-service teachers' attitudes towards race, SES, and disabilities. A total of 117 pre-service teachers completed a 21-item instrument, which yielded satisfactory results for racial and SES acceptance. However, they were less tolerant of people with disabilities and different religious beliefs. Walker-Dalhouse & Dalhouse (2006) found significant sensitivity gains when pre-service teachers participated in classes on multiculturalism. Schick and Boothe (1995) found similar results when examining the effects of cultural training programs on pre-service teachers' perceptions of ethnic students.

Studies involving regular teachers, on the other hand, found they have more negative racial attitudes toward students from different ethnic and SES backgrounds (Crawford, 2007; Elhoweris, Mutua, Alsheikh, & Holloway, 2005; Hinojosa & Moras, 2009). Crawford (2007) examined the materials teachers used in self-contained special education classrooms with Latino and African American students with Emotional Disturbance (ED). Qualitative data suggested a significantly lower grade-level of curriculum materials were used in those classrooms, demonstrating the effects of teachers' racial biases in their everyday practices. Hinojosa and Moras (2009) also examined teachers' racial attitudes through a meta-analysis of available pre-existing data. Available data through the General Social Surveys (1994-2004) were analyzed to track teachers' attitude patterns. Results suggested that teachers' racial attitudes were similar

but sometimes less tolerant than those of the general public population (Hinojosa & Moras, 2009).

Many factors may hinder teachers' levels of cultural sensitivity (McKenzie & Scheurich, 2008). A qualitative study was conducted to examine barriers to teachers' willingness for classroom changes. Four major themes of resistance were found: externals factors are sources for students' low achievement, accountability is destructive to teaching, suggesting change is difficult, and teachers are not leaders. The implication is that teachers tend to blame external factors (e.g., lack of parental involvement) for students' academic problems (McKenzie & Scheurich, 2008). Accountability for changes should be placed on all parties involved with the child, which includes parents (e.g., more supervision), teachers (e.g., more instruction), and the child (e.g., more achievement motivation). The conflicting findings for pre-service versus regular teachers on racial attitudes and students' academic outcomes provide evidence for the effectiveness of pre-service training programs and the existence of racial biases among many teachers in the classrooms.

Racial Attitude

Teachers' negative racial attitudes towards minority students continue to be a problem at schools (Bigham, 2010; Clifton, Perry, Parson, & Hryniuk, 1986; Edl, Jones, & Estell, 2008; Jensen, 1973; Richardson, 2002; Roseberry-McKibbin & Eicholtz, 1994; Tenenbaum & Ruck, 2007). An older study by Jensen (1973) examined teachers' attitudes based on students' ethnic and SES backgrounds. Videotapes of fifth and sixth grade students with different ethnic and SES backgrounds were presented to 156

teachers, during which they rated Caucasians more favorably, followed by African Americans and then Latinos. Not surprisingly, SES was also a contributing factor in teachers' ratings of students. Caucasian and African American students with higher SES were rated more favorably as compared to those with lower SES. However, strong negative racial attitude was extended to the Latino subgroup regardless of SES (Jensen, 1973). Similarly, Clifton et al. (1986) found existing racial biases on teachers' evaluation of minority students. As society progresses in the 21st century, racial equality, and discrimination continue to affect the schooling system.

Two separate studies found negative teachers' attitudes towards minority and especially Latino students (Edl et al., 2008; Tenenbaum & Ruck, 2007). Edl and colleagues (2008) measured teachers' perspectives on a group of students in a major Midwestern city. More specifically, they examined racial biases on European and Latino students from regular and bilingual classrooms. Students were enrolled in the study in the fall of their fourth grade year and were followed through spring of their fifth grade year. Teachers completed a survey to rate students four times throughout the year on six different subscales: Aggression, Popularity, Academics, Affiliative (friendliness), Olympian (athletic ability and physical attractiveness), and Internalizing (depression and anxiety symptoms). Latino students were initially rated lower in all areas, but the difference was less significant at later times (Edl et al., 2008). Additionally, they found discrepancies in teachers' ratings of Latino versus European students in the different classrooms (regular vs. bilingual), suggesting their perceptions were based more on English proficiency than on ethnicity (Edl et al., 2008).

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Tenenbaum and Ruck (2007) examined four separate meta-analyses: teachers' expectations for students, teachers' referrals, teachers' negative speech, and teachers' positive and neutral speech. A total of 76 empirical studies were selected to examine the results for each of the categories listed above. Three out of the four meta-analyses yielded small but significant effects. The findings suggested teachers made more positive academic expectations, referrals (e.g., special education, disciplinary action, and/or gifted programs), and positive speech for Caucasian students than Latino and African American students. Furthermore, teachers had higher expectations for Asian American students than for any other ethnic subgroups, suggesting the effects of stereotyping on teachers' perception of students' academic abilities (Tenenbaum & Ruck, 2007).

Despite evidence of teachers' negative racial attitudes and student stereotyping, steady progression towards multiculturalism has been suggested in the literature (Hinojosa & Moras, 2009; Hosterman, DuPaul, & Jitendra, 2008; Ramirez, 2005; Schick & Boothe, 1995). Hosterman et al. (2008) examined the role of student's ethnicity on teachers' rating of Attention-Deficit/Hyperactivity Disorder (ADHD). A total of 172 first through fourth grade students were recruited for this study. Students were divided into two separate groups: students with ADHD and students without ADHD. Mixed racial ethnicity (Caucasian, African American, and Latino) was present in both treatment groups. Teachers were instructed to rate students' ADHD symptoms on two separate measures based on behavioral observations in their classrooms. After the observations, they completed a Likert-scale questionnaire about each student. The results indicated teachers' ratings of students were consistent with the diagnoses of students with or

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without ADHD, suggesting their ratings were based on actual observations and not students' ethnicity (Hosterman et al., 2008).

Interestingly, Ramirez (2005) examined the additional component of teachers' ethnicity in rating minority students for ADHD. A total of 129 Latino and 89 Caucasian teachers participated in the data collection. Teachers were instructed to watch videotapes of Latino and Caucasian students, during which they completed the ADHD rating scales for each video vignette. The findings indicated teachers from both ethnic backgrounds had the same ratings for the Caucasian student. However, Latino teachers rated the Latino student slightly higher on ADHD symptoms. When acculturation was co-varied, no significant differences were found, indicating cultural values may have influenced their ratings more than ethnicity (Ramirez, 2005).

Teacher-Student Racial Congruence

Numerous studies have found positive effects when teachers have the same ethnicity as the students (Downey & Pribesh, 2004; Oates, 2003; Saft & Pianta, 2001; Viadero, 2001). Oates (2003) investigated the effects of students' test performance with the matching/mismatching of teachers' and students' race. Data was collected from the National Educational Longitudinal Study (NELS). A total of 7,249 Caucasian and 836 African American students' standardized test data from 10th and 12th grades were used in the study. Additionally, teachers' (African American vs. Caucasian) perception data on students' expectation and diligence appraisals were also obtained from the NELS. The findings suggested teacher-student racial congruence affects performance results. Caucasian teachers rated African American students less favorable than Caucasian

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students, whereas African American teachers had similar ratings for both subgroups. Downey and Pribesh (2004) found similar matching results of teachers' evaluations of students. Similarly, Saft and Pianta (2001) examined teachers' perceptions and teacher-student racial congruency. A total of 197 preschool and kindergarten teachers and 840 children were recruited for this study. Teachers completed self-report questionnaires on their perceptions of the teacher-student relationship. The results of the study indicated that the ethnic match between teachers and students was related to teachers' perceptions of the teacher-student relationship. Furthermore, when the teacher and student had the same ethnicity, more positive ratings of teacher-student relationship were reported (Saft & Pianta, 2001).

A collective theme emerged from a review of the research: although training programs improve multiculturalism in pre-service teachers, the effect of racial biases continues to be problematic in schools. Teacher-student racial congruence affects teachers' perception of students as well as students' academic performance (Downey & Pribesh, 2004; Oates, 2003; Saft & Pianta, 2001; Viadero, 2001). As indicated earlier, students' placement and/or services may be impacted by teachers' racial attitudes towards students' ethnicity, gender, or SES (Elhoweris et al., 2005; Ramirez, 2005; Tenenbaum & Ruck, 2007).

Referral of Students

Many factors have been identified in the literature as influencing teachers' decision making when referring students for special education services (Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Schwartz, Wolfe & Cassar, 1997; Tenenbaum &

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Ruck, 2007). Common reasons for teachers to refer students for special education services include learning disabilities, emotional disturbances, low academic achievement, ADHD, and other disabilities that adversely affect students' academic outcomes (Ramirez, 2005). When referrals were made based on students' academic needs, positive academic results were feasible. However, the reverse occurred when referrals were made based upon students' ethnicity, gender, and/or SES (Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Tenenbaum & Ruck, 2007).

Elhoweris et al. (2005) studied the effect of children's ethnicity on teachers' tendency for referral and recommendations for gifted and talented programs. A total of 207 elementary school teachers were recruited for this study. Teachers were randomly assigned to three condition groups: European student vignette, African American student vignette, and the control group. They then answered two questions pertaining to information from a vignette. The findings indicate that students' ethnicity affected teachers' referral decisions, suggesting racial attitudes play a mediating role in minority students' placement (Elhoweris et al., 2005).

Similarly, McBee (2006) examined pre-existing data (N = 705,074) for all elementary school students in the state of Georgia during the 2004 fiscal year. Students' nomination, screening, and identification for placement in gifted and talented programs were investigated. Georgia has a multiple-criteria assessment procedure for placement in the gifted and talented programs: teachers' nominations, student screening/assessment, and then determination for gifted program placement. The results indicated that Asian and Caucasian students were much more likely to be nominated than African American

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or Hispanic students. In addition, students who paid for their lunches were also much more likely to be nominated than those students who received free or reduced price lunches. The findings suggested the inequality of nominations, rather than actual assessment, may have adversely affected the placement of African American/Hispanic and low SES students in gifted programs (McBee, 2006).

Schwartz et al. (1997) investigated regular versus pre-service teachers' referrals for Emotional Disturbance (ED) labels. A total 65 (27 regular and 38 pre-service) teachers were recruited for this study. First, teachers completed a demographic questionnaire, self-esteem scale, and locus of control scale. Second, they were instructed to watch experimental videotapes of two students being interviewed by a school psychologist intern. Third, they completed the emotional disturbance scale, referral questions, and child rating scale. The findings suggested teachers' self-esteem, locus of control, teaching experience, and students' characteristics can predict their inclinations for student referrals for ED evaluations (Schwartz et al., 1997).

Referrals Based on Students' Ethnicity

A review of the literature suggests a pattern of teachers' referral for special education for each ethnic student groups (Coutinho et al., 2002; Cullinan & Sabornie, 2004; Fletcher & Navarrete, 2003; Langdon, 1989; MacMillan, Gresham, Lopez & Bocian, 1996; Moore, 2002; Ortiz & Yates, 1988; Redden, Forness, Ramey, Ramey, Zima, Brezausek & Kavale, 1999; Rueda, 1993; Sullivan, 2011; Yeh, Forness, Ho, McCabe & Hough, 2004). Latino students are more likely to be referred for Learning Disability (LD) evaluations (Coutinho et al., 2002; Fletcher & Navarrete, 2003; Langdon,

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1989; Ortiz & Yates, 1988; Rueda, 1993; Sullivan, 2011); African American students are more likely to be referred for Emotional Disturbance (ED) evaluations (MacMillan et al., 1996; Yeh et al., 2004); Asian students are more likely to be referred for speech/language and/or anxiety based evaluations (Illinois State Board of Education, 1991; Na, 2007; Zin & Rafik-Galea, 2010); Caucasian students are more likely to be referred for depression and/or anxiety (physical symptoms or fear) based evaluations (Cullinan & Sabornie, 2004; Redden et al., 1999).

Summary

A review of the literature suggests that pre-service teachers receive trainings on diversity from their academic programs with significant gains (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). However, available research data revealed that a majority of regular teachers still have racial biases toward minority students (Edl et al., 2008; Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Tenenbaum & Ruck, 2007). Conflicting data suggest the need to examine current teachers' tendency for racial biases and their effect on recommendations for students' treatment planning.

CHAPTER III

METHODOLOGY

To understand the nature of the perceived problem and to effect change it is essential to gather empirical data. This study targeted those engaged in the decision making positions for service delivery and thus providing an insight into the drivers and deliberations behind such management planning decisions, particularly as it pertains to student ethnicity, language, and culture. This chapter describes the process of data collection as well as a discussion of the research design and data analysis procedures. The purpose of the study was to examine the role of students' ethnicity in teachers' decisions regarding treatment planning. Specific research questions are: 1) Does level of cultural sensitivity influence teachers' perception of students' academic and/or behavioral problems? and 2) If so, does their self-perceived cultural sensitivity influence their treatment recommendations?

Participants

The sample consisted of teacher participants whose email addresses were randomly selected from publicly available online search engines. Teacher participants who volunteered to complete the online survey were randomly assigned to one of five groups that differed in the experimental conditions (i.e., student vignettes that differed by student ethnicity). Each participant was instructed to read the student vignette, and then

answer corresponding questions. A total of 2,000 emails were sent in the initial recruiting phase for teacher participants. Several states were targeted due to their higher concentrations of Latino students (i.e., Texas, California, New York, and New Jersey). Invitations were also sent to teachers in three additional states (i.e., Tennessee, Kansas, and Philadelphia) because email addresses for teachers from those states were readily available online. Google search engine was used to find teachers' public email addresses within the seven states. A challenge arose when no teachers showed interest in study participation. As a result, a second recruiting method was used to enhance response rate. The researcher found teachers' public email addresses for the entire Irving Independent School District (Irving ISD) in Texas. The Director of Planning, Evaluation, and Research was contacted and permission to conduct the research at Irving ISD was granted. A second mass emailing was conducted to solicit participants using approximately 1000 randomly selected public email addresses of teachers in the Irving ISD. While a total of 3000 teachers were solicited, 167 responded to the invitation but 46 of those failed to complete the entire survey. The majority of participants were female from the state of Texas ($n = 99$), so the outliers (e.g., male, transgender and other locations) were excluded in the final analyses to improve the power of the study.

Procedures

Permission to conduct the study was granted by the Institutional Review Board (IRB) for Human Subjects of the Texas Woman's University. All research materials (e.g., student vignettes with photographic images, surveys, and rating scales) were

uploaded onto PsychData for data collection. A randomized list of email addresses from various websites for teachers was obtained through online search engines. The researcher selected random teachers' emails based upon their last names (e.g., selecting the first 10 teachers with a last name beginning with A, then the next 10 beginning with B, and so on); a mass email invitation was sent to those who were randomly selected. Approximately 2,000 teachers were randomly selected for study participation during the initial recruitment. Another 1,000 teachers were randomly selected from Irving ISD for study participation. Teacher participants in this study completed a web-based electronic survey that included a demographic background questionnaire, one of five randomly assigned vignettes with questions, and the Teacher Multicultural Attitude Survey (TMAS) as described below.

Following IRB approval, a mass email invitation was sent to teachers with public email addresses available online (see Appendix K). The email provided explanations of the study and contained a link to the online survey. Once they elected to follow the link, study participants had the opportunity to read the consent form outlining risks associated with participating in an online survey. If they chose to participate, participants indicated their acceptance of the risks by selecting the "I Agree" option. Participants were then instructed to complete a demographic questionnaire (see Appendix H). After providing this information, participants were randomly assigned (computer generated) to one of the five research conditions (see Appendixes A-E). In each group, participants read a vignette and then answered related questions to determine how they conceptualized a student's problem and their thoughts regarding the best course of treatment for the

student. Each vignette featured a student of a different ethnicity and teachers' responses to the questions were used to help determine the effect of students' ethnicity in teachers' service delivery as well as their decisions for treatment planning. After answering the questions, participants were then instructed to complete the TMAS (see Appendix F). A debriefing statement was provided at the end of the study to explain the purpose of the research (see Appendix J). Referral sources for counseling services were also provided in case participants suffered psychological distress from their participation.

After completing this phase, all participants had the opportunity to request that the results of the study be sent to them. If they elected to receive the results, they were instructed to include their contact information at the end of the study. A separate column was added on Statistical Package for the Social Sciences (SPSS) to record those who requested for the study results. Participants' personal information (e.g., names & email addresses) were separated from their actual survey responses to ensure confidentiality. Finally, all participants had the option of entering a drawing to win a gift card for a discount department store valued at one hundred dollars. Entering the drawing was accomplished by providing contact information (e.g., names and email addresses) under prize drawing boxes at the end of the online survey. Similarly, a separate column was added on SPSS to track those who elected for the prize drawing. The prize drawing served as a motivational factor to encourage study participation. At the end of the study, all participants had the opportunity to provide feedback or comments about the research.

Materials

Demographic Background Questionnaire

A questionnaire was designed by the principal researcher to obtain specific information about the teacher participants. The items are similar to those used in the study by Elhoweris, Mutua, Alsheikh, and Holloway (2005), which examined teacher characteristics such as age, gender, and race; area of specialization; teaching experience; and school socioeconomic status. Additional items such as teaching satisfaction, average number of students in the classroom, available types of school services, involvement in students' Individualized Education Programs (IEP), and types of treatment recommendations were included in the questionnaire. Because it is the author's belief that teachers influence the type of services and the amount of time allocated for students' support, questions regarding teachers' treatment referrals and recommendations for students' treatment planning were included.

Descriptive Vignettes

A short descriptive vignette with visual cues about a male student who is struggling with academic and behavioral issues was created as the control design (Appendix A) to examine the effect of teachers' biases in problem identification and treatment planning. All of the teacher participants were assigned to read the same descriptions of the presenting issues; the only differences were information about the ethnicity of the student. There were five versions of the vignettes. In each version, only the name and ethnicity of the student were changed. The four names described in the vignettes were Jose for the Latino student (Appendix B), John for the Caucasian student

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(Appendix C), Honghui for the Asian American student (Appendix D), and Dontrall for the African American student (Appendix E). A control group was included that did not give any information regarding the ethnicity of the student (Appendix A). The ethnicity of the student was randomly assigned by the survey to measure teachers' objectivity with respect to problem identification and recommendations for students' treatment.

Immediately after reading the provided vignette, the participants were instructed to give their opinions on the following questions:

1. Why do you think he is struggling in your classroom?

   a) He demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

   b) He demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

   c) His level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

   d) He seems unmotivated to do any academically based activities.

   e) He needs to have a speech-language evaluation.

   f) Lack of parental involvement and supervision.

2. What type of intervention would be most appropriate for this child?

    a) Evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

    b) Behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

    c) Counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

    d) Speech-language services (e.g., improving receptive and expressive language skills).

    e) Improving home-school relationship and encouraging his mother to be more involved with him at school.

A separate comment box was added to elicit additional information regarding participants' choices for the student in each vignette. The rationale for adding the comment box was to determine if any potential student biases exist when choosing specific treatment recommendations. The estimated time for reading the vignette and completing the two questions was approximately 15 minutes. Participants were encouraged to answer the questions based solely on the given information in order to minimize the possibility of additional factors influencing their answers. The electronic survey was configured so that only one response could be given to each question; participants were instructed to choose the most appropriate answer for each question.

Pilot Study

Due to the untested nature of this instrument, the questionnaire was pilot tested using a small sample of graduate school psychology students ($n = 20$); two of the graduate students had previous teaching experience. The purpose of the pilot study was to ensure the accuracy and usability of the instrument prior to contacting potential teacher participants. Images selected to represent the ethnicity of the students in the vignettes were presented during a graduate course. Graduate students from the school psychology program were encouraged to identify the ethnicity of each child in the photographs. Unfortunately, they were unable to conclusively identify the race of the Latino child due to his biracial appearances. Additionally, the class thought that the Caucasian child might have some kind of genetic disorder, which could have influenced teachers' responses. As a result, two new images were chosen to replace the original pictures of the Latino and Caucasian students. The images were presented again to the same group of graduate students, during which they accurately identified the ethnicity of each child in the picture (Latino, Caucasian, Asian American, and African American).

Phase II of the pilot study the recruitment of twenty graduate psychology students to evaluate the accessibility of the survey online and any technical problems they encountered during the process. These students also had the opportunity to provide feedback for instrumental improvement. The researcher's goal for the pilot study was to strengthen the reliability of the instrument, so students were encouraged to rate the effectiveness of the measure with regards to the effect of students' ethnicity on teachers' treatment recommendations. No abnormalities were reported, but several typographical

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errors were found in the survey and subsequently corrected. The two students who had previous teaching experiences provided positive feedback, stating that "the study was interesting and that it addresses concerns about potential implicit student biases; cultural sensitivity is important in minimizing biases, so the study appropriately examined teacher-student relationships" (personal communication).

The Teacher Multicultural Attitude Survey (TMAS)

The TMAS is a self-report questionnaire designed to assess teachers' multicultural awareness and sensitivity (Ponterotto, Baluch, Greig, & Rivera, 1998) (see Appendix D). Two studies have been conducted to validate its efficacy in measuring teachers' multicultural awareness and sensitivity. In the first study, Ponterotto et al. conducted two focus groups during the initial development stage of the TMAS. Twelve public school teachers and nine private school teachers participated in one of the two focus groups. Minor changes with wording in the questions were made from teachers' responses. In the second study, a total of 227 graduate students in teacher education programs were recruited to assess the reliability and validity of the TMAS (Ponterotto et al., 1998). All participants completed the TMAS, the Multigroup Ethnic Identity Measure (MEIM), the Quick Discrimination Index (QDI), and the Social Desirability Scale (SDS). The TMAS was positively correlated to the QDI racial ($r = .45$) and the MEIM ($r = .31$), suggesting teachers who have positive racial attitudes and who value multicultural education tend to also have greater cultural sensitivity to other ethnic groups (Ponterotto et al., 1998). Furthermore, the TMAS correlated with the SDS ($r = .00$), which suggested the absence of social desirability contamination (Ponterotto et al., 1998).

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The findings indicated the TMAS has acceptable psychometrics on internal consistency (.86), convergent validity (.80), and test-retest reliability (.86) as a measure of cultural sensitivity (Ponterotto et al., 1998).

In the current study, each participant was instructed to answer 20 items that were arranged on a Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A sample item from the scale is "I believe the teacher's role needs to be redefined to address the needs of students from culturally diverse backgrounds." Teachers who score high on the TMAS are described as having high cultural sensitivity and awareness in multicultural teaching issues (Ponterotto et al., 1998). In essence, teacher participants who scored high on the TMAS were expected to have fewer cultural biases that could influence their problem conceptualization and treatment planning.

Research Design

Two research hypotheses were tested in this research study. H_1: Teachers who scored high on the TMAS are likely to be sensitive to cultural diversity. Therefore, it is expected that teachers with high TMAS scores are less likely to be influenced by students' ethnicity when making treatment referrals and recommendations. H_2: Teachers who share the same ethnic background as the student understand cultural challenges, and are less likely to be negatively influenced by students' ethnicity when making treatment referrals and recommendations.

The hypotheses were tested by computing two separate multivariate analysis of covariance (MANCOVA) for the two dependent measures: treatment planning and teachers' cultural sensitivity as measured by the TMAS. The two dependent measures

provided continuous data for analysis. Statistically, each of the five categories rated for treatment planning were compared to the four independent variables for significance. Additionally, teachers' TMAS scores were also compared to their responses on the student vignettes. Available research findings suggested differences among pre-service and regular teachers' level of cultural sensitivity (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). Therefore, teaching experience was entered as the covariant for statistical significance. Results of the MANCOVA were expected to yield a significant effect for ethnicity (teachers' and students') and cultural sensitivity.

MANCOVA is used to test the significance of group differences when two or more dependent variables are involved in the experimental design. The goal of the MANCOVA is to test whether mean differences among the independent variables on a combination of dependent variables are likely to have occurred by chance (Miles & Banyard, 2007). Similarly, MANCOVA is used when one or more covariates are involved in determining mean differences among groups (Miles & Banyard, 2007).

Several assumptions should be considered when using MANCOVA. First, the experimental design involves the manipulation of independent variables and the randomization of participants' group assignment. In this study, participants were randomly assigned to one of five different stimulus conditions (student vignettes). Second, normal distribution of the multivariate dependent variables for each group is expected. The histograms, kurtosis, and skewness numbers derived from the study data suggested no noticeable departure from normality. Third, dependent variables have

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homogeneity of variance in the study. Levene's Test of Equality of Error Variance was used to test for homogeneity of variance. Significance levels of .79 (academic interventions), .06 (behavioral interventions), .00 (counseling interventions), .16 (speech and language services), .00 (home-school relationship), .26 (TMAS scores) were found for each of the treatment recommendations and TMAS scores. The significance level was set at .05 suggesting counseling interventions and improving home-school relationship violated the assumption of homogeneity of variance. However, the statistics remained robust due to the equivalence of the sample sizes (Miles & Banyard, 2007).

In the present study, the four independent variables were students' ethnicity as manipulated through five different vignette conditions, participants' self-identified ethnicity, number of multicultural trainings, and level of self-reported cultural sensitivity. Ethnicity (Hispanic, Asian American, African American, and Caucasian vs. Control) of the student vignette was the first independent variable actively manipulated in the research conditions. The second independent variable was the ethnicity of the teachers, which was derived from the demographic background questionnaire. The third independent variable was the number of multicultural training, which was categorized into three groups: zero to five, six to ten and eleven plus courses. The fourth independent variable was teachers' self-reported level of cultural sensitivity.

The dependent variables were the five treatment recommendations (academic, behavioral, counseling, speech-language, and parental interventions) and participants' TMAS scores. The literature suggested different levels of cultural sensitivity among pre-service versus regular teachers (Diuguid, 2010; Rowland et al., 1999; Schick & Boothe,

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1995; Walker-Dalhouse & Dalhouse, 2006), so teaching experience was chosen as the covariant for the study. Consequently, two separate factorial MANCOVA was used to determine whether a combination of treatment recommendations and TMAS scores varied as a function of the stimulus conditions, participants' self-identified ethnicity, number of multicultural trainings, and/or level of self-reported cultural sensitivity.

Data Analysis Procedures

All statistical data were analyzed using SPSS version 17.0. Descriptive and multivariate statistics were used to analyze the data in this study. The data entries were checked for missing information, outliers, and normality of distribution. An alpha level of $p \leq 0.05$ was set when determining statistical significance. Two separate experimental designs 5 X 2 (students' and teachers' ethnicity) and 3 X 2 (multicultural training and cultural sensitivity) MANCOVA were used to analyze the relationship between the independent variables and the two dependent variables (treatment planning and teachers' TMAS scores).

An adequate response rate is needed to maximize the sampling size to enhance statistical power and generalizability to the larger population (Miles & Banyard, 2007). Consequently, 2,000 teachers were initially contacted and then an additional 1,000 teachers from Irving ISD were solicited for study participation to obtain a large sample size. In order to ensure reliability of the data results, an alpha level of $p \leq 0.05$ was set when interpreting all analysis results. The Power Analysis Calculator was utilized online to determine the necessary statistical power and sample size for this study. Power was

set at .80, alpha was set at .05, and beta was set at .95 to obtain a Cohen's medium effect size for a minimum of 59 teacher respondents.

Summary

This chapter summarized the methods used to collect and analyze the research data. A total of 3,000 emails were sent to recruit teacher participants from Texas, California, Tennessee, Kansas, Philadelphia, and New Jersey. The majority of participants were female from the state of Texas ($n = 99$), so the outliers (e.g., male, transgender and other locations) were excluded in the final analyses to improve the power of the study. Participants were randomly assigned to one of the five research conditions. Each teacher was instructed to read a student vignette and then answer related questions. The vignettes differed only in the names and ethnicity provided in the description of the student. Other student characteristics remained the same across all five conditions. Participants also completed a demographic background questionnaire and the TMAS rating scale. Statistical analysis included descriptive and multivariate statistics to determine any significant difference exists between the five groups in their problem conceptualization and treatment planning.

CHAPTER IV

RESULTS

As stated in Chapter 1, the purpose of this study is to determine if a student's ethnicity influences a teacher's referrals for special education services or treatment recommendations. More specifically, the researcher was interested to explore the affect of cultural insensitivity on the type of services students may receive at school. This chapter presents the study findings related to students' ethnicity and teachers' treatment recommendations. The first section provides demographic information about the teacher participants. The second section presents the results of the preliminary analyses of the research data. The implications of the study's results in answering the research questions are discussed in the third section.

There were two research questions: 1) Does level of cultural sensitivity influence teachers' perception of students' academic and/or behavioral problems? and 2) If so, does their self-perceived cultural sensitivity influence their treatment recommendations? This research study addressed two main hypotheses:

H_1: Teachers who scored high on the Teacher Multicultural Attitude

Survey (TMAS) are likely to be sensitive to cultural diversity. Therefore, it is

expected that teachers with high TMAS scores are less likely to be influenced by

students' ethnicity when making treatment referrals and recommendations.

H_2: Teachers who share the same ethnic background as the student understand cultural challenges, and are less likely to be negatively influenced by students' ethnicity when making treatment referrals and recommendations.

Description of Participants

A total of 3,000 emails were sent to recruit teacher participants for this study. Of these emails, 167 teachers clicked on the research link and started completing the surveys online. The researcher determined some missing information was crucial and may affect the overall study results, so some data were eliminated to ensure validity of the research findings. The final analysis included 99 teacher participants after removing the outliers (e.g., male, transgender and other locations) and incomplete entries ($n = 68$).

The descriptive analysis revealed that 100% of the participants ($n = 99$) were female from the state of Texas. The participants reported ages ranging from 21 to 70, with a mean age of 41.3 years. Seventy-seven percent of teachers were Caucasian ($n = 76$), 17% were Latino ($n = 17$), 4% were African American ($n = 4$), 1% were Asian American ($n = 1$), and 1% were American Indian ($n = 1$).

Participants reported income ranging from $20,000 to $160,000, with a mean income of $57,000. The respondents averaged 12.6 years of experience in teaching, with years of experience ranging from zero to forty years. Forty-two percent of teachers reported working at a middle school ($n = 41$), 30% at a high school ($n = 30$), 24% at a junior high school ($n = 24$), and 4% at a kindergarten ($n = 4$).

The majority of teachers reported working at a low-income school ($n = 70$, 71%), while others rated their schools as middle ($n = 20$, 20%) to high ($n = 9$, 9%) income.

Participants reported having had an average of eight classes on multicultural training (ranging from zero to fifty courses). Sixty-eight percent of teachers identified themselves as having a high level of cultural sensitivity ($n = 67$), 28% with a middle level of cultural sensitivity ($n = 28$), and 4% with a low level of cultural sensitivity ($n = 4$). See Table 1 for the frequencies and percentages for each of the demographic characteristics of the participants.

Table 1

Demographic Characteristics of Participants ($N = 99$)

Characteristic	n	%	Cumulative %
Age at time of survey (years)			
21-34	32	32.3	32.3
35-44	34	34.4	66.7
45-54	17	17.1	83.8
55-64	14	14.2	98.0
65-74	2	2.0	100.0
Race/Ethnicity			
White or Caucasian	76	76.8	76.8
Latino or Hispanic	17	17.1	93.9
Black, African, or African American	4	4.0	97.9
American Indian	1	1.0	98.9
Asian, Asian American, or Pacific Islander	1	1.0	99.9
Income			
20,000-50,000	46	46.5	46.5
51,000-60,000	36	36.4	82.9
61,000-70,000	3	3.0	85.9
71,000-90,000	8	8.0	93.9
95,000-160,000	6	6.0	99.9

Cont'd

Years in Teaching			
0-10	54	54.5	54.5
11-20	27	27.3	81.8
21-30	11	11.1	92.9
31-40	7	7.0	99.9
Type of School			
Middle School	41	41.5	41.5
High School	30	30.3	71.8
Junior High School	24	24.2	96.0
Kindergarten	4	4.0	100.0
School SES			
Low	70	70.7	70.7
Middle	20	20.2	90.9
High	9	9.1	100.0
Multicultural Training Experiences			
0-5	55	55.6	55.6
6-10	28	28.3	83.9
11+	16	16.2	100.1
Self-Reported Cultural Sensitivity			
High	67	67.7	67.7
Middle	28	28.3	96.0
Low	4	4.0	100.0

Note: Totals of percentages do not equal 100 for every characteristic due to rounding.

Descriptive Statistics

Descriptive statistic in terms of means, standard deviations, and correlation

coefficients were calculated for all variables in the study. See Table 2 for the descriptive

statistics on the covariate and each of the independent and dependent variables. Pearson correlations addressed the relationship between the dependent variables (TMAS scores and treatment recommendations) and the independent variables (Stimulus conditions, participants' ethnicity, number of multicultural trainings, and self-reported level of cultural sensitivity). Teaching experience was positively correlated with the number of multicultural trainings ($r = .27, p < .05$), which suggested the more experienced teachers had a tendency to have greater number of multicultural trainings. Teachers' ethnicity ($r = .39, p < .05$) and teachers' self-reported level of cultural sensitivity ($r = .32, p < .05$) were positively correlated with TMAS scores. TMAS scores were positively correlated with academic ($r = .24, p < .01$) and counseling ($r = .25, p < .01$) interventions, which indicated those who scored high on the TMAS had a tendency to select academic or counseling related services. Failure to find statistically significant correlations between the covariant and other variables suggested teaching experience is not statistically correlated with treatment recommendations and TMAS scores. See Table 3 for specific mean scores and standard deviation for the dependent variables as a function of the independent variables.

Table 2

Correlation Coefficients, Means, and Standard Deviations for the Covariate, Independent Variables, and Dependent Variables

Measure	1	2	3	4	5	6	7	8	9	10	11
1. Teaching Experience	1.00	-.00	.07	.27**	-.02	.03	.14	.14	.10	.16	.13
2. Participant's Race		1.00	.08	-.06	.02	.39**	.17	.04	-.07	.05	.10
3. Stimulus Condition			1.00	.02	-.02	-.04	.04	-.07	-.16	-.05	.03
4. Multicultural Trainings				1.00	.16	.18	-.16	.03	-.02	-.14	.11
5. Cultural Sensitivity					1.00	.32**	-.05	-.09	.10	-.07	-.09
6. TMAS Score						1.00	.24**	.16	.25*	.12	.10
7. Academic							1.00	.42**	.22*	.28**	.49**
8. Behavioral								1.00	.52**	.21*	.52**
9. Counseling									1.00	.10	.51**
10. Speech/Language										1.00	-.03
11. Parental											1.00
M	12.64	1.23	3.17	1.61	1.68	3.99	4.13	3.98	4.37	3.37	4.47
SD	9.20	.42	1.46	.75	.47	0.50	.76	.94	.68	1.03	.78

Note. $*p < 0.01$; † $**p < 0.05$

Multivariate Analysis

Two separate 5 (Stimulus conditions) X 2 (White versus non-White) and 3 (Number of multicultural trainings) X 2 (Level of self-reported cultural sensitivity) multivariate analysis of covariance (MANCOVA) was performed to examine the independent and joint effects of these variables on treatment recommendations. Teaching

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experience was entered as the covariant to determine if statistical significance exists between pre-service and regular teachers as suggested in the literature (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). The MANCOVA results are presented in Table 4 and Table 5.

Students' and Teachers' Ethnicity Results

A significant difference was found between the ways White and non-White participants responded to the dependent variables, Wilks' $\Lambda = 0.77$, $F (6, 79) = 3.87$, $p =$

Table 3

Mean Scores and Standard Deviations for Dependent Variables as a function of the Independent Variables

Group	TMAS Score		Academic Interventions		Behavioral Interventions		Counseling Interventions		Speech/ Language Interventions		Parental Interventions	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Participant's Race												
White	3.89	0.47	4.07	0.76	3.96	0.85	4.28	0.71	3.33	0.99	4.43	0.72
Non-White	4.37	0.48	4.50	0.51	4.20	1.06	4.65	0.49	3.40	1.19	4.80	0.52
Stimulus Condition												
Race not Specified	3.97	0.39	4.29	0.59	4.18	1.13	4.59	0.51	3.18	1.13	4.76	0.44
Mexican/Latino/Hispanic	4.09	0.46	3.94	1.03	3.88	0.99	4.35	0.99	3.71	1.31	3.94	1.03
Caucasian/White	3.91	0.65	4.06	0.66	4.06	0.66	4.35	0.61	3.06	0.90	4.65	0.61
Asian American	4.06	0.40	4.22	0.65	4.17	0.71	4.33	0.77	3.72	0.75	4.72	0.58
African American	3.95	0.58	4.23	0.71	3.85	0.93	4.23	0.51	3.15	0.93	4.46	0.51
Multicultural Training												
0-5	3.92	0.51	4.25	0.62	4.04	0.99	4.38	0.77	3.50	1.06	4.48	0.75
6-10	4.07	0.44	4.19	0.62	3.89	0.80	4.26	0.53	3.11	0.93	4.44	0.64
11+	4.13	0.59	3.81	1.11	4.13	0.72	4.44	0.63	3.25	1.67	4.69	0.60
Cultural Sensitivity												
High	4.11	0.41	4.14	0.79	3.97	0.94	4.41	0.71	3.31	1.02	4.47	0.78
Middle or Low	3.42	0.60	4.19	0.62	4.10	0.79	4.26	0.63	3.42	1.06	4.58	0.50

Note. $N = 99$; Participant's Race: White ($n = 75$), Non-White ($n = 20$); Stimulus Condition: Race not Specified ($n = 17$), Mexican/Latino/Hispanic ($n = 17$), Caucasian/White ($n = 17$), Asian American ($n = 18$), African American ($n = 26$); Multicultural Training: 0-5 ($n = 52$), 6-10 ($n = 27$), 11+ ($n = 16$); Cultural Sensitivity: High ($n = 64$), Middle or Low ($n = 31$).

.00, $\eta^2 = .23$ (23%). While teachers' ethnicity was statistically significant, the readers should use caution when interpreting the results due to the limited sample size. Teaching experience was not statistically significant, which means length of time spent teaching did not have an effect on how participants responded to the dependent variables. Wilks' $\Lambda = 0.96$, $F(6, 79) = .51$, $p = .80$, $\eta^2 = .04$ (4%) was observed for teaching experience. Similarly, students' ethnicity as measured through the five stimulus conditions (vignettes) was not statistically significant, suggesting the race of the students in the five vignettes did not have an effect on how teachers responded to the dependent variables. Wilks' $\Lambda = 0.68$, $F(24, 277) = 1.38$, $p = .12$, $\eta^2 = .09$ (9%) was found for stimulus conditions. Interaction of students' and teachers' ethnicity revealed no significance, Wilks' $\Lambda = 0.80$, $F(24, 277) = .76$, $p = .78$, $\eta^2 = .05$ (5%).

Table 4

Multivariate Analysis of Covariance of Participant's Race and Stimulus Condition, With Amount of Teaching Experience as Covariate

Source	Wilks' Λ	df	F	p	η^2
Teaching Experience (covariate)	.96	06, 79.0	0.51	.80	.04
Participant's Race (PR)	.77	06, 79.0	3.87	.00	.23
Stimulus Condition (SC)	.68	24, 276.8	1.38	.12	.09
PR x SC	.80	24, 276.8	0.76	.78	.05

Note. Covariate is Amount of Teaching Experience (in years).

Table 5

*Multivariate Analysis of Covariance of Multicultural Training and Cultural Sensitivity,
With Amount of Teaching Experience as Covariate*

Source	Wilks' Λ	df	F	p	η^2
Teaching Experience (covariate)	.95	06, 83.0	0.75	.61	.05
Multicultural Training (MT)	.80	12, 166.0	1.61	.09	.10
Cultural Sensitivity (CS)	.85	06, 83.0	2.54	.03	.16
MT x CS	.84	12, 166.0	1.30	.23	.09

Note. Covariate is Amount of Teaching Experience (in years).

Analyses of Variance (ANOVA) on each dependent variable were conducted to follow up the MANCOVA results (see Table 6). Significant main effects for participants' race were found for the TMAS scores (F (1, 84) = 20.76, p = .00, η^2 = .20), academic (F (1, 84) = 3.67, p = .05, η^2 = .04), counseling (F (1, 84) = 5.88, p = .02, η^2 = .07), parental (F (1, 84) = 4.45, p = .04, η^2 = .05) interventions. There were no statistically significant differences between the responses of White and non-White participants on behavioral (F (1, 84) = 1.40, p = .24, η^2 = .02) and speech/language (F (1, 84) = .41, p = .53, η^2 = .01) interventions. There were no significant main effects for stimulus condition (students' ethnicity) or teaching experience on treatment recommendations and TMAS scores. No interaction effects were observed between participants' race and stimulus conditions.

Table 6

Univariate Analyses of Variance for Dependent Variables

Source	TMAS Score			Academic Interventions			Behavioral Interventions			Counseling Interventions			Speech Language Interventions			Parental Interventions		
	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2
Teaching Experience[a]	00.10	.67	.00	1.31	.26	.02	1.65	.20	.02	0.43	.52	.01	0.95	.33	.01	1.62	.21	.02
Participant's Race (PR)[b]	20.76	.00	.20	3.67	.05	.04	1.40	.24	.02	5.88	.02	.07	0.41	.53	.01	4.45	.04	.05
Stimulus Condition (SC)[c]	01.56	.20	.07	0.30	.88	.01	0.66	.62	.03	1.17	.33	.05	0.92	.46	.04	2.53	.46	.11
PR x SC	01.30	.28	.06	0.13	.97	.01	1.08	.37	.05	0.48	.75	.02	1.22	.31	.06	0.10	.98	.01

Note. $N = 99$; [a]Teaching Experience was entered as the covariate in the MANCOVA. [b]$df = 1, 84$; [c]$df = 4, 84$.

Multicultural Training and Cultural Sensitivity Results

Teachers' self-reported level of cultural sensitivity was statistically significant, which suggested participants with high versus middle or low level of cultural sensitivity responded differently to the dependent variables, Wilks' $\Lambda = 0.85$, $F (6, 83) = 2.54$, $p = .03$, $\eta^2 = .16$ (16%). Teaching experience was not statistically significant, which means length of time spent teaching did not have an effect on how participants' responded to the dependent variables. Wilks' $\Lambda = 0.95$, $F (6, 83) = .75$, $p = .61$, $\eta^2 = .05$ (5%) was observed for teaching experience. Similarly, multicultural training was not statistically significant, suggesting the number of multicultural training courses attended did not have an effect on how teachers responded to the dependent variables. Wilks' $\Lambda = 0.80$, $F (12, 166) = 1.61$, $p = .09$, $\eta^2 = .10$ (10%) was found for multicultural training. Interaction of

multicultural training and cultural sensitivity yielded no significance, Wilks' $\Lambda = 0.84$, F (12, 166) =1.30, $p = .23$, $\eta^2 = .09$ (9%).

Analyses of Variance (ANOVA) on each dependent variable were conducted to follow up the MANCOVA results (see Table 7). Significant main effect for teachers' self-reported level of cultural sensitivity was found for the TMAS scores (F (1, 88) = 9.19, $p = .00$, $\eta^2 = .10$). There were no statistically significant differences between the responses of high versus middle or low cultural sensitivity on academic (F (1, 88) = .01, $p = .92$, $\eta^2 = .00$), behavioral (F (1, 88) = .11, $p = .74$, $\eta^2 = .00$), counseling (F (1, 88) = 2.07, $p = .15$, $\eta^2 = .02$), speech/language (F (1, 88) = .57, $p = .45$, $\eta^2 = .01$) and parental (F (1, 88) = .28, $p = .60$, $\eta^2 = .00$) interventions. There were no significant main effects for multicultural training or teaching experience on treatment recommendations and TMAS scores. No interaction effects were observed between multicultural training and cultural sensitivity.

Table 7

Univariate Analyses of Variance for Dependent Variables

Source	TMAS Score			Academic Interventions			Behavioral Interventions			Counseling Interventions			Speech Language Interventions			Parental Interventions		
	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2	F	p	η^2
Teaching Experience[a]	00.19	.66	.00	2.90	.09	.03	0.96	.33	.01	0.64	.43	.01	2.31	.13	.03	0.08	.78	.00
Multicultural Training (MT)[b]	00.20	.82	.01	2.43	.09	.05	0.41	.66	.01	0.43	.66	.01	1.59	.21	.04	1.27	.29	.03
Cultural Sensitivity (CS)[c]	09.19	.00	.10	0.01	.92	.00	0.11	.74	.00	2.07	.15	.02	0.57	.45	.01	0.28	.60	.00
MT x CS	00.43	.65	.01	0.80	.46	.02	1.06	.35	.02	0.67	.52	.02	1.52	.23	.03	1.36	.26	.03

Note. $N = 99$, [a]Teaching Experience was entered as the covariate in the MANCOVA; [b]$df = 2, 88$; [c]$df = 1, 88$.

The statistical results answered the research questions and study hypotheses. The research questions for the study were as follows:

Does level of cultural sensitivity influence teachers' perception of students' academic and/or behavioral problems?

The statistical analyses revealed statistically significant difference between the ways White and non-White participants responded to the dependent variables. While teachers' ethnicity was statistically significant, the readers should use caution when interpreting the results due to the limited sample size. The collected data from this study failed to support the hypothesis that the level of cultural sensitivity may be influenced by students' ethnicity when making treatment referrals and recommendations. Perhaps personal experiences and other contextual factors may have influenced the significance group differences. The research findings also failed to support the hypothesis that matched-race sampling influenced participants' responses.

If so, does their self-perceived cultural sensitivity influence their treatment recommendations?

The readers should use caution when interpreting the results from this study due to the limited sample size. However, data derived from this study suggested that there is a statistically significant difference between White and non-White participants' scores on the TMAS. More specifically, participants' self-reported level of cultural sensitivity as measured by the TMAS may have influenced their treatment recommendations. Significance of .05 (academic), .02 (counseling), and .04 (parental) interventions were observed in this study. The majority of participants reported having a high level of cultural sensitivity ($n = 67$, 68%) towards minority students. A statistically significant result was found among participants who rated themselves as having high versus middle or low level of cultural sensitivity on the TMAS scores. These results are encouraging in support of a growing trend towards multiculturalism. Further research is needed to explore the influences of cultural awareness on problem conceptualization and their rationales for specific treatment recommendations.

CHAPTER V

DISCUSSION

The purpose of the study was to examine the role of students' ethnicity in teachers' decisions regarding treatment planning. It was important to explore if cultural awareness and sensitivity influence teachers' perceptions of students' presenting problems at school. It was the author's belief that teachers tend to have fewer student biases when they have higher level of cultural sensitivity. This chapter discusses the research findings of the study. The chapter has six main sections. The first section presents an overview of the rationales behind the study. The second section addresses the results of the research study, while the third and fourth sections discuss the limitations and contributions of the study. The fifth section offers concluding thoughts about the study. The final section offers recommendations for future research on cultural sensitivity and treatment planning.

Overview of the Study

High School drop-out rates are highest among Latino and African American students across the United States (Beauvais, Chavez, Oetting, Deffenbacher & Cornell, 1996; Cebollero, Cepeda, Emanuel, Gabb, Gonzalez, Heintz, & Rosario, 1993, 1994; Chang & Le, 2010; Ream & Rumberger, 2008; Sullivan, Riccio, & Reynolds, 2004). A considerable amount of research has been conducted in an effort to explore factors influencing the inflation of high school drop-outs. Consequently, the overrepresentation

of minorities in special education has been an area of research interest. Some studies suggested that teacher referrals for gifted or special programs were influenced by students' ethnicity (Elhoweris, Mutua, Alsheikh, & Holloway, 2005; McBee, 2006; Ramirez, 2005; Schwartz, Wolfe & Cassar, 1997; Tenenbaum & Ruck, 2007). The literature indicated that pre-service teachers receive trainings on diversity from their academic programs influencing higher level of cultural awareness and sensitivity (Diuguid, 2010; Rowland, Harlan, & Arnold, 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). Conflicting data suggest the need to examine the current trends for teacher referrals and recommendations for students' treatment planning.

This research study aimed to determine if students' ethnicity influences teachers' decisions for treatment recommendations. Given the evidence for pre-service teachers' tendency to have higher levels of cultural sensitivity, teacher experience as measured by the number of years teaching was chosen as the covariant in the study. It was hypothesized that teachers who scored high on the Teacher Multicultural Attitude Survey (TMAS) are more sensitive to cultural diversity, so they are less likely to be influenced by students' ethnicity when making treatment referrals and recommendations. In particular, it was hypothesized that teachers who shared the same ethnic background as the student would have fewer biases influencing their treatment decisions.

Discussion of Results

The purpose of the study was to investigate the role of students' ethnicity on teachers' referrals and treatment recommendations through the use of vignettes. Five different stimulus conditions (vignettes) were designed to test potential student biases

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that may influence teachers' decisions for treatment recommendations. This study used five student vignettes about a hypothetical boy who is failing all his classes. Descriptions of the child remained the same except for his name and information about his ethnicity. Elhoweris et al. (2005) found that when student vignettes were used to examine underlying referral biases, teachers were more likely to refer the non-labeled (e.g., unspecified ethnicity) student for gifted programs than the labeled African American student. Similarly, this study included a non-labeled student vignette as the control group. McBee (2006) revealed that Asian American and Caucasian students were more likely to be nominated for gifted and talented programs than African American and Latino students in the study. The results of this study does not support the findings of Elhoweris et al. (2005) and McBee (2006), in that students' ethnicity had no effect on teachers' referrals for treatment services. In other words, the treatment recommendations in this study were not a function of the student's ethnicity in the vignettes.

The race of the students had no significant influence on the type of school services recommended by the teacher participants in this study. The results of this study were more consistent with the findings of Hosterman, DuPaul, and Jitendra (2008) and Ramirez (2005), who found teachers' Attention Deficit Hyperactivity Disorder (ADHD) ratings of students were based on actual behavioral manifestations independent of students' ethnicity. Furthermore, there was a group difference among non-White participants' responses for students' treatment recommendations. The data from this study also suggested that teachers' own personal ethnic backgrounds differed in the type of services they selected for the student in the vignettes. This finding is consistent with

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the work of Ramirez (2005), who reported that cultural values may have influenced Latino teachers' slightly higher ADHD ratings of Latino students in the study. This can offer an explanation as to why a discrepancy exists between White and non-White teachers' responses for students' treatment recommendations.

The review of the literature suggested that pre-service teachers tend to have a higher level of cultural sensitivity due to newer training programs focusing on multiculturalism (Diuguid, 2010; Rowland et al., 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). The results of this study failed to support the effects of teaching experiences on teachers' decisions for students' school related services. The number of years teaching was not a function of the students' ethnicity or an influence on the type of student services selected by the teacher participants in this study. Similarly, the number of multicultural training courses attended did not yield significant results for treatment recommendations or TMAS scores. However, teachers' self-reported level of cultural sensitivity was statistically significant on their TMAS scores. Although teaching experience was not indicative of higher level of cultural sensitivity, teachers' ethnicity was significant in their treatment responses and TMAS scores. Caucasian teachers differed in their level of cultural sensitivity (TMAS scores) as compared to their non-Caucasian counterparts. While teachers' ethnicity was statistically significant, the readers should use caution when interpreting the results due to the limited sample size. However, the results of the study suggested that level of cultural sensitivity does have an influence on teachers' treatment recommendations.

In this study, it appears that the race of the students had no significant impact on the type of services teachers selected, whereas the race of the teachers differed on their level of cultural sensitivity influencing their treatment recommendations. Several factors should be considered when interpreting the results of this study. First, many of the participants commented that they had difficulty answering the vignette questions due to limited information about the student's struggles in the classroom. A few teachers explained further assessment and investigations are needed before referrals can be made. Thus, perhaps some teachers were uncomfortable selecting certain answers based solely on the given information. Second, some teachers provided feedback that the student in the vignette needed an experienced teacher who is able to engage the child to increase school enjoyment. Consequently, they reported feeling restricted to rate the listed services. Third, teachers displayed mixed views about the students' problems and provided inconclusive data about any support for potential student biases.

The vignettes were created to examine if teachers have underlining biases that may interfere with their recommendations of treatment for students of different ethnicities. Some teachers attributed his behavioral problems to a lack of parental supervision and involvement. For example, teachers commented,

"lack of supervision has him struggling with day to day activities;"

"my first assumption is that he does not have much organization at home, because his mother is not involved;"

"it appears that Jose does not have a very functional family dynamic; he does not have a good home life causing academic difficulties."

Other teachers were sensitive to cultural factors that may have influenced his poor academic performance. For instance, some teachers stated,

"he may have difficulties switching languages at the home-school environment;"

"he may need a bilingual classroom or at the very least EFL classroom;"

"he may be never taught some of the skills needed to be successful;"

"the student is just neglected by adults and may have difficulties expressing his needs."

The results from this study indicated that there were no noticeable racial biases that influenced teachers' responses. On the contrary, the teacher comments provide support for a positive trend towards multiculturalism in the school.

Limitations of the Study

There were a number of limitations to this study, which may have been amplified by several unintentional methodological weaknesses. First, the vignettes that were designed to measure implicit student biases may have low construct validity. The description of the student in the vignette may not have elicited potential biases as intended. The information provided in the vignettes was derived from the author's own personal experience as a practicum student for several school districts. Numerous teachers attributed the lack of parental involvement as the source of Latino and African American students' academic difficulties, whereas different explanations (e.g., depression or anxiety) were given for Caucasian and Asian American students. However, the descriptions of the student in the vignettes may have been too vague to measure potential

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student biases. A comment box was added after each vignette to minimize potential weaknesses of the study design.

Second, it is possible that participants guessed the intent of the study before answering the questions about problem conceptualization and treatment planning. Although efforts were made to mask the true nature of the study intent, teacher participants may have guessed that student's ethnicity was manipulated in the vignettes. Consequently, participants may have rated the student more favorably due to social desirability. As mentioned earlier, the vagueness of the student descriptions may have caused some teachers to feel uncomfortable expressing their true opinions about the student's struggles and associated treatment recommendations.

Third, the external validity of the study is threatened by the limited generalizability of the study results. The majority of the participants were identified as Caucasian ($n = 76$, 77%), female ($n = 99$, 100%), and located in the state of Texas ($n = 99$, 100%). The demographic makeup of the participants in this study was restricted to a small sample of teachers that cannot be generalized to other teachers across the United States. Despite efforts to ensure a sufficient sample size from several different states, the respondents were limited in their race, gender, and physical location.

Fourth, the recruiting method may have influenced the results of this study. The author made an error in not conducting a follow-up email notification to remind teachers for study participation. Furthermore, the author also failed to protect the privacy of potential teacher participants by hiding their email addresses during the mass email

invitation. Consequently, several teachers responded negatively towards the insensitive nature of the recruiting method.

The final limitation of the study was the failure to incorporate Response to Intervention (RTI) as part of the treatment design. RTI is an educational framework aimed at identifying students at-risk through a 3-tier model. The first tier utilizes universal screening methods to identify at-risk students. The second tier provides small group interventions to strengthen areas of skill deficit. The third tier involves individualized evaluations, treatment interventions, and progress monitoring. Teacher participants provided feedback that there was a lack of information on the documented intervention strategies attempted to help the student in the classroom. Perhaps if student referral to the RTI team was included as a treatment recommendation, teacher participants may have yielded different results.

Contributions of the Study

The findings of this study provide several important contributions to the existing literature on teachers' treatment recommendations for minority students. Most of the studies reviewed examined the role of students' ethnicity on teachers' decisions for referrals (Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Schwartz et al., 1997; Tenenbaum & Ruck, 2007). This study has extended the literature by introducing the role of teachers' ethnicity (possibly governed by one's own cultural experiences) on their evaluations of the student, which may have influenced their decisions for treatment recommendations. White and non-White teachers responded differently in their ratings of the student in the vignette. Although students' ethnicity failed to provide support for

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student biases, teachers' ethnicity was influential on the type of student services they selected in the study. Second, this study revealed a statistically significant difference between White and non-White teachers' scores on the TMAS, which suggested they may differ on their level of cultural sensitivity. Third, teachers' self-reported level of cultural sensitivity was statistically significant when compared to their TMAS scores. Cultural awareness and sensitivity played an important role on the type of services selected by the teacher participants in this study.

Another contribution to the literature is the identification of teachers' preference for specific student services. Most research in the literature focused on the referral rates of ethnic students to gifted programs or special education (Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Schwartz et al., 1997; Tenenbaum & Ruck, 2007). However, there was a lack of research on the type of student services recommended by teachers. This study added empirical data on current trend for teacher recommendations. White and non-White teachers differed on their selection of student services in this study. A statistically significant difference exists among the scores of the teachers on academic, counseling, and parental interventions. Finally, this research study offers a different perspective on the effects of teaching experience on cultural sensitivity and treatment recommendations. Unlike previous research findings that pre-service teachers had greater level of cultural sensitivity than regular teachers (Diuguid, 2010; Rowland et al., 1999; Schick & Boothe, 1995; Walker-Dalhouse & Dalhouse, 2006). The results of the study failed to support the notion that teaching experience affects level of cultural sensitivity and treatment recommendations.

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Conclusion of the Study

This research attempted to explore the role of students' ethnicity on teachers' decisions for treatment recommendations. The results of the study found no significant differences among teacher participants across five stimulus conditions. In particular, teachers' overall ratings for the student in the vignettes were not significantly different among the five experimental groups. In addition, students' ethnicity in the vignettes had no effect on teachers' ratings of student services. Therefore, the study found no evidence to support student biases based upon cultural insensitivity. Previous research findings suggested teachers' ratings of students were influenced by the ethnicity of the students (Elhoweris et al., 2005; McBee, 2006; Ramirez, 2005; Schwartz et al., 1997; Tenenbaum & Ruck, 2007). The findings of this study did not support previous results and provided comfort in a movement towards school multiculturalism. Teacher participants from this study demonstrated cultural sensitivity with an understanding of the potential effect of student biases in their treatment recommendations.

Teachers' self-reported level of cultural sensitivity was statistically significant when compared to their TMAS scores, which indicated that participants who self-identified as having a high level of cultural sensitivity also scored high on the TMAS. However, the number of multicultural training did not yield any significant results on treatment recommendations and TMAS scores. Awareness of one's own level of cultural sensitivity may be influential on the attitude towards minority students, which may impact the type of student services at school.

Interestingly, teachers' ethnicity was statistically significant on treatment recommendations and cultural sensitivity as measured by the TMAS. White and non-White teachers differed on their evaluations of the student as well as their treatment preferences in this study. A statistically significant difference exists among the scores of the teachers on academic, counseling, and parental intervention recommendations. The findings suggested additional factors above and beyond students' ethnicity may have influenced the study's results. The discrepancy between Whites versus non-White teachers suggested other contextual factors such as cultural and personal experiences may be influential on teachers' recommendations. Further exploration of teachers' cultural backgrounds and practices should be a focus of future research.

Recommendations for Future Research

Future research on whether teachers' cultural backgrounds and personal experiences may influence their decisions for students' treatment recommendations should be addressed when planning to replicate this study. The findings suggested a discrepancy between the White and non-White teachers' responses to treatment services. However, the underlying factors contributing to the teacher differences were unknown. One area of suggestion for future studies is to include additional questionnaires that measure individual cultural identity and practices.

A second suggestion is to improve the student vignettes by developing more concise descriptions of a struggling student that may elicit potential student biases. One way to improve the study design is to make video recordings of actual students exhibiting the described symptoms in the classroom. Participants may have a better understanding

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of the student's problem if they are not limited by the vagueness of a short descriptive vignette. Teachers may be more comfortable providing their opinions after watching the video, which may again strengthen the results of the research study.

A third suggestion is to increase the response rate by improving the recruiting method. Pre-notification and follow-up emails are necessary to ensure potential participants received the mass study invitation. Additionally, the follow-up emails may serve as a reminder for those who may be interested in study participation. The author had difficulties obtaining online data simply through web-based invitations. It is suggested that future researchers contact potential school districts for permission to contact teachers through the district's listserv system.

Future researchers should focus on extending the sample size to match the geographic populations of ethnic minorities in the United States. One of the limitations for this study was the disproportionate distribution of ethnic teacher participants. The majority of the teachers was Caucasian, female, and located in the state of Texas. A larger sample size may ensure proportional racial representations for better cross comparison. Improving the sample size would also improve the external validity of the research study, because it improves the generalizability of the results to other teachers in the United States.

A final suggestion offered is the inclusion of RTI as part of the treatment design. The educational trend towards early identification of at-risk students should be considered in future studies. Many teacher participants requested information about previous documented interventions within the classroom, which suggested an inclination

towards RTI preventive movement. Future investigators may provide information regarding student's failure to thrive after repeated efforts through the RTI model. Furthermore, treatment recommendations may also include additional evidence-based strategies for Tier 2 classroom interventions. Documented evidence-based interventions are necessary before referrals can be made for special education.

Teachers and educators alike are influential on the type of school-related services students receive at school. The findings of this study suggest teachers' own ethnic backgrounds and personal experiences may have influenced the selection of students' treatment recommendations. Consequently, the delivery of school-based services may not be tailored to students' individual needs but teachers' conceptualization of their problems based upon their own cultural upbringing experiences. This study provided empirical data in support for cultural sensitivity training programs to include the exploration of potential teachers' biases from personal experiences and to enhance awareness of its affect on students' services within the school system. Students of all ages and ethnic backgrounds should have equal opportunities for individualized support regardless of their race, gender, and socioeconomic status.

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APPENDIX A

VIGNETTE (CONTROL GROUP)

Directions:

Please read the following vignette carefully and then respond to the questions.

An 8-year-old boy is struggling in your 3rd grade classroom. Academically, he is failing all subjects except for Physical Education (PE). In class, he is **disorganized** (e.g., missing worksheets, messy desk, and losing school materials), **anxious** (e.g., obsessive worrying about school performance, constant fear of embarrassment, and hands shake during timed tests), **unmotivated** (e.g., seems bored every day, lack of self-initiation to do class work, and consistently complaining about assignments), and **disruptive** (e.g., making noises, incompliance to instructions, and physically aggressive to others) in your classroom. When you ask him questions about different subjects, he just puts his head on the desk. He shows up every day without his homework even after your efforts to organize his work in colored folders. His mother never signs his reading logs and never returns your calls.

Based upon the given information, please rate your responds according to the following scale: 1. *Strongly Disagree* 2. *Disagree*   3. *Neutral* 4. *Agree*   5.*Strongly Agree*

(* Please note that there is no right or wrong answers. We are interested in studying your opinions about different school related topics)

1. Why do you think he is struggling in your classroom?

    a) he demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    b) he demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

c) his level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

d) he seems unmotivated to do any academically based activities.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

e) he needs to have a speech-language evaluation.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

f) lack of parental involvement and supervision.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

2. What type of intervention would be most appropriate for this child?

a) evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

b) behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

c) counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

d) speech-language services (e.g., improving receptive and expressive language skills).

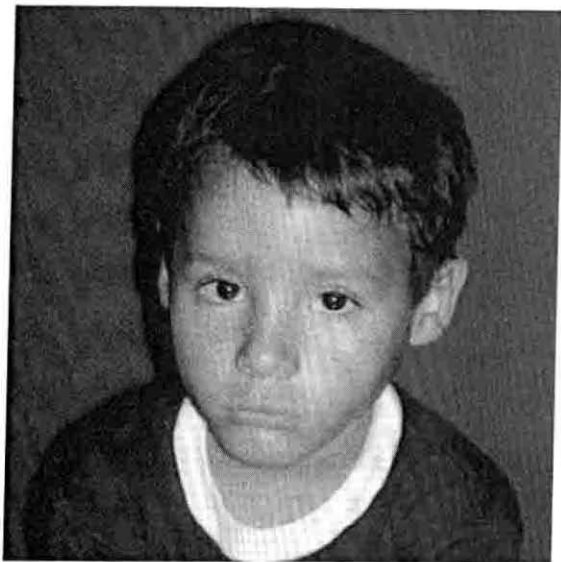□ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

e) improving home-school relationship and encouraging his mother to be more involve with him at school.

□ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

APPENDIX B

VIGNETTE (HISPANIC GROUP)

Directions:

Please read the following vignette carefully and then respond to the questions.

José is an 8-year-old Mexican boy struggling in your 3rd grade classroom. Academically, he is failing all subjects except for Physical Education (PE). In class, he is **disorganized** (e.g., missing worksheets, messy desk, and losing school materials), **anxious** (e.g., obsessive worrying about school performance, constant fear of embarrassment, and hands shake during timed tests), **unmotivated** (e.g., seems bored every day, lack of self-initiation to do class work, and consistently complaining about assignments), and **disruptive** (e.g., making noises, incompliance to instructions, and physically aggressive to others) in your classroom. When you ask him questions about different subjects, he just puts his head on the desk. He shows up every day without his homework even after your efforts to organize his work in colored folders. His mother never signs his reading logs and never returns your calls.

Based upon the given information, please rate your responds according to the following scale: *1. Strongly Disagree*   *2. Disagree*   *3. Neutral*   *4. Agree*
5.Strongly Agree

(* Please note that there is no right or wrong answers. We are interested in studying your opinions about different school related topics)

1. Why do you think he is struggling in your classroom?

a) he demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

b) he demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

c) his level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

d) he seems unmotivated to do any academically based activities.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

e) he needs to have a speech-language evaluation.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

f) lack of parental involvement and supervision.

☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

2. What type of intervention would be most appropriate for this child?

   a) evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   b) behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   c) counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   d) speech-language services (e.g., improving receptive and expressive language skills).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*
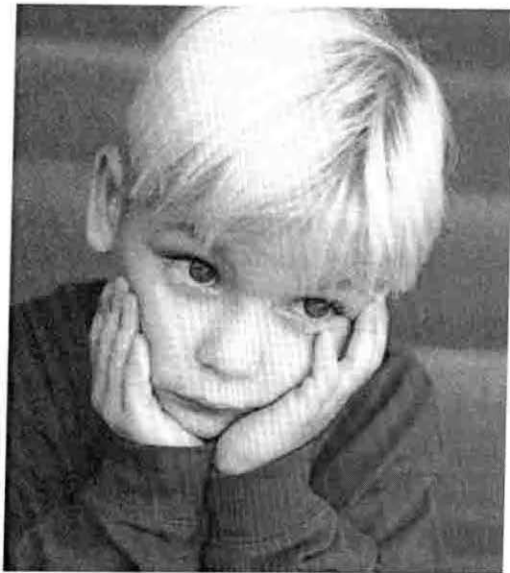
   e) improving home-school relationship and encouraging his mother to be more involve with him at school.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

APPENDIX C

VIGNETTE (CAUCASIAN GROUP)

Directions:

Please read the following vignette carefully and then respond to the questions.

John is an 8-year-old Caucasian boy struggling in your 3rd grade classroom. Academically, he is failing all subjects except for Physical Education (PE). In class, he is **disorganized** (e.g., missing worksheets, messy desk, and losing school materials), **anxious** (e.g., obsessive worrying about school performance, constant fear of embarrassment, and hands shake during timed tests), **unmotivated** (e.g., seems bored every day, lack of self-initiation to do class work, and consistently complaining about assignments), and **disruptive** (e.g., making noises, incompliance to instructions, and physically aggressive to others) in your classroom. When you ask him questions about different subjects, he just puts his head on the desk. He shows up every day without his homework even after your efforts to organize his work in colored folders. His mother never signs his reading logs and never returns your calls.

Based upon the given information, please rate your responds according to the following scale: *1. Strongly Disagree*   *2. Disagree*   *3. Neutral*   *4. Agree*   *5.Strongly Agree*

(* Please note that there is no right or wrong answers. We are interested in studying your opinions about different school related topics)

1. Why do you think he is struggling in your classroom?

   a) he demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

   b) he demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

   c) his level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

   d) he seems unmotivated to do any academically based activities.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

   e) he needs to have a speech-language evaluation.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

   f) lack of parental involvement and supervision.

     □ *Strongly Disagree* □ *Disagree* □ *Neutral* □ *Agree* □ *Strongly Agree*

2. What type of intervention would be most appropriate for this child?

   a) evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   b) behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   c) counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   d) speech-language services (e.g., improving receptive and expressive language skills).

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   e) improving home-school relationship and encouraging his mother to be more involve with him at school.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

APPENDIX D

VIGNETTE (ASIAN AMERICAN GROUP)

Directions:

Please read the following vignette carefully and then respond to the questions.

Honghui is an 8-year-old Asian American boy is struggling in your 3rd grade classroom. Academically, he is failing all subjects except for Physical Education (PE). In class, he is **disorganized** (e.g., missing worksheets, messy desk, and losing school materials), **anxious** (e.g., obsessive worrying about school performance, constant fear of embarrassment, and hands shake during timed tests), **unmotivated** (e.g., seems bored every day, lack of self-initiation to do class work, and consistently complaining about assignments), and **disruptive** (e.g., making noises, incompliance to instructions, and physically aggressive to others) in your classroom. When you ask him questions about different subjects, he just puts his head on the desk. He shows up every day without his homework even after your efforts to organize his work in colored folders. His mother never signs his reading logs and never returns your calls.

Based upon the given information, please rate your responds according to the following scale: *1. Strongly Disagree*   *2. Disagree*   *3. Neutral*   *4. Agree*   *5. Strongly Agree*

(* Please note that there is no right or wrong answers. We are interested in studying your opinions about different school related topics)

1. Why do you think he is struggling in your classroom?

   a) he demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   b) he demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   c) his level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   d) he seems unmotivated to do any academically based activities.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   e) he needs to have a speech-language evaluation.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

   f) lack of parental involvement and supervision.

   ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

2. What type of intervention would be most appropriate for this child?

    a) evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

        ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    b) behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

        ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    c) counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

        ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    d) speech-language services (e.g., improving receptive and expressive language skills).

        ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

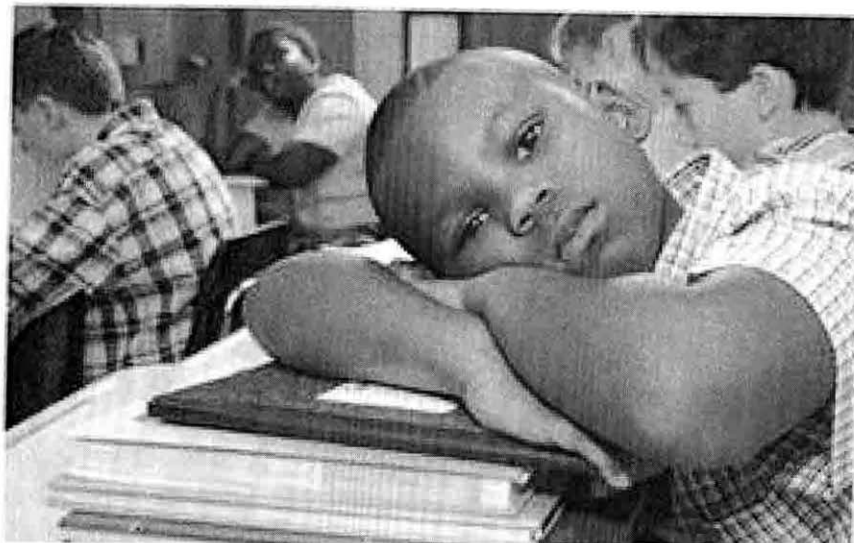   e) improving home-school relationship and encouraging his mother to be more involve with him at school.

        ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

APPENDIX E

VIGNETTE (AFRICAN AMERICAN GROUP)

Please read the following vignette carefully and then respond to the questions.

Dontrall is an 8-year-old African American boy is struggling in your 3rd grade classroom. Academically, he is failing all subjects except for Physical Education (PE). In class, he is **disorganized** (e.g., missing worksheets, messy desk, and losing school materials), **anxious** (e.g., obsessive worrying about school performance, constant fear of embarrassment, and hands shake during timed tests), **unmotivated** (e.g., seems bored every day, lack of self-initiation to do class work, and consistently complaining about assignments), and **disruptive** (e.g., making noises, incompliance to instructions, and physically aggressive to others) in your classroom. When you ask him questions about different subjects, he just puts his head on the desk. He shows up every day without his homework even after your efforts to organize his work in colored folders. His mother never signs his reading logs and never returns your calls.

Based upon the given information, please rate your responds according to the following scale: *1. Strongly Disagree*   *2. Disagree*   *3. Neutral*   *4. Agree*   *5.Strongly Agree*

(* Please note that there is no right or wrong answers. We are interested in studying your opinions about different school related topics)

1. Why do you think he is struggling in your classroom?

    a) he demonstrates academic difficulties and should be referred for Specific Learning Difficulties (LD) evaluation to qualify for academic services under Special Education.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    b) he demonstrates signs of depression and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    c) his level of anxiety may have influenced his behavioral/academic difficulties and should be referred for Emotional Disturbance (ED) evaluation to qualify for services under Special Education.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    d) he seems unmotivated to do any academically based activities.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    e) he needs to have a speech-language evaluation.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

    f) lack of parental involvement and supervision.

       ☐ *Strongly Disagree* ☐ *Disagree* ☐ *Neutral* ☐ *Agree* ☐ *Strongly Agree*

2. What type of intervention would be most appropriate for this child?

    a) evidence-based academic interventions (e.g., reading recovery, incremental rehearsal, and peer tutoring).

    ☐ *Strongly Disagree*   ☐ *Disagree*   ☐ *Neutral*   ☐ *Agree*   ☐ *Strongly Agree*

    b) behavioral interventions (e.g., token economy, mystery motivator, and behavioral contracts).

    ☐ *Strongly Disagree*   ☐ *Disagree*   ☐ *Neutral*   ☐ *Agree*   ☐ *Strongly Agree*

    c) counseling interventions (e.g., positive self-talk, short-term vs. long-term goals, and family therapy).

    ☐ *Strongly Disagree*   ☐ *Disagree*   ☐ *Neutral*   ☐ *Agree*   ☐ *Strongly Agree*

    d) speech-language services (e.g., improving receptive and expressive language skills).

    ☐ *Strongly Disagree*   ☐ *Disagree*   ☐ *Neutral*   ☐ *Agree*   ☐ *Strongly Agree*

    e) improving home-school relationship and encouraging his mother to be more involve with him at school.

    ☐ *Strongly Disagree*   ☐ *Disagree*   ☐ *Neutral*   ☐ *Agree*   ☐ *Strongly Agree*

APPENDIX F

Teacher Multicultural Attitude Survey (TMAS)

Teacher Multicultural Attitude Survey*

Directions: Using the following scale, please tick the number that best corresponds to your level of agreement with each statement:

1 : **S**trongly **D**isagree

2 : **D**isagree

3 : **U**ndecided

4 : **A**gree

5 : **S**trongly **A**gree

	1 SD	2 D	3 U	4 A	5 SA
1. I find teaching a culturally diverse student group rewarding.					
2. Teaching methods need to be adapted to meet the needs of a culturally diverse student group.					
3. Sometimes, I think there is too much emphasis placed on multicultural awareness and training for teachers.					
4. Teachers have the responsibility to be aware of their students' cultural backgrounds.					
5. I frequently invite extended family members (e.g., cousins, grandparents, godparents, etc.) to attend parent teacher conferences.					
6. It is not the teacher's responsibility to encourage pride in one's culture.					
7. As classrooms become more culturally diverse, the teacher's job becomes increasingly challenging.					
8. I believe the teacher's role needs to be redefined to address the needs of students from culturally diverse backgrounds.					
9. When dealing with bilingual students, some teachers may misinterpret different communication styles as behavioral problems.					

10. As classrooms become more culturally diverse, the teacher's job becomes increasingly rewarding.					
11. I can learn a great deal from students with culturally different backgrounds.					
12. Multicultural training for teachers is not necessary.					
13. In order to be an effective teacher, one needs to be aware of cultural differences present in the classroom.					
14. Multicultural awareness training can help me work more effectively with a diverse student population.					
15. Students should learn to communicate in English only.					
16. Today's curriculum gives undue importance to multiculturalism and diversity.					
17. I am aware of the diversity of cultural backgrounds in my classroom.					
18. Regardless of the racial and ethnic makeup of my class, it is important for all students to be aware of multicultural diversity.					
19. Being multiculturally aware is not relevant for the subject I teach.					
20. Teaching students about cultural diversity will only create conflict in the classroom.					

Do you have any thoughts or comments about this survey, or about the research topic?

THANK YOU!

APPENDIX G

Teacher Multicultural Attitude Survey (TMAS): Permission Letter

Re: ATTN: Teacher Multicultural Attitude Survey

JOSEPH PONTEROTTO [ponterotto@fordham.edu]

You replied on 2/22/2011 2:46 PM.

Sent: Tuesday, February 22, 2011 2:16 PM
To: Maynard, Angelina
Attachments: TMAS Scale and Scoring.doc (52 KB)[Open as Web Page]; Ponterotto & Ruckdeschel, ~1.pdf (966 KB)[Open as Web Pag

Hi Angelina,

attached is all you need.   Be sure to read the pdf reliability article also attached as you will want to calculate coefficient alpha on the TMAS scores.

Please send me a copy of the results.

good luck.

sincerely,

joe ponterotto
Joseph G. Ponterotto, Ph.D.
Professor
Coordinator, Mental Health Counseling Program
Division of Psychological & Educational Services
Graduate School of Education
Room 1008
Fordham University - Lincoln Center Campus
113 West 60th Street
New York, NY 10023-7478
U.S.A

-----"Maynard, Angelina" <ang_maynard@mail.twu.edu> wrote: -----

To: "Ponterotto@Fordham.edu" <Ponterotto@Fordham.edu>
From: "Maynard, Angelina" <ang_maynard@mail.twu.edu>
Date: 02/22/2011 02:52PM
Subject: ATTN: Teacher Multicultural Attitude Survey

Dr. Ponterotto,

Hi. I am writing to get permission to include your TMAS in my data collection for my dissertation proposal. I will be examining the

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effects of teachers' perceptions of students' performances/behaviors based upon ethnicity. I would greatly appreciate it if you could let me know what are the procedures to get permission to use it in my study. Thank you for your time.

Yours Sincerely,

Angelina Maynard, M.A., LPC, NCC
Doctoral Student, School Psychology
Department of Philosophy and Psychology
Texas Woman's University
Denton, TX 76204
Voice: 972-415-6322
Email: ang_maynard@mail.twu.edu

APPENDIX H

Demographic Background Questionnaire

Teacher Demographic Background Questionnaire*

Directions: Thank you for your time to complete this questionnaire. Please provide your responses to the following questions. This information will remain confidential.

SECTION A: BACKGROUND INFORMATION

Age: _____

Gender: _____ Male _____ Female

Zip Code: _____

Race (please choose any or all that apply):

_____ American Indian

_____ Asian-American/Pacific Islander

_____ Asian East Indian

_____ Black/African-American

_____ Mexican-America/Chicano

_____ Puerto-Rican

_____ Other Hispanic

_____ White/Caucasian

_____ Other

Marital Status:

_____ Single

_____ Married (or living with partner)

_____ Divorced

Annual Income: _____

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Education History:

_____ Bachelor's Degree

_____ Master's Degree

_____ Doctoral Degree

Employment Status:

_____ Full-Time

_____ Part-Time

_____ Quarter-Time

SECTION B: TEACHING EXPERIENCES

Type of School:

_____ Kindergarten

_____ Elementary

_____ Middle School

_____ Junior High

_____ High School

_____ Other:_____

School's SES Status:

_____ Low

_____ Middle

_____ High

Area of Specialization:

____ General Education

____ Special Education

____ Bilingual Education

____ Gifted & Talented Education

____ Other (please list them)

_____

_____

School Psychologist on Staff:

____ Yes

____ No

Number of Multicultural Trainings Attended: ____

Average Number of Students in Your Classroom. ____

Years of Experience as a Teacher: ____

Level of Satisfaction with Teaching:

____ Highly Dissatisfied

____ Dissatisfied

____ Undecided

____ Satisfied

_____ Highly Satisfied

Level of Self-Reported Cultural Sensitivity:

_____ Low

_____ High

SECTION C: TYPE OF SERVICES

Type of Services Available at your School (please choose any or all that apply):

_____ Regular Class with Special Education Teacher Consultation

_____ Regular Class with Special Education Support (Co-Teaching)

_____ Regular Class with Special Education Pulled-Out Services (e.g., Content Mastery)

_____ Regular Class with Modified Curriculum

_____ Special Education Class with Modified Curriculum

_____ Gifted & Talented Programs

_____ Counseling Services

_____ After School Tutoring

_____ Intervention Team (e.g., behavioral specialist)

_____ Prevention Team (e.g., high school drop-out)

_____ Community Outreach (e.g., home visits)

_____ Other Services (please list them):

_____

_____

SECTION D: INVOLVEMENT IN STUDENTS' IEP

From your overall experience as a teacher, please rate your responds according to the following scale: 1. Never   2. Sometimes   3. Often   4. Always

1. Active member of the referral team for special education.	1	2	3	4
2. Active member of the referral team for gifted & talented programs.	1	2	3	4
3. Involve in students' treatment planning during IEP meetings.	1	2	3	4
4. Has an influence in the type of services the students may receive (e.g., content mastery versus after school tutoring).	1	2	3	4
5. Has an influence in the amount of time student will spend for special education services (e.g., 30 mins versus 45 mins at content mastery).	1	2	3	4

I am involved in students' treatment recommendations in the following areas (please choose any or all that apply).

_____ Academic Interventions (e.g., reading recovery, incremental rehearsal or peer tutoring)

_____ Behavioral Interventions (e.g., token economy, mystery motivator or behavioral contracts)

_____ Parent Consultations (e.g., parenting, community resources or home-school alliance)

_____ Prevention Programs (e.g., bullying, teen pregnancy or high school drop-out)

_____ Other Services (please list them):

_____

_____

_____

_____ Not Applicable

APPENDIX I

Informed Consent Form

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Dear Participants:

You are invited to participate in a research study pertaining to the perspectives of general and special education teachers in students' treatment recommendations. Your professional experience, knowledge, and opinions are valuable to this study.

Your participation in this study is completely voluntary. You may withdraw from this study at any time. As compensation for taking part in the research, participants will have the opportunity to enter into a drawing for a prize ($100 Wal-Mart gift card). If you agree to participate, please do the following:

Complete the teacher demographic background questionnaire.

Read the vignette describing a male student with academic and behavioral difficulties, and then answer two related questions.

Respond to a brief rating scale.

Do not provide any identifying information about you. All your responses are confidential and will remain anonymous.

If you choose to participate in the prize drawing, simply enter your e-mail address at the end of the survey. A mass e-mail will notify the winner.

There is a potential risk of loss of confidentiality in all e-mail and internet transactions. The potential benefit from this study is knowledge that you have had an opportunity to express your opinions and to provide valuable information for our educational community. A summary of the research findings is available upon your request. If you have any questions concerning this research study, please contact the principal investigator via e-mail at: ang_maynard@mail.twu.edu; via telephone at (972) 415-6322 or my advisor Dr. Kathy DeOrnellas at kdeornellas@twu.edu; via telephone at (940) 898-2315. Thank you for your time and consideration for participation.

Sincerely,

Angelina Maynard, M.A.

Doctoral Student in School Psychology

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I give my consent to participate in the above study. I understand that my participation in this study is voluntary and that I may withdraw from this study at any time. An offer has been made to answer any questions concerning this research study.

	Please enter your initials.

APPENDIX J

Debriefing Form

Dear Participant:

Thank you for participating as a research participant in the present study concerning your view of the pseudo student's difficulties and recommendation for treatment planning. The purpose of the study was to examine the effect of student's ethnicity on teacher's treatment recommendations.

You were randomly assigned to one of the five vignette conditions describing the same pseudo student, but with different ethnic backgrounds (e.g., Caucasian, Hispanic, Asian-American, African-American and Control). Your responses were valuable for examining if there is a treatment effect with ethnicity.

If you have questions about your participation in the study, please contact me via e-mail at: ang_maynard@mail.twu.edu; via telephone at (972) 415-6322 or my faculty advisor, Dr. Kathy DeOrnellas at kdeornellas@twu.edu; via telephone at (940) 898-2315.

If you have questions about your rights as a research participant, you may contact the Office of Human Subject Research via e-mail at irb@twu.edu or via telephone at (940) 898-3378.

If you have experiences psychological distress as a result of your participation in this study, please contact the counseling office at (940) 898-3801.

Thank you again for your participation.

Sincerely,

Angelina Maynard, M.A.
Doctoral Student in School Psychology

APPENDIX K

Mass Email Invitation

DEAR PARTICIPANTS:

My name is Angelina Maynard and I am a doctoral student conducting a research study for my dissertation at Texas Woman's University.

The purpose of the study is to examine the perspectives of general and special education teachers on recommending students' for different types of treatment or services. You have been asked to participate because you are a teacher in kindergarten through twelfth grade.

As a participant in this study, you will be asked to spend approximately 10-15 minutes of your time completing an online demographic questionnaire, answering questions based on a student vignette, and completing an attitude survey. Your participation in this study is completely voluntary and you may choose to withdraw from this study at any time.

After completing the survey, you may choose to participate in a drawing for a $100 Wal-Mart Gift Card. If you choose to do this, you can enter your contact information at the end of the survey. After the drawing, your contact information will be permanently deleted. There is a potential risk of loss of confidentiality in all e-mail, downloading, and internet transactions.

If you have questions about this study, please contact me via e-mail at: ang_maynard@mail.twu.edu; via telephone at (972) 415-6322 or my faculty advisor, Kathy DeOrnellas, PhD at kdeornellas@twu.edu; via telephone at (940) 898-2315.

If you would like to participate in this study, please click on the following link:

https://www.psychdata.com/s.asp?SID=142974

Thank you for your time.

Sincerely,
Angelina Maynard., M.A.
Doctoral Student in School Psychology