An Exploration of In-Service and Pre-Service Teachers' Perspectives on Racial Minority Students

By Tiffany Tan, Marisa Macy, Judith Levin, Sherron Killingsworth Roberts

EXECUTIVE SUMMARY

Racial biases within teachers have caused racial minority students to face more academic challenges than their White peers, such as lower program placements and lower academic expectations. With the increasing number of racial minority students in our country, it is crucial to better understand the racial biases that may occur in classrooms. This is a pilot study that examined and compared pre-service and in-service teachers' implicit attitudes toward racial minority students while looking at their self-efficacy beliefs in teaching diverse classrooms.

Participants included nine pre-service teachers from a four-year university and nine PreK-3 in-service teachers from the Southeastern part of the United States. This study used an Implicit Association Test (IAT) to examine if pre-service or in-service teachers held more negative implicit attitudes toward racial minority students. An IAT measures the strength of associations between concepts (racial majority students and racial minority students) and evaluations (positive and negative traits). After analyzing these results, raw data from participants' IAT results showed that more pre-service teachers associated racial minority students with negative traits. On the contrary, the Teacher Efficacy Scale for Classroom Diversity (TESCD) showed that more pre-service teachers held higher self-efficacy beliefs in teaching diverse classrooms in areas such as teaching English Language Learners and students from diverse cultural backgrounds. Results support recommendations and implications for practitioners to better understand the cause of racial disparities in our education system and how pre-service teachers can be better prepared to teach in diverse classrooms.

ABOUT THE AUTHORS

Tiffany Tan is a recent honors graduate from the Early Childhood Development and Education program at the University of Central Florida.
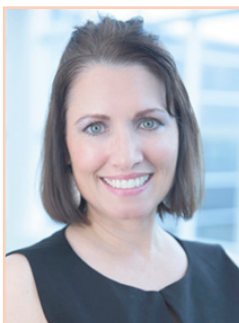
Marisa Macy teaches early childhood classes at the University of Central Florida (UCF). She does research related to young children with disabilities.

Judith Levin is an Associate Lecturer in UCF's College of Community Innovation and Education. In addition to teaching, she is the Program Coordinator for the Early Childhood Development and Education's undergraduate, graduate, and Ph.D. degree programs.

Sherron K. Roberts is a Professor of Language Arts and Literacy Education at the University of Central Florida. Her research considers literacy as social practice, content analyses of children's literature, and innovative pedagogy in teacher education.

INTRODUCTION

Based on past studies, teachers are more likely to hold higher prejudiced beliefs and more negative implicit attitudes toward ethnic and racial minority students (Glock & Bohmer, 2018; Glock et al., 2018; Picower, 2009; Bergh et al., 2010). With negative implicit attitudes toward ethnic and racial minority students, researchers then began noticing a pattern of also: lower academic expectations of minority students (Blanchard & Muller, 2015; Marx, 2000; Glock & Cate, 2018), lower classroom placements or more negative program referrals of minority students (Riley, 2014; Tenenbaum & Ruck, 2007), and lower awareness in teaching classrooms with racial minority students (Glock & Bohmer, 2018; Glock, Kovacs, & Cate, 2019; Barry & Lechner, 1995).

Psychology researchers Greenwald and Banaji (1995) who studied this implicit social cognition (attitudes, self-esteem, and stereotypes) state that the signature of implicit cognition occurs when traces of past experiences affect performances in the present day. According to Greenwald and Banaji (1995), these earlier experiences, though influential to a person's behavior, may not be remembered in a usual sense, which means that "it is unavailable to self- report or introspection" (Greenwald & Banaji, 1995, p.5). Greenwald and Banaji explains the term implicit attitude as follows:

> "Implicit attitudes are introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action toward social objects" (Greenwald & Banaji, 1995, p. 8).

Self-efficacy belief as defined by Albert Bandura (1997), states that it is the "beliefs in one's capabilities to organize and execute the courses of action required to manager prospective situations" (Bandura, 1997, p. 2). In an academic setting through the lenses of a teacher, this means the belief in one's capability to organize and execute the course of teaching students. Self- efficacy belief through the lenses of a teacher can also be interpreted as the level of investment in teaching, aspirational levels, and the goals that are set for themselves, which may also be known as teacher efficacy belief (Hoy & Spero, 2005). With the focus of this pilot study being around racial minority students and teaching diverse classrooms; self-efficacy belief in this aspect will be centered around teachers' beliefs in their capabilities of teaching racial minority students with various ethnic, cultural, and customs in a classroom.

Social Learning Theory, developed by Albert Bandura (1997), states that through the process of observational learning, behavior is learned and imitated from the environment (Bandura, 1977). Bandura's experiments focused on the transmission of aggression, where children were more aggressive towards a doll after observing an adult model who acted aggressively towards that same doll (Bandura et al., 1961). The same way aggression and non-aggression can be learned through observation, one can also learn prejudice and discrimination (Hjerm et al., 2018). In a perfect society, there will be no prejudice and discrimination would be nonexistent.

However, we live in an imperfect society where discrimination and negative stereotypes are exceedingly familiar to many groups. When a teacher fails to unlearn these traits that have been embedded into our imperfect society, negative attitudes toward these groups start to arise in the classroom (Glock & Bohmer, 2018; Glock, Kovacs & Pit-ten Cate, 2018; Picower, 2009; Bergh et al., 2010). These groups, often viewed as the minority groups in the United States, experience disadvantages more frequently because of their race, ethnicity, and cultural background (Mortenson & Netusil, n.d.; Downey & Pribesh, 2004; Glock & Pit-ten Cate, 2018). These societal factors are also known as the macrosystem, according to Urie Bronfenberenner's (1979) Ecological Systems Theory.

Bronfenbrenner's ecological systems theory (1979) is based on the four systems in a child's life that will impact how they will grow and develop. For the purpose of this study, this thesis will look at the microsystem and macrosystem. The microsystem is the first and smallest system of Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979) It includes the child's immediate environment, the people who they are directly interacting with (Bronfenbrenner, 1979). For example, children's family members, teachers, or peers. A child's microsystem is said to have the greatest influence on how they will grow and develop (Bronfenbrenner, 1979). With teachers being in a child's microsystem,

how a teacher chooses to act and react in a classroom will have a great impact on who their students will grow to become (Ulug et al., 2011). Next, one must consider the macrosystem. This ecological system is described as the largest and most distant system out of the four systems, and it includes the societal factors mentioned above, ethnicity and cultural beliefs (Bronfenbrenner, 1979). When these two systems inevitably interact, educators are forced to observe how a child's macrosystem affects their relationship with the people in their microsystem. In the case of this current study, one should consider how children's racial and cultural backgrounds may affect the teacher- student relationships and student academic growth in school settings.

Tying in what is now known about the Social Learning Theory and ecological systems theory with the current study, the question was posed: How is it that a teacher, who is seen as the most influential and impactful model in the classroom, holds more negative attitudes toward those of ethnic and racial minority groups? Past studies on teacher attitudes of ethnic and racial minority students have found evidence in these two aspects: lower academic expectations, and lower classroom placements or more negative program referrals (e.g., special education). In the next sections, the literature review will discuss and analyze past studies concerning academic expectation, program placements, teacher efficacy impacts, and racial minority students.

ACADEMIC EXPECTATIONS

Lower academic expectations of ethnic and racial minority students may arise in a classroom depending on teachers' experiences, background, cultural beliefs, and more. When a racial dynamic between teacher and student (e.g., White teacher - ethnic minority student) exists, lower academic expectations of a student are more likely to happen. Marx (2000), who analyzed the perceptions of White and Hispanic pre-service teachers, found that White participants had lower expectations for their tutees, who were non-native English speakers from minority backgrounds, to graduate high school and/or attend college, compared to Hispanic pre-service teachers. Whereas Hispanic participants had high expectations that their tutees will be successful in school, graduate, and even attend college (Marx, 2000). While analyzing in-service

teachers, researchers have also found similar results regarding academic expectations in ethnic minority students. Bergh et al. (2010) found that when assessing the relationship between implicit prejudiced attitudes and academic expectations for students, teachers who held negative prejudiced attitudes toward ethnic minority students were more likely to evaluate ethnic minority students as being less intelligent and having less promising achievement in their academics. In addition, ethnic achievement gaps were also found to be larger in classrooms whose teachers held higher prejudiced beliefs against ethnic minority students (Bergh et al., 2010). This means, ethnic minority students with teachers who hold prejudiced beliefs against them will becoming lower achieving students. Lastly, a meta-analysis done by Tenenbaum and Ruck (2007) also found evidence from 32 separate reports that indicated teachers had higher and more positive expectations for European American students compared to ethnic minority students.

PROGRAM PLACEMENTS

Teachers and administrators are trusted by parents and their students to make accurate and appropriate decisions for students' program placements in schools. However, when a teacher demonstrates bias in their decision making and is influenced by a student's ethnic and cultural background, we get ethnic minority students who are placed in inaccurate classroom placements or programs. When academic information including student's ethnicity and English as a Second Language (ESL) labels were given to teachers to make program referrals, more than half of the teachers referred ethnic minority students who had the same academic records as ethnic majority students to lower placement programs (Riley, 2014).

Another study by Cate et al. (2015) showed that teachers were less accurate when making tracking decisions for ethnic minority students than ethnic majority students when students' race and ethnicity were shown in their academic profile. According to Cate et al., when teachers were also given students' cultural background, in addition to their academic records, they are more likely to use the category-based strategy when making decisions for ethnic minority students (Cate et al., 2015). This means, teachers are more likely to rely on biases

and stereotypes when making a tracking decision for students, while neglecting other available information, such as their academic achievements (Glock et al., 2014; Cate et al., 2015). The meta-analysis study conducted by Tenenbaum and Ruck (2007) also showed that teachers were more likely to refer ethnic minority students inaccurately to more negative programs such as retention programs, special education programs, and ESL placement.

Although actions of negative prejudice may not always be done intentionally, decisions made by teachers from a prejudice stance will cause disadvantages to many students. Robert Merton's (1948) self-fulfilling prophecy is "in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true" (1948, p. 195). This indicates that lower academic expectations of students and inaccurate negative program referrals, will often also lead to lower academic performance and achievements (Merton, 1948; Bergh et al., 2010). Based on this evidence from the past studies, negative attitudes and prejudiced beliefs of teachers have caused further disadvantages among racial and ethnic minority students.

TEACHER SELF-EFFICACY BELIEFS

Teacher self-efficacy belief may affect racial minority students as Albert Bandura has described it to be inconsistent across various subject matter and various tasks (Bandura, 1997). This means, a teacher's self-efficacy belief may be affected by the racial and ethnic background of their students, or the racial and ethnic background of themselves.

Pre-service teachers from ethnic minority groups have shown to be more enthusiastic and reported higher specific self- efficacy beliefs regarding teaching students from ethnic minority groups than preservice teachers from the ethnic majority (Glock & Kleen, 2019). Past research has shown that "unrealistic optimism" among pre-service teachers often leads to the underestimation of difficulties to be faced in their early years of teaching (Hoy & Spero, 2005). In addition to these findings, teachers' self-efficacy beliefs in teaching racial minority students have also proven to have an effect on student achievement. Racial minority students whose teachers have shown higher self- efficacy

beliefs in teaching them have demonstrated higher test scores in comparison to racial minority students whose teachers have shown lower self-efficacy beliefs (Hines, 2008).

Based on past studies that have been done on this topic, there are clear connections between teachers' years of classroom experiences, their implicit attitudes toward students from racial minority groups and their self-efficacy beliefs in teaching a diverse classroom. The goal of this current study is to investigate implicit attitudes toward racial minority students and self- efficacy beliefs in teaching a diverse classroom between two groups. This pilot study will examine the following research questions:

> 1. In a comparison of pre-service teachers and in-service teachers, how do differences in teachers' implicit attitudes differ toward racial minority students exist?
>
> 2. In a comparison of pre-service teachers and in-service teachers, how do differences in teachers' self-efficacy differ in teaching racial minority students exist?

METHOD

This pilot study was conducted with 18 pre-service and in-service teachers from the southeastern part of the United States. This research was approved by the university's Institutional Review Board prior to starting the investigation of teacher perspectives. The Methods section next describes: (a) participants, (b) materials, and (c) procedures.

Participants

Participants included pre-service teachers from a four-year university in the Southeastern part of the United States. Pre-service teacher participants consisted of nine females from an Early Childhood Development and Education program who ranged from ages 21 to 27.

All participants from this group were final year students conducting their internships in PreK-3 classrooms in local schools. In addition to their current internship experience, this group of participants ranged from having six months to seven

years of volunteering and/or teaching assistant experiences. It is also important to note that these pre-service teacher participants have not finished coursework needed to complete their B.S. in Early Childhood Education.

Of the pre-service teacher participants, four of the nine identified as Caucasian, three participants identified as Hispanic, and two identified as Asian. Next, the second group of participants included nine in-service PreK-3 teachers also from the Southeastern region of the United States. In-service teacher participants included nine females, ranging in age from 23 to 54. This group of in-service teachers have primarily taught only in early childhood classrooms and in private schools, with the exception of three teachers who have taught upper elementary classes. Out of nine in-service teachers, eight participants identified as Caucasian, while only one identified as Hispanic. In addition, eight of these in-service teachers were also currently teaching in a private school, with less than 25% racial minority students. All participants were chosen to aim the study in an early childhood (PreK-3) setting. Participants were contacted through email; and of those who were contacted, 100% agreed and participated in the study.

Materials

To assess participants' implicit bias, this pilot study utilized the Implicit Association Test (IAT) created by Anthony Greenwald (1998). The IAT is a test that measures the strength of associations between concepts and evaluations. In the case of this study, the concepts were racial majority students versus racial minority students, and the evaluations were positive and negative traits. The IAT used adjectives from Stangor, Sullivan, and Ford's study (1991), who found three positive traits and three negative traits that were most associated with the following groups: White, Black, Asian, and Hispanic.

Since this study investigated pre-service and in-service teacher perceptions of ethnic and racial minority groups, pictures used in our IAT showed pictures of Black, Asian, and Hispanic children as the minority, and White children as the majority. Pictures were all sized down to fit our test, and color-corrected to black and white. This was an individual test and took 10 minutes per participant.

Task card examples are included in Appendix A.

Next, the survey created and taken on Qualtrics included questions pertaining to each participant's demographics such as their age, gender, ethnicity, years of teaching and/or volunteering experience, highest educational degree, and the ethnic composition of the school employees and students. The survey included the Teacher Efficacy Scale for Classroom Diversity (TESCD) (Kitsantas, 2012) that assessed participants' self-efficacy beliefs toward teaching in a diverse classroom. Results were scored on a Likert scale ranging from (0- extremely uncertain to 100- extremely certain). Appendix B shows the scenario questions scored by participants.

Procedures

After giving informed consent using the IRB HRP 254 Explanation of Research form, participants were seated in front of the computer screen. Participants were first given instructions for the test, prompting them to locate the "E" and "I" key on the keyboard. Then, the tasks started. Task one included the 20 traits from Stangor et al.'s study, participants were asked to click on the "E" key if the trait is "Positive" and the "I" key if the trait is "Negative".

Next, participants were asked to sort 20 pictures of racial majority and racial minority children. They were given instructions to click the "E" key for "Racial majority children" and the "I" key for "Racial minority children".

The third task will then be a reverse of the first task. Participants were asked again to sort the 20 traits by Stangor et al. (1991), however, the keys were switched for this task. Participants were instructed to now click the "E" key for "Racial minority children" and the "I" key for "Racial majority children".

The fourth task contained the initial combined task, where participants were given both the 20 traits, and the 20 photos. Participants were then instructed to use the "E" key for "Positive" traits, and photos of "Racial majority children", and then "I" key for "Negative traits, and photos of "Racial minority children". And last, the reversed combined task prompted participants to use the "E" key for "Positive" traits and photos of "Racial minority children", and the "I" key for "Negative" traits and

photos of "Racial majority children" (Appendix A). Then, participants filled out the first part of the Qualtrics survey that asked their demographics, educational background, and work experiences. Then, the second part of the survey, the Teacher Efficacy Scale for Classroom Diversity (TESCD) by Anastasia Kitsantas (2012). This test tool used a Likert scale that ranged from extremely uncertain to extremely certain. Participants were thanked for their participation; they were also given permission to request a copy of their results from the IAT.

RESULTS

Participants' Implict Attitudes

Participants' implicit attitudes were analyzed by the strength of associations between the concepts (racial majority students, racial minority students) and evaluations (positive traits, negative traits). First, the differences in both associations from Task 4 and Task 5 were calculated by subtracting the results from Task 5 from Task 4. The data was calculated on an Excel sheet and is shown in Table 1 which includes the number of pre-service teachers who displayed more implicit bias toward racial majority students was more than the number of in-service teachers who displayed implicit bias.

TABLE 1: Participants' Association Differences in Task 1 and Task 5

In-Service	Pre-Service
746.66	129.31
-222.45	2233.08
688.18	690.94
103.61	192.95
23.33	-382.5
-775.89	812.37
1699.34	-544.02
113.6	-314.34
-945.34	-395.39

However, when the data was inserted into an independent t-test, the t-test generated that there was no significant difference when comparing the results of both groups. As shown in Table 2, the two-tailed test did not determine significance at the 5% level (0.79 > 0.05). In conclusion, even though the number of pre-service teachers who showed more implicit bias toward racial majority students was higher than the number of in-service teachers, the difference in both groups were not significant enough to conclude that pre-service teachers hold more of an implicit bias when compared to in-service teachers.

TABLE 2: t-Test Two Sample Assuming Equal Variances

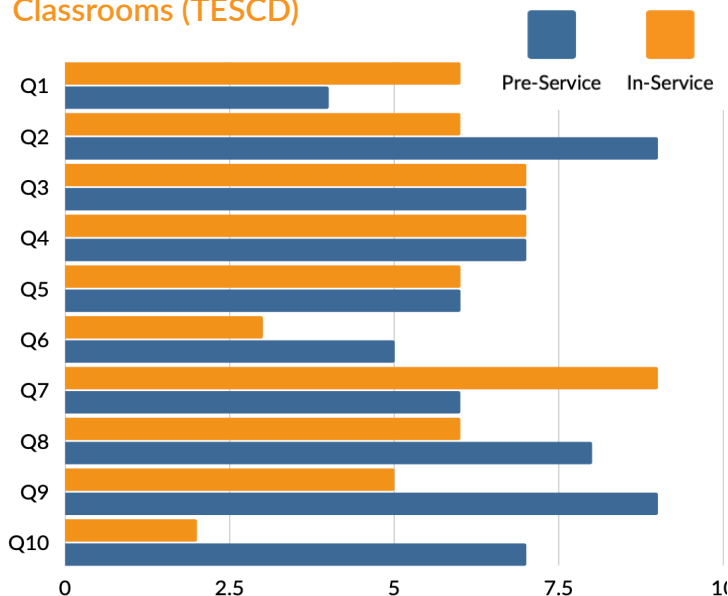|	In-Service	Pre-Service
Mean	159.0044444	269.1555556
Variance	657581.1093	777918.0807
Observations	9	9
Pooled Variance	717749.595	
Hypothesized Mean Difference	0	
df	16	
t Stat	-0.275809144	
P(T<=t) one-tail	0.393112579	
t Critical one-tail	1.745883676	
P(T<=t) two-tail	0.786225158	
t Critical two-tail	2.119905299	

Participants' Self-Efficacy Beliefs in Teaching Diverse Classrooms

The Teacher Efficacy Scale for Classroom Diversity (TESCD) included ten scenario questions regarding teaching a diverse classroom (Appendix B). Each question was answered using a Likert scale that ranged from extremely uncertain to extremely certain, every question was examined individually.

Although not all questions on the scale included questions regarding racial issues or cultural backgrounds, 5 out of 10 of the questions touched on the topic; while the other 5 questions discussed the following: gender stereotypes, student self-esteem, socioeconomic background, learning modality, and religion.

Figure 1 shows the number of participants who answered either certain or extremely certain on questions 1 to 10. Questions regarding teaching English Language Learners, solving racial conflicts, acknowledging cultural diversity and norms include Q1, Q2, Q4, Q6, and Q10. The data from these questions will be discussed next.

FIGURE 1: Teacher Efficacy Scale for Diverse Classrooms (TESCD)

As shown in Figure 1, more pre-service teachers (6>4) stated higher self-efficacy beliefs when teaching English Language Learners in Q1. This question discussed strategies that will enhance communication in the classroom when teaching students who are English learners. Next, Q2 asks how certain participants are when creating a learning environment that is racially unbiased. The data showed that more in-service teachers (9>6) showed higher self-efficacy beliefs when discussing a racial matter in the classroom without being racially biased. Q4, Q6, and Q10 ask participants scenario questions regarding teaching students whose cultural background varies. Since these 3 questions discussed the same topic, data will be looked at as a whole. Figure 1 tells that there are only major differences in Q10 out of the three questions. Q10 asks how certain participants are when teaching students whose beliefs and values may conflict with theirs. As shown, only two pre-service teachers were certain or highly certain, while seven in-service teachers were certain or highly certain.

The data gathered and analyzed for this thesis highlighted that the difference between in- service and pre-service teachers' implicit attitudes toward racial minority students were insignificant. This study was not able to conclude that pre-service teachers may possess more negative implicit attitudes toward racial minority students when compared to in-service teachers. Additionally, the Teacher Efficacy Scale for Classroom Diversity (TESCD) showed that pre- service teachers had higher self-efficacy beliefs

in some respects when teaching diverse classrooms, compared to in-service teachers, but not all.

DISCUSSION

The number of students from racial and ethnic minority groups is growing rapidly in the United States (National Center for Education Statistics, 2018). Over the past decade, an increase of approximately one and a half million ethnic minority students are enrolled in public and private schools across the nation, with Hispanics now being 24.4% of the student population, and Asians being 4.8% of the population (National Center for Education Statistics, 2018). Appendix C shows the increase in numbers among racial minority groups. Although the numbers of ethnic minority teachers have slightly increased in the past decade, most recent data have shown that 79.3% of the teacher population identified as White in the 2017-2018 school year (National Center for Education Statistics, 2018). Despite this vast increase of minority groups in our schools, teachers in the U.S. are predominantly White (National Center for Education Statistics, 2018). Appendix D shows the difference between White teachers and teachers from racial minority groups. With students of minority groups on the rise and teachers from these groups occupying only approximately 20% of the population, a majority of American students will graduate without ever being taught by a teacher of color (Jordon-Irvine, 2004).

The main purpose of this pilot study was to determine pre-service and in-service teachers' self-efficacy beliefs for teaching in diverse classrooms while also determining if a difference in implicit attitudes toward racial minority students exists across in-service and pre- service teachers (Tan, 2020). Although the t-test failed to show a statistically significant difference when comparing pre-service and in-service teachers, the raw data from the IAT did show that the number of pre-service teachers who showed more negative implicit attitudes toward racial minority students was higher than those of in-service teachers. These results were parallel to past studies regarding pre-service teachers and their implicit attitudes toward racial minority students (Glock & Bohmer, 2018; Glock, Kovacs & Pit-ten Cate, 2019; Picower 2009). Similar to the results from the IAT, the results from the Teacher Efficacy Scale for Classroom Diversity

also showed parallel results to past studies (Glock & Bohmer, 2018; Glock & Kleen, 2019). As discussed, the difference in implicit attitudes toward racial minority students and self- efficacy beliefs in teaching a diverse classroom between both groups were not statistically significant enough to draw strong or generalizable conclusions.

However, discussing the results from this study as they relate to the parallel results from past research studies on the topic, many of which were not conducted in the United States is important. The argument can be made that racial disparity plays a critical part in schools across the United States, more work must be done in teacher education. In the U.S., teacher education reform is an important part of a more comprehensive educational reform to improve schools and to enhance student success (Darling-Hammond, 2005). Certainly, one past study on teacher education reform (Wang et al., 2010) have concluded the need to "develop a more democratic knowledge system in teacher education where academic, school-based, and community-based knowledge come together in new ways to develop teacher preparation that better prepares teachers to teach specific groups of students who are now underserved by our schools" (Wang et al., 2010, p. 396).

Moreover, the U.S. studies discussed in the literature review were published (Picower, 2009; Tenenbaum & Ruck, 2007) before current societal movements and active organizations came into existence to shine light on racial injustices and promote racial equity. The Black Lives Matter movement was founded in 2013 as a global organization whose mission is to eradicate white supremacy and fight racism against Black people ("Black Lives Matter: About", 2020). This movement, although founded in 2013, made huge impacts in 2020 in response to George Floyd, a Black man, murdered by police in Minneapolis, Minnesota and Breonna Taylor, a Black woman murdered by White police in Louisville, Kentucky ("Black Lives Matter: About", 2020). Her murder, highlighted on social media, brought many to the streets to protest and led to nationwide discussions about systemic racism, implicit bias and racial equity. Consequently, many Americans, especially White Americans, have been challenged to rethink and unlearn the stereotypes, biases, and racism engrained into our society over many decades. Perhaps, this wave of "unlearning systemic racism" may have impacted the results of this study as Americans become more acutely aware of this topic.

Limitations

The limitations of this study included the following. First, the sample size of this study was smaller than anticipated, due to COVID-19. Typically, quantitative studies are usually not less than a sample size of 30; this study had a total of 18 participants which led to the use of nonparametric t-test to compensate for this limitation. Second, the pre-service and in- service teachers who participated were quite homogeneous in that all were female, early childhood education interns from the same university. Likewise, almost all in-service teachers taught at the same school, and only 11% of participants identified with racial minority groups.

Third, the IAT included some design flaws. The test included two words that could work as either positive or negative, the two words were traditional and selfish. The test marked traditional as a positive trait, and selfish as a negative trait; however, two participants argued that the two words could be an either or.

CONCLUSION

No doubt, future action by teacher education programs and schools are required to reach educational equity. This study, however limited, serves a small pilot study to examine implicit bias of educators and possible negative classroom consequences due to teacher implicit bias.

Considering the extensive research on racial inequality in American schools, intense and immediate work needs to be done to reform schools and teacher education, including administrative, pre-service, and in-service training, diversifying staff and faculty on all levels, and diversity coursework with corresponding field experiences in teacher education programs. This research recommends that pre-service and in-service teachers work to challenge the pervasive, and often invisible roots of systemic racism in education in order to ensure the success and harmony of all school children.

REFERENCES

Bandura, A. (1997). Self-efficacy: *The exercise of control*. New York: Freeman.

Bandura, A. (1977). *Social learning theory*. Prentice-Hall.

Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal and Social Psychology, 63(3)*, 575–582. https://doi.org/10.1037/h0045925

Barry, N. H., & Lechner, J. V. (1995). Pre-service teachers' attitudes about and awareness of multicultural teaching and learning. *Teaching and Teacher Education, 11(2)*, 149–161. https://doi.org/10.1016/0742-051x(94)00018-2

Bergh, L. V. D., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The Implicit Prejudiced Attitudes of Teachers. *American Educational Research Journal, 47(2)*, 497– 527. https://doi.org/10.3102/0002831209353594

Black Lives Matter: About. (2020, June 22). https://blacklivesmatter.com/

Blanchard, S., & Muller, C. (2015). Gatekeepers of the American Dream: How teachers' perceptions shape the academic outcomes of immigrant and language-minority students. *Social Science Research, 51*, 262–275. https://doi.org/10.1016/j.ssresearch.2014.10.003

Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Harvard University Press.

Cate, I. M. P.-T., & Glock, S. (2018). Teacher expectations concerning students with immigrant backgrounds or special educational needs. *Educational Research and Evaluation, 24(3-5)*, 277–294. https://doi.org/10.1080/13803611.2018.1550839

Cate, I. M. P.-T., Krolak-Schwerdt, S., & Glock, S. (2015). Accuracy of teachers' tracking decisions: short- and long-term effects of accountability. *European Journal of Psychology of Education, 31(2)*, 225–243. https://doi.org/10.1007/s10212-015-0259-4

Darling-Hammond, L. (2005). Educating the New Educator: Teacher Education and the Future of Democracy. *The New Educator, 1(1)*, 1–18. https://doi.org/10.1080/15476880490441379

Digest of Education Statistics, 2019. National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education. https://nces.ed.gov/programs/digest/d19/tables/dt19_209.10.asp.

Downey, D. B., & Pribesh, S. (2004). When Race Matters: Teachers' Evaluations of Students' Classroom Behavior. *Sociology of Education, 77(4)*, 267–282. https://doi.org/10.1177/003804070407700401

Education Demographic and Geographic Estimates. https://nces.ed.gov/programs/edge/tableviewer/acsProfile/2018.

Glock, S., & Böhmer, I. (2018). Teachers' and pre-service teachers' stereotypes, attitudes, and spontaneous judgments of male ethnic minority students. *Studies in Educational Evaluation, 59*, 244–255. https://doi.org/10.1016/j.stueduc.2018.09.001

Glock, S., & Kleen, H. (2019). Attitudes toward students from ethnic minority groups: The roles of preservice teachers' own ethnic backgrounds and teacher efficacy activation. *Studies in Educational Evaluation, 62*, 82–91. https://doi.org/10.1016/j.stueduc.2019.04.010.

Glock, S., Kovacs, C., & Cate, I. P. T. (2018). Teachers' attitudes towards ethnic minority students: Effects of schools' cultural diversity. *British Journal of Educational Psychology, 89(4)*, 616–634. https://doi.org/10.1111/bjep.12248

Glock, S., Krolak-Schwerdt, S., & Cate, I. M. P.-T. (2014). Are school placement recommendations accurate? The effect of students' ethnicity on teachers' judgments and recognition memory. *European Journal of Psychology of Education, 30(2)*, 169–188. https://doi.org/10.1007/s10212-014-0237-2

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102(1)*, 4–27. https://doi.org/10.1037/0033-295x.102.1.4

Hines, M.T. (2008) The interactive effects of race and teacher self-efficacy on the achievement gap in school. *International Electronic Journal for Leadership in Learning, 12(11)*.

Hjerm, M., Eger, M. A., & Danell, R. (2018). Peer attitudes and the development of prejudice in adolescence. *Socius: Sociological research for a dynamic World, 4*, 237802311876318. https://doi.org/10.1177/2378023118763187

Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21(6)*, 743. https://doi.org/10.1016/j.tate.2005.06.010

Irvine, J. J. (2004). *Educating teachers for diversity: seeing with a cultural eye*. Teachers College Press.

Marx, S. (2000). *An Exploration of Pre-Service Teacher Perceptions of Second Language Learners in the Mainstream Classroom.*

Merton, R. (1948). Self-Fulfilling Prophecy. *The Antioch Review, 8(2)*, 193–210. https://doi.org/10.2307/4609267

Mortenson, W. P., & Netusil, A. J. (n.d.). Attitudes of Prospective Teachers Toward the Culturally Different, 1–17. https://files.eric.ed.gov/fulltext/ED115614.pdf

Picower, B. (2009). The unexamined Whiteness of teaching: how White teachers maintain and enact dominant racial ideologies. *Race Ethnicity and Education, 12(2)*, 197–215. https://doi.org/10.1080/13613320902995475

Riley, T. (2014). "I Know I'm Generalizing but...": How Teachers' Perceptions Influence ESL Learner Placement. *TESOL Quarterly, 49(4)*, 659–680. https://doi.org/10.1002/tesq.191

Stangor, C., Sullivan, L. A., & Ford, T. E. (1991). Affective and Cognitive Determinants of Prejudice. *Social Cognition, 9(4)*, 359–380. https://doi.org/10.1521/soco.1991.9.4.359

Tan, T. (2020). A comparison of two perspectives on students from minority groups: In-service teachers versus pre-service teachers. Unpublished manuscript.

Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. J*ournal of Educational Psychology, 99(2)*, 253–273. https://doi.org/10.1037/0022-0663.99.2.253

Ulug, M., Ozden, M. S., & Eryilmaz, A. (2011). The Effects of Teachers' Attitudes on Students' Personality and Performance. *Procedia - Social and Behavioral Sciences, 30*, 738–742. https://doi.org/10.1016/j.sbspro.2011.10.144

Wang, J., Odell, S. J., Klecka, C. L., Spalding, E., & Lin, E. (2010). Understanding Teacher Education Reform. *Journal of Teacher Education, 61(5)*, 395–402. https://doi.org/10.1177/0022487110384219

APPENDICES

Appendix A

Lazy	Negative	i
Dirty	Negative	i

Task Card One:

Task Card Two:

Words Shown in Part One:

Stimulus	Category	Correct Response
Athletic	Positive	e
Rhythmic	Positive	e
Sociable	Positive	e
Aggressive	Negative	i
Lazy	Negative	i
Inferior	Negative	i
Industrious	Positive	e
Intelligent	Positive	e
Friendly	Positive	e
Stubborn	Negative	i
Materialistic	Negative	i
Selfish	Negative	i
Gentle	Positive	e
Aggressive	Negative	i
Passive	Negative	i
Cheerful	Positive	e
Traditional	Positive	e
Proud	Positive	e

Words Shown in Part Two:

Stimulus	Category	Correct Response
Photo 1	Racial Minority Children	i
Photo 2	Racial Minority Children	i
Photo 3	Racial Minority Children	i
Photo 4	Racial Minority Children	i
Photo 5	Racial Minority Children	i
Photo 6	Racial Minority Children	i
Photo 7	Racial Minority Children	i
Photo 8	Racial Minority Children	i
Photo 9	Racial Minority Children	i
Photo 10	Racial Minority Children	i
Photo 11	Racial Majority Children	e
Photo 12	Racial Majority Children	e
Photo 13	Racial Majority Children	e
Photo 14	Racial Majority Children	e
Photo 15	Racial Majority Children	e
Photo 16	Racial Majority Children	e
Photo 17	Racial Majority Children	e
Photo 18	Racial Majority Children	e

Photo 19	Racial Majority Children	e
Photo 20	Racial Majority Children	e

Lazy	Negative	e
Dirty	Negative	e

Task Card Three:
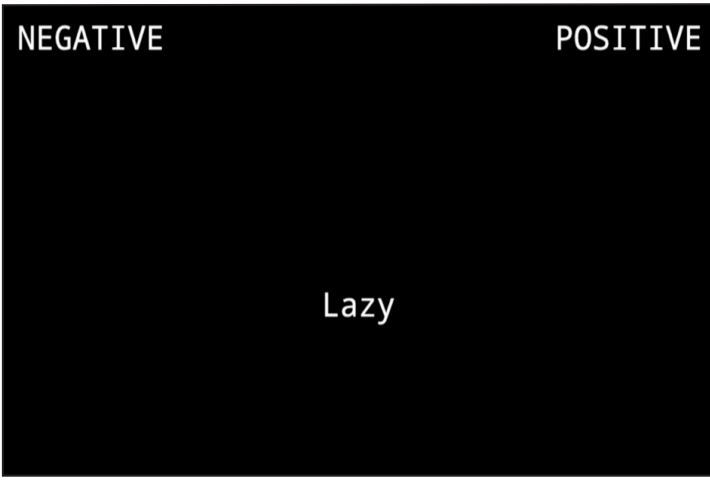
Words Shown in Part Three:

Task Cards Four:

Note: Part four used the same words and photos as parts one & two

Stimulus	Category	Correct Response
Athletic	Positive	i
Rhythmic	Positive	i
Sociable	Positive	i
Aggressive	Negative	e
Lazy	Negative	e
Inferior	Negative	e
Industrious	Positive	i
Intelligent	Positive	i
Friendly	Positive	i
Stubborn	Negative	e
Materialistic	Negative	e
Selfish	Negative	e
Gentle	Positive	i
Aggressive	Negative	e
Passive	Negative	e
Cheerful	Positive	i
Traditional	Positive	i
Proud	Positive	i

Task Cards Five:

RACIAL MAJORITY
NEGATIVE

RACIAL MINORITY
POSITIVE

Note: Part five used the same words from part four, but swapped

Appendix B

Teacher Efficacy Scale for Classroom Diversity (TESCD)

| 1	You are teaching a diverse class with some students for whom English is a second language. When you teach, you encounter several verbal communication problems that confine comprehension of instructional material and effective discussions in the classroom. How certain are you that you can use strategies that enhance and maintain verbal communication in the classroom?
2	You are teaching a racially diverse class. Often during class discussions related to racial issues create friction which leads to hostility among the students. How certain are you that you can create a learning environment where your students can discuss these issues without being racially biased?
3	You are teaching a class consisting of an approximately equal number of male and female students. You have noticed that many girls and boys firmly reject activities, role playing, and academic subjects that they believe are inconsistent with their gender schemata. How certain are you that you can develop a classroom environment that encourages your students to adhere to nontraditional gender stereotypes?
4	You are teaching a culturally heterogeneous class. You have observed that most of your students' experience "cultural mismatch" between their homes and school culture. For example, some of your students have different standards about what behaviors are appropriate in the classroom. How certain are you that you can help your students to successfully adjust to the school environment?
5	You are teaching a class with students from diverse backgrounds that are at risk for academic failure. You have noticed that these students show signs of low self-esteem, disinterest in school activities, and at times exhibit disruptive behavior. How certain are you that you can develop culturally related context activities to encourage your students to participate in academic classroom tasks?
6	You are teaching a class with students from various ethnic backgrounds with different traditions, customs, conventions, values, and religious beliefs. You notice that some of your students have trouble tolerating one another's differences. How certain are you that you can provide your students with opportunities that foster awareness and appreciation of cultural differences?
7	You are teaching a culturally diverse class. You have noticed that your ethnically diverse students show different learning modality preferences (e. g., written vs. auditory). For example, some of your students prefer listening to a tape of their reading assignment while reading rather than only reading it. How certain are you that you can create a learning environment that accommodates your students' modality preferences?
8	You are teaching a class with students from various socioeconomic backgrounds. Some of these students show lower aspirations for academic achievement, are often lethargic, seem isolated in class, and rejected by their more economically advantaged peers. How certain are you that you can create a favorable climate that will promote social interaction among your students?
9	You are teaching a unit in religion. Your students' religious beliefs vary considerably and classroom discussions of different religions would be a challenging task. How certain are you that you can ensure that your students develop appreciation and respect for religious diversity?

10	You are teaching students whose cultural climate (e.g., values, norms, school expectations etc.,), differs substantially from that of the school and community. In fact, sometimes your expectations may conflict with the students' personal beliefs and values. How certain are you that you can help your students understand how the school's core curriculum relates to their own cultural climate and life needs?

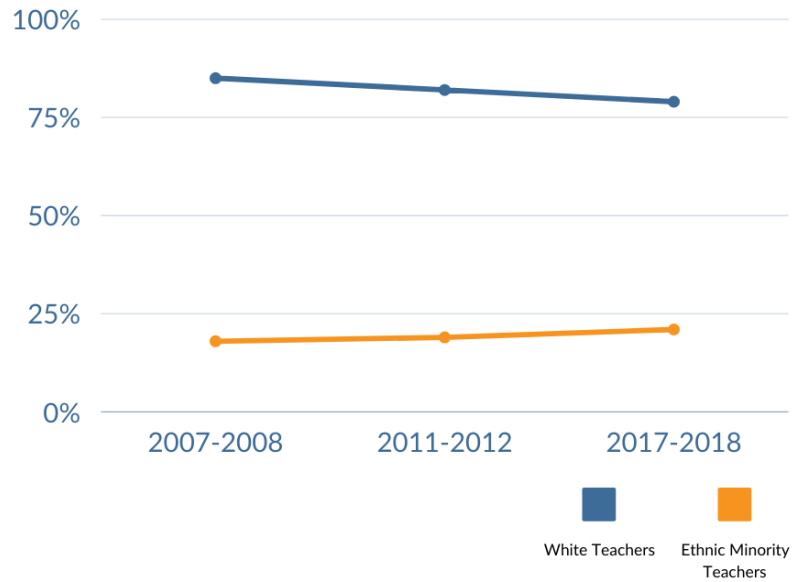*Note: Scale ranges from 0 (Extremely uncertain) - 100 (Extremely certain)*

Ethnic Minority Students in the United States
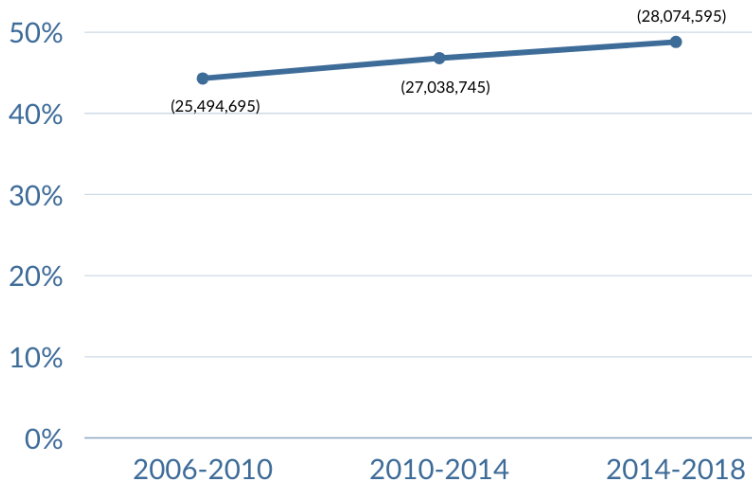
Note: Statistics from this figure was derived from the National Center for Education Statistics.

Ethnic Minority Teachers vs. White Teachers in the United States

Note: Statistics from this figure was derived from the National Center for Education Statistics.