Mental Health and Discipline Through the Eyes of Educators

1. Proposal Narrative

A. Abstract

The following experiment examines the impact race has on teachers' perceptions of challenging behaviors and mental health symptoms. Previous research has found Black students are more likely to receive exclusionary disciplines in the classroom than White students (Sturgess, 2011). Additionally, Black students are less likely to be referred to mental health professionals for internalizing mental health concerns (Alegría et. al., 2012). Previous research has failed to look at teachers' eye movements as a catalyst for the discrepancy seen between mental health and disciplinary referrals along racial lines. By tracking the eye movements of teachers in the La Crosse, Wisconsin area, we expect the participants will be more likely to look for signs of problematic behaviors in the Black child and signs indicating a child needs help with their mental health in the White child. Using a within-subjects research design, the 50 participants will be exposed to an image of four children in a classroom via a computer screen attached to the eye-tracking system. The children on the screen will be composed of two Black male students and two White male students. We will then track the participants' eye movements when telling them to look at specific areas of the photo, focusing on who they look to when we tell them to look at the child displaying problematic behaviors and then the child displaying behaviors that stem from mental health issues.

B. Background/Statement of the Problem/Significance of the Project

If you asked a stranger on the street if they had a preference for one race over another, you would most likely receive a look of disgust followed by a response along the lines of "I'm not a racist!" Now consider the same situation but with a teacher as they are walking down the school hallway. You might imagine that their response would be the same as the stranger on the street, if not stated even more passionately. Teachers are widely considered educated role models for our youth, and hopefully very few would profess explicitly racist beliefs. However, just because individuals are not explicitly

racist does not mean that they are not implicitly racist. Explicit biases are conscious and intentional, whereas implicit biases are more involuntary, unconscious, and effortless beliefs that humans harbor (Greenwald, McGhee, & Schwartz, 1998).

Rosenthal and Jacobson (1966) tested implicit biases in educational settings empirically. At the beginning of the school year, teachers were told that a randomly selected group of students would be "bloomers" and would significantly improve academically throughout the course of the school year. Other students were randomly labeled "non-bloomers". The results exposed that the teachers' implicit beliefs toward both the "bloomer" and "non-bloomer" students dictated how they interacted with the child, and subsequently produced the predicted outcome. The interactions, such as creating a warmer climate, expecting greater class involvement, and having higher standards for the "bloomers," acted as mediators and affected the children's academic success during the school year.

Similarly, Harvard's Implicit Association Test on race found that the majority of citizens implicitly prefer and associate positive words faster with White people than Black people (Greenwald, McGhee, & Schwartz, 1998). While it is clear that explicit biases are negatively affecting children of racial minorities in our society and schools today, so too are implicit biases; however, they are doing so covertly. Implicit racial biases have been shown to impact disciplines imposed in the classroom. Although Black citizens comprise only 13% of the United States population (United States Census Bureau, 2010), observations from numerous schools of varying grade levels found that Black students received 37% of in school suspensions and 43% of out of school suspensions (Sturgess, 2011). Teachers may be aware of the general disparities in school discipline, but due to their implicit biases, they may feel as though their severe punishments toward Black students are justified. Sturgess (2011) also found that teacher race did not affect these numbers. Both White and Black teachers were more likely to write punishment referrals for Black students than White students.

One concern with discrepancies in how different racial groups are viewed, both implicitly and explicitly, is the impact such inconsistencies may have on children's mental health (DuPont-Reyes et. al., 2019). Results showed that Black boys were more likely to believe treatment is ineffective for mental health issues, such as social anxiety and bipolar disorder, and that symptoms of such mental illnesses reflect negatively on one's personality. Furthermore, the anticipation of judgment from peers due to mental illness was found to be stronger among children who identified as belonging to a racial minority group (Quinn et. al., 2019).

Not only is the intersectionality of race and mental health differently experienced by those affected, but the mental health of Black and White students are perceived differently by teachers as well (Alegría et. al., 2012). Results showed that Black students were less likely to be referred to mental health professionals than their White peers for low-severity concerns, such as mild depression and anxiety. Further, without a referral, the rate of service use significantly declined regardless of race.

In order to assess whether racial and gender biases can explain referral rate discrepancies, researchers used eye-tracking technology on teachers (Gilliam et. al., 2016). Teachers were shown images of male and female students of different races and asked to identify challenging or disruptive behaviors in classrooms. Results showed teachers looked at Black boys far longer than at any other race/sex combination. These findings indicate that who teachers focus on when looking for challenging or disruptive behaviors in classrooms might contribute to racially unequal disciplinary measures.

Research suggests that eye movements when viewing a scene are affected by beliefs and attitudes. Thus, the use of eye-tracking systems has created an adequate way to study implicit biases (Gilliam et. al., 2016). An eye tracker is a piece of technology that detects eye movements, which allows for the analysis of the human ability to process visual information from interactive and diagnostic uses (Mele & Federici, 2012). Eye movements occur in response to the combination of cognitive and perceptual processes. By looking at eye movements, we are able to study image processing, language processing, memory, social cognition, auditory processing, and decision making.

In our study, an eye-tracking system will be used to look at the impact race has on teachers' perceptions of challenging behaviors and mental health symptoms. Previous research has failed to look at teachers' eye movements as a catalyst for the discrepancy seen between mental health and disciplinary referrals along racial lines. We believe our findings will be important in highlighting implicit biases that educators are unaware of. Being more aware of their implicit beliefs might allow them to consciously work to overcome these biases to provide a more inclusive classroom environment for all students. More specifically, making teachers aware of their implicit biases could influence teachers to pay closer attention to minority students who display signs of mental health issues, such as anxiety and depression. Such improvements could positively impact Black students' success in the future. Based on the many Implicit Association Test results that uncover widespread implicit racial prejudice against Black people in favor of White people, we hypothesize that given the scene of a Black child and White child, teachers will be more likely to look for signs of problematic behaviors in the Black child and for signs indicating a child needs help with their mental health in the White child.

C. Objectives / Specific Aims

- Examine implicit biases by measuring the degree to which teachers show preference for looking at either Black students or White students when prompted to look for either mental health concerns or troubling behaviors.
- Analyze vision patterns collected by the eye-tracking system to show prevalence of implicit racial biases in today's society.
- Add nuance to the research that shows implicit biases are evident in school classrooms and use this information as a starting point to start a societal discussion around the topic, thus identifying possible ways to counteract these biases.

D. Methods

The UWL Geography department owns an eye-tracking system and has offered its use to the Psychology department. We will recruit 50 current teachers from La Crosse, Wisconsin area schools. Participants will be seated in front of a computer and calibrated and connected to the eye-tracking system. They will view a series of images, each depicting two White and two Black male students in a classroom. As a cover story, participants will be informed that the study assesses their change blindness in classroom settings and they will view a video explaining the concept. Change blindness is the phenomenon that people will not detect a change in their environment unless they are looking directly at the area changing (Simons & Levin, 1997). We will then ask participants to look for the change in a specific area of each image. For example, we will ask them to look for the change in concrete aspects of the image, such as the student with glasses, or more subjective parts of the image, such as the smartest student. On certain critical trials, participants will be told the change will occur in the student who exhibits problematic behaviors or in the student who seems to be struggling with mental health. During these prompts, no change will actually occur. By eliminating the change from occurring, there should be no legitimate reason to look at one child more often than another. Using the eye-tracking system, will be able to see which racial group of students teachers tend to look at more, given the prompt they received. As outlined earlier, we predict that teachers are more likely to look at Black students when looking for troubling behavior and more likely to look at White students when looking for mental health issues.

We will analyze our data by conducting a 2(race) x 2(prompt) within subjects ANOVA with time spent looking as the dependent variable. By examining looking times we will be able to conclude if there is a significant interaction between race and looking prompts, allowing us to establish whether or not teachers harbor implicit racial biases.

E. Final Products and Dissemination

In the spring of 2021, we will present this study at the University of Wisconsin- La Crosse Research & Creativity Symposium. Additionally, we will apply to present at the Midwestern Psychological Association annual conference and the National Conference of Undergraduate Research.

F. Budget justification

The total amount requested to conduct this study is \$2,300. We predict that we will spend approximately 300 hours of work throughout this project and are asking for \$1,500 as a stipend. Additionally, we are requesting \$50 in order to print a poster for future presentations, and \$750 to pay participants. We plan on giving each of our 50 participants a \$15 gift card to Kwik Trip for participating. Incentives are necessary for our experiment in order to get the optimal number of participants, as we are asking teachers to spend their free time after a full work day to partake in our study and eye-tracking studies are somewhat time-consuming for both researchers and participants. Alegría, M., Lin, J. Y., Green, J. G., Sampson, N. A., Gruber, M. J., & Kessler, R. C. (2012).
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