THE PERCEPTION OF HEALTHCARE PROVIDER BIAS BY WHITE STUDENTS AND STUDENTS OF COLOR

By

Erica Jade Fontan

Submitted to the Psychology Department, Allegheny College
in partial fulfillment of the requirements for the degree of
BACHELOR OF SCIENCE
April 3rd, 2024

A Senior Comprehensive Project
Presented by:
Erica Jade Fontan
April 3rd, 2024

Pledge: _____

Approved:

_____

Dr. Monali Chowdhury

_____

Dr. Ryan Pickering

Table Of Contents:

Acknowledgements:

I would first like to dedicate this research project to my younger brother Jordan. Jordan is a man of color who has autism and has been my biggest inspiration to do research on healthcare provider bias and do work involving autism and other neurodevelopmental disabilities. My family is lucky that Jordan had an overwhelming amount of support from resources to help him progress through the spectrum and he always wants to help people just like him. Buddy, you're the reason why I work hard, I love you sweet pea!

I would also like to dedicate this research project to my grandfather, Pablo Cartagena who passed away from Alzheimer's last year. My grandpa had a rough past few years with his condition but still always showed nothing but love and support to me. My grandpa was like a father figure to me and my biggest role model. He had a dream for me to graduate college and pursue education. I will now be graduating as a first generation student with a research project. I know he would be proud of me for everything I've accomplished. Te amo Grandpa!

Thank you to my readers Dr. Chowdhury and Dr. Pickering for helping me develop a topic I am passionate about for this project and giving me the opportunity to help me grow as a researcher, a student and an individual. They have provided me with multiple insights throughout my research and have helped me execute a project I have deep care for. Thank you both Dr. Chowdhury and Dr. Pickering for making this experience run smoothly, this is an experience I will never forget. Best advisors ever!

I would like to say a huge thank you to my mom and dad, Yolanda and Eric for supporting my academic endeavors and raising me to be the adult that I am for the last twenty one years of my life. I love you both unconditionally and don't know what I would do without you. Another parental figure in my life is my grandma, who inspires me to keep going everyday

no matter what the challenge is. I would also like to thank my older sister, Eliza, for being another one of my role models and inspiring me to graduate college and to make a difference in people's lives just like she does, being a nurse. Along with the rest of my family, Tia Loudres, Tio Don, Tio Poly, Mark, Chris, Izzy, Nikki, my nephew Milo and his little brother baby O and my niece (technically second cousin) Cali Rose along with her little brother Logan Alexander for always supporting me and showing me nothing but love!

I can't express enough love and gratitude to my boyfriend, Henry Rosenberg. Henry and I met in Dr. Chowdhury's junior seminar class in spring of 2023 and he has been nothing but kind, patient and supportive throughout this whole process. Thank you Henry, for always finding a way to put a smile on my face, even when I was stressed and tired. I love you always. Thank you so much to my friends, Darnae, Chikasi, Amani, Zoe, Sam, Sophia, Sabrina, Debbie and Gabe for watching me comp almost every day and reminding me to drink water instead of my third cup of coffee. The love and support you all have given me has helped me push through the hardships I faced while working on this project. Also a huge thank you to the Grounds For Change community I was involved in for pushing me to finish this project, making lovely memories and providing me with unhealthy amounts of caffeine, soy milk and sweet treats! Thank you to Roger. Roger is not a human, roger is a Guinea Pig… who squeaks, has an endless appetite, and does tricks. Even though Roger is technically just a small rat with eyes that have not a thought behind them, he is my emotional support animal, and I really couldn't have done it without Roger (aka. Stinky, pinky, mr.fluffy) the list goes on…Squeak squeak!

Finally, I need to thank myself. After all the ups and downs, time management and hard work I have put in, I did it. I am a first generation, latinx, queer graduate and the first in my family to have institutional research. I defied the odds against me and will continue to do so!

Abstract:

Medical racism and discrimination are one of the many disparities people of color have to go through on a day to day basis (Horowitz et al. 2019). There have been many reports pertaining to the different types of racial discrimination specifically against people of color in medical environments by healthcare providers, one being healthcare provider bias (Heath et al. 2022). This study examines perception of healthcare bias by White students and students of color through qualitative thematic analysis. Twenty-two undergraduate students from Allegheny College were recruited on the SONA platform and reported their experiences within healthcare. One questionnaire was a Demographic Questionnaire, which recorded the participants' identities. The open ended questionnaire labeled Healthcare Provider Bias questionnaire (HPBQ), which was created and inspired by research on medical racism by Health et. al (2021), Obsorne, (2007), Tanne et. al (2002) and Abdou et al.(2010); Giscombé & Lobel, (2005). The study aimed to measure participants' experiences in the medical field with their provider and health disparities they may have experienced. There were two participant groups, White participants and participants of color with responses being coded by question and racial identity. Several overarching themes, using thematic analysis coding (Braun & Clarke, 2006), emerged including that in the importance of familiarity, trust and comfort being important factors when having a healthcare provider. Results from each data set provided partial support of the hypothesis by some questions from the HPBQ directly supporting the hypothesis and some questions indirectly supporting the hypothesis.

Introduction:

Racism is something that people of color face regularly, 65% of Americans across many racial and ethnic groups have reported constant experiences of racial insensitivity in the last few years, (Horowitz et al, 2019). When people hear the word “racism” a lot of people tend to think of acts that are blatant such as the usage of slurs, physical attacks on a group of people, and direct discrimination in the public setting. Society does not address the other forms of racism people of color face such as microaggressions and stereotype threat enough, including biases against specific types of races and ethnicities. Racism can also happen in certain environments as well that consist of blatant and passive aggressive actions. Racism can happen in the medical field, and it does constantly.

Medical racism is defined as,“the systematic and wide-spread racism against people of color within the medical system” (Bronson et al, 2020, p.1). A common example of medical racism is healthcare provider bias, a bias that healthcare providers hold which either consciously or unconsciously dictates their decisions on interactions and treatment towards the patient, Heath et al. 2020). Healthcare provider bias is common amongst patients of color, more specifically patients who identify as African American or Black and Hispanic or Latinx, “Overall, four in 10 patients of any demographic group said they perceive their healthcare providers as biased against them. Hispanic and Black patients were more likely to report as much compared with any other demographic group” (Heath et al., 2022, p.1), “Twenty-one percent of Black patients reported implicit bias or discrimination from their physicians, compared to 11 percent of Hispanic and 8 percent of Asian respondents” (Heath et al, 2021, p. 2). Knowing that a healthcare provider's perception of a patient may be biased can jeopardize patients of color.

Early Intervention and Healthcare Provider Bias:

Healthcare provider bias is not only harmful to patients of color, it is detrimental to patients of color who are young children who are potentially being exposed to the wrong treatment or no treatment at all due to a doctor's racially biased perception. Parents of color bringing their children to either a check up, or an elevation for a specific illness can typically lead to frustrations, feeling defeated and backwards progression within the child's cognitive growth if they recognize the healthcare provider has a bias towards the child and their family. This bias causes the healthcare provider to not recognize emotional and behavioral problems in children of color and instead view these issues as nothing important to further examine, which leads to lack of proper care, treatment and resources for children of color (Cameron & Guterman, 2007). An example of healthcare provider bias impacting children patients of color are doctors refraining from giving a child of color an autism diagnosis and instead diagnose the child of color with a behavioral disorder, "African American children are 5.1 times more likely to be diagnosed with behavioral issues than autism compared to white children" (OFAR et al, 2018, p. 2), "Hispanic children are 65 percent less likely and black children 19 percent less likely than white children to be diagnosed with autism" (OFAR et al, 2018, p. 1). A common behavioral disorder children of color get diagnosed with is conduct disorder. Conduct disorder, "refers to a group of behavioral and emotional problems characterized by a disregard for others" (Nationwide's Children, 2023, p. 3). "Children with conduct disorder have a difficult time following rules and behaving in a socially acceptable way. Their behavior can be hostile and sometimes physically violent" (Nationwide's Children, 2023, p. 4). Children of color tend to receive a conduct disorder diagnoses rather than an ASD or any neurodevelopmental diagnosis, "A study of 1173 youth living in residential treatment facilities found that Hispanic and Black

American youth were diagnosed with CD at significantly higher rates than non-Hispanic white youth (43.3% and 34.4%, respectively, compared to 24.4%)" (Cameron & Guterman, 2007, p. 2). When ASD diagnoses are given to children of color, it is often during the later stages of childhood, which can be detrimental to that child's cognitive development. Studies have shown that healthcare providers recognize ASD in children of color by 2.05% compared to White children at 2.38%, recognizing and giving children of color an autism diagnosis on average at the age of 8 (Pham et al. 2022). Unfortunately, healthcare providers who hold these biases portray families of color as dysfunctional. Research has shown that when a family of color, more specifically a black family is presented, they are often perceived as dysfunctional, less educated and unstable in many factors including mentally and economically (Bryant et al. 1988). These biased perceptions of families of color that are held by doctors can potentially be inequitable to patients and their families' in regards to treatment plans and access to resources.

Stereotyping:

These perceptions healthcare providers hold are known as stereotypes, "Stereotypes are defined most frequently and consistently in scholarly literature as an association between group(s) and the characteristic(s) attributed to those group(s)" (Kurylo, 2012, p. 1). Stereotyping is a factor that influences racial biases within people which then leads to how people interact with said outgroups. For instance, it is not uncommon that non-black people view most black people as violent, incompetent, lazy and to have poor mannerisms, "51 percent believe that black persons are prone to violence, 29 percent view black persons as unintelligent, and 44 percent view them as lazy" (Williams et al. 2000, p. 4). Stereotyping is common within the medical field amongst medical professionals and can influence a healthcare provider's decision to refrain from proper care or treatment. Doctors have regularly viewed black patients as incompetent which led

to their decision of not giving any treatment to the patient, “Perceiving a black patient as less competent and thus deciding to not prescribe the patient a medication” (FitzGerald & Hurst, 2017, p. 2). The stereotyping placed on patients of color can influence the decisions healthcare providers make on providing proper care, treatment or what access they have to helpful resources. Doctors placing stereotypes on their patients of color and refraining from proper care stems from this idea that patients of color are expected to jeopardize their health due to societal stereotyping. A stereotype held by non African American/ Black individuals is the African American/ Black community actively partaking in what is known as “risky behaviors". What “risky behaviors” entail are doing drugs and being sexually active in dangerous ways due to the societal perception that black people consistently consume illegal drugs and black people, especially black women are hypersexualized, “They [doctors] also believed that their Black patients were less intelligent, more likely to engage in risky health behaviors, and less likely to adhere to treatment recommendations” (Abdou & Fingerhut, 2014, p. 5). The negative health related stereotypes doctors place on their patients of color, especially women patients of color can be frightening and detrimental to their health and instead of receiving the proper care, these groups are more fearful of not fitting those negative stereotypes than their own physical and mental well being (Abdou & Fingerhut, 2014).

Stereotype Threat:

Stereotyping can lead to what is known as stereotype threat. Stereotype threat is scholarly defined as “the psychological phenomenon where an individual feels at risk of confirming a negative stereotype about a group they identify with” (Heaning et al. 2023, p. 1). This type of threat generally causes an immense amount of psychological distress and anxiety within people of color, which holds them back from thriving in society and environments they are placed in

whether that is school, work, etc due to the constant fear of not only being perceived in a negative way but the worry of having to fight against stereotypes being placed onto them and fearing that experiencing any type of failure in any given social environment, even if it is as little as a mistake is perceived as confirming a negative stereotype about one's identity (Osborne, 2007). Most people of color are aware of the fact that there is a high chance that they will experience stereotype threat in any environment they put themselves in.

Healthcare provider bias and Stereotype threat:

Due to stereotype threatening, research has reported that patients of color being aware of stereotype influenced perceptions healthcare providers may have about them (Abdou et al. 2010). Knowing this, people of color may remove themselves from certain environments to avoid stereotype threat and any other psychological stress it may bring upon them. African American/ Black people, more specifically African American/ Black women are statistically known to be more hesitant to go to the doctors office due to the fact that they are aware that medical racism is heavily prominent within healthcare providers and environments, “Black women are less likely to utilize health care than White women even after adjusting for access. This pattern suggests that, in addition to economic barriers, there are social barriers to health care utilization and, ultimately, good health among Black women, and possibly also other minorities” (Abdou & Fingerhut, 2014, p. 1). Stereotype threat in the medical field causes patients of color to worry more about being mistreated due to preconceived notions about their identity than their own mental and physical well being. There have been reports of African American/ Black women expressing concern about stereotypes being placed on them by healthcare providers and how differently they are treated because of their race or ethnicity (Abdou & Fingerhut, 2014).

Composition Goals:

This study examined the experience of healthcare provider bias in different racial groups in medical environments. There are reports and research stating that generally, it is common for racial biases and other discriminatory behaviors take place in a handful of public places including health care settings towards minorities, more so African American/ Black and Hispanic/Latinx folk according to a recent KFF survey that reported Black and Hispanic adults being more likely than White adults to experience race-based discrimination in public settings while shopping, working, getting health care, or interacting with the police" (Hill et al. 2023). If discrimination and biases towards racial groups is normalized, why would these behaviors stop at the medical field, where people are potentially the most vulnerable? This leads to the hypothesis that patients of color perceive more healthcare provider bias in any medical setting compared to white patients. It is briefly highlighted throughout research provided how biases are displayed, one being the lack of opportunity for medical early intervention for patients of color. Lacking the opportunity for early intervention such as refraining from a neurodevelopmental diagnosis for a child of color and instead giving a behavioral disorder diagnosis or no diagnosis at all due to stereotyping is a common way healthcare providers display bias towards patients of color. Early intervention is detrimental when giving any type of neurodevelopmental disability diagnosis to avoid any cognitive or social setbacks in the child's adulthood. The latest a child should be diagnosed with a neurodevelopmental diagnosis is approximately 4 years old, while the youngest and most common ages would be around 12-18 months old (Dennis et al. 2022). Findings have found that on average, children of color are properly diagnosed with a neurodevelopmental disability between the ages of 4 to 7 or three years after the child's parents reach out to a doctor for concerns for their child (Alyward et al. 2021) . A common sign of a child having a neurodevelopmental disability is that child being nonverbal and with early intervention, that

child is far more likely to become verbal compared to children who receive a late diagnosis with late intervention (Koegel et al. 2013). Findings relating to late intervention have significantly negative consequences towards the child's cognitive and social growth (Koegel et al. 2013). Healthcare providers withholding the opportunity for families of color to intervene early for their child's neurodevelopmental disability while being aware of the long term effects of late intervention is one way healthcare provider bias is displayed towards patients of color. There is also more detailed research and elaborate analysis on other ways bias is displayed by healthcare providers in the medical field amongst patients of color, which include stereotyping and stereotype threat and how these behaviors impact these groups of patients.

Methods:

Participants: A total of twenty two students were recruited from Allegheny College, nine students being students of color and thirteen being White using the SONA platform. After a week of collecting data, there was some trouble finding participants of color due to Allegheny College being a predominately White institution. Due to this, some other forms of recruitment were through contacting the presidents and vice presidents of organizations that are resources for students of color on campus and emailing professors in the psychology department to visit their classes and talk about the credentials of the study. The organizations contacted were the Green Students Of Color Society (GSOCS, African Student Association (ASA), South Asian Student Society (SASS), Islamic Cultural Association (ICA) and The Association of Caribbean Students (ACS). Thirteen of the participants are White college students and the other nine participants are college students of color.

Materials: Participants needed a laptop, the SONA website and has been provided with the Demographic Questionnaire (Appendix A) and Healthcare Provider Bias Questionnaire (HPBQ) (Appendix B). The consent form and both questionnaires were made on the google forms platform. The Demographic Questionnaire asked participants questions about their race/ethnicity, gender identity, academic year, academic major, age and what they have seen a healthcare provider for. The Healthcare Provider Bias Questionnaire (HPBQ) is inspired by research and statistics founded, relating to racial biases including stereotype threat and discrimination within the healthcare industry and how it impacts the patients well being and perception of the medical field. The six questions in the HBPQ are as follows.

Question one: "**On a scale of 1-10, 1 being the lowest and 10 being the highest, how much do you trust your healthcare provider to give you the best treatment?"**

This is inspired by research conducted by Sarah Heath and colleagues who provided statistics about who experiences racial bias in the healthcare field and how those races feel about their healthcare providers, "Eighty-six percent of White respondents said they trust their providers, compared to 76 percent of Black adults and 77 percent of Hispanic adults. Seventy-seven percent of White respondents said their providers care about them, while only about two-thirds (67 percent) of Hispanic respondents and 71 percent of Black respondents said the same. Additionally, White patients perceive their clinicians as spending the right amount of time on patient-provider interactions. Eighty percent of White respondents agreed as much, while 68 percent of Hispanic patients and 73 percent of Black patients said the same" (Heath et al. 2021, p. 2).

Question two: "To your memory, have you received any discrimination from your healthcare provider? If yes, what was the scenario and how did it make you feel? If no, then how has your healthcare provider made you feel in your past visits?"

This question inspired by researched conducted by Sarah Heath and colleagues who also provided statistics on this specific topic, stating that a large majority of patients of color, more specifically African American/ Black and Hispanic/ Latinx patients reported more discrimination compared to their white peers, "Particularly, 12 percent of patients said they experienced discrimination at the hands of their own doctors. Twenty-one percent of Black patients reported implicit bias or discrimination from their physicians, compared to 11 percent of Hispanic and 8 percent of Asian respondents" (Heath et al. 2021, p.1).

Question three: “Do you feel any type of nervousness or anxiety while at the doctor's office and/or being in any health care setting? If yes, what makes you nervous? If no, what do you feel in any healthcare setting?”

Scholarly work conducted by Jason W. Osborne reported patients of color experiencing constant stereotyping by healthcare providers or being stereotype threatened in the healthcare setting which contribute to healthcare provider bias, thus being an influencing factor for patients of color to avoid experiencing being viewed with such negative connotations by doctors. Generally, being stereotyped and stereotype threatened amongst marginalized groups causes an increase in psychological stress and anxiety, “Because of these stereotypes, group members tend to experience higher anxiety on tasks in the stigmatized domain than others not subject to these negative stereotypes. This anxiety is due to the constant fear of being viewed through the lens of the stereotype, to constantly having to fight against being stereotyped, and to the worry that any personal failure will be a confirmation of the negative group stereotype” (Osborne, 2007, p. 112).

Question 4: “Would you feel more comfortable with a healthcare provider of the same race as you? Further explain your choice”.

Tanne et al. (2002), states in her research that patients tend to choose healthcare providers of the same race and not only have more trust in healthcare providers who look just like them, but are more satisfied with their experience with that healthcare provider.

Question 5: “There have been reports of discrimination amongst patients of color in the healthcare industry,“Twenty-one percent of Black patients reported implicit bias or discrimination from their physicians, compared to 11 percent of Hispanic and 8 percent of Asian respondents'' (Heath et al. 2021). Briefly provide your thoughts and opinions on this”.

Heath et al. (2021) has reported discrimination amongst multiple patients of color including black and hispanic patients. Abdou et al. (2010); Giscombé & Lobel, (2005) has also provided statistics on specifically black women experiencing healthcare provider bias in the medical field, which led to doctors withholding proper treatments and medications for these patients. I saw the patient's perspective on this subject matter and code the responses and opinions between my two groups of participants. All my questions relate to the research I have done in my introduction, hence correlating to my hypothesis.

Procedure: Research was conducted through online questionnaires, being The Demographic Questionnaire and the HPBQ through the SONA platform. First, students had to read a consent form, entailing what the study will be about and what their role as participants will be. Participants who consented, clicked the *"I agree to participate in this study"* option. Participants who may have not consented, were advised to exit the study. Then participants were asked to fill out the Demographic Questionnaire (Appendix A) which was a six question questionnaire, asking participants to provide information pertaining to their identities, background information and what they have seen any healthcare provider for. Participants were provided with the Healthcare Provider Bias Questionnaire (HPBQ) to document their experiences with healthcare provider bias (Appendix B), which consists of five questions that were inspired by the scholarly work of Health et. al 2021, Obsorne, 2007, Tanne et. al 2002 and Abdou et al. 2010; Giscombé & Lobel, 2005. Lastly, responses were compared between White college students and college students of color by coded overarching themes and significant differences within the two groups responses using qualitative thematic analysis. Thematic analysis used in this study was based on the work from Braun and Clare, 2006 titled "Using Thematic Analysis In Psychology ". The

goals of this article were to outline the process of using thematic analysis within psychological research and providing a step by step guide to how to apply the principles of thematic research to personal research. Thematic analysis was defined as “A method for identifying, analyzing and reporting patterns within data " (Braun & Clarke, 2006, p. 79). Thematic analysis was also described as flexible, due to all the approaches data can be collected through thematic analysis, a few being epistemological, conversation analysis and interpretive phenomenological analysis which are all involved with collecting data through knowledge, dialogue and interpreted experiences, (Braun & Clarke, 2006). The step by step guide which I adopted within my practice given by Braun & Clarke were, “1) familiarizing yourself with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining names and themes, 6) producing the report” (Braun & Clarke, 2006, p. 87). The article also provides insight on how to report patterns and themes data sets and have to maintain consistency when identifying these patterns and themes. I have reported my findings by using a rich thematic description, which gives the reader an better idea as to which themes are present throughout all data sets (Braun & Clarke, 2006) along with a theoretical approach, due to the analysis being coded per question. All theories and procedures obtained from this article were applied to my research process and data collection to help me collect and understand thematic analysis and the variety of data sets introduced in my study. Both groups have been exposed to the same criteria. The study ends with a debrief form and students either receive SONA credits or their name put in a gift card raffle to potentially win one of three $20 dollar gift cards to any local businesses in Meadville, Pennsylvania.

Results:

The goal of this research was to look into the experience of healthcare provider bias and to find overarching themes between White patients and patients of color experiences through the HPBQ provided.

Descriptive statistics

Appendix C includes a series of visual pie charts of data collected from the Demographic Questionnaire to grasp a better idea of which identities participants identify as. The vast majority of participants were racially identified as white *(N=15; 51.7%).* Most participants of color identified as African American/ Black *(N=9; 31%)* , following Hispanic/Latin/Caribbean *(N=2; 6.9%)*, multiracial with one multiracial participant was African American/ Black with Hispanic/Latin/Caribbean and the other participant was White and Asian *(N=2; 6.9%)* and Asian *(N=1; 3.4%)* . The majority of participants identified their gender as female *(N=15; 60%).* Following were male participants *(N=6; 24%)*, non binary *(N=3; 12%)* and "other" *(N=1; 4.0).* We had a lot of diversity with participant majors, the majority being psychology majors *(N=7; 33.3%),* followed by double majors in neuroscience and psychology *(N=3; 14.3%),* biology *(N=2; 9.5%),* business *(N=2; 9.5%)*, environmental science *(N=2; 9.5%),* undecided *(N=2; 9.5%),* Political Science *(N=1; 4.8%)* and neuroscience without a double major *(N=1; 4.8%).* The vast majority of participants were in the graduating class of 2026 *(N=9; 42.9%),* followed by the class of 2027 *(N=5; 23.8%),* the class of 2025 *(N=4; 19%)* and the class of 2024 *(N=3; 14.3%).* The sample of age was a range of 18-21 for participants, with the *mean* being 19.7 and *standard deviation* being 1.04. All participants regardless of race, gender, major and class year visited a healthcare provider for physical health purposes *(N=22; 62.9%)* followed by participants seeing a healthcare provider for mental health *(N=9; 25.7%)* and neurodevelopmental health *(N=4; 11.4%)* which include diagnoses and treatment for Autism

(ASD), ADHD, learning disabilities, etc. While using thematic analysis for each question, including miscellaneous data, I have identified a few overarching themes for each question, along with similarities and differences amongst different identities throughout the study.

Thematic Analysis On Healthcare Provider Bias:

Question 1: "On a scale of 1-10, 1 being the lowest and 10 being the highest, how much do you trust your healthcare provider to give you the best treatment? Provide an explanation"

- **Theme: Trust**

White participant responses: White participants, regardless of gender, reported comfortability with their healthcare providers on an average rating of 8-10. There was a common theme of trust within White participants due to having a close relationship with their providers such as, *"10, I have known him for years and we have a mutual trust"* from a participant who was a White male. Another reason for trust is due to providers displaying a comforting presence to the patient. Another White male participant reported *"A 9; I think people can make mistakes which is why it is a 9 and not a 10, but my healthcare professionals have all shown a willingness to help me and explain things which made me feel like I was going to get the best treatment for me".* A White female stated that *"9, my health care provider makes me feel comfortable during our appointments and she actively listens to my concerns and provides adequate responses and treatments".*

Outliers for White Participants: One White female, claimed that she had a poor surgical experience, "*5- I have had surgery that did not go very well*" and a White non binary participant rated their comfortability with their healthcare provider a 6 with no explanation.

Participants of color responses: Most participants of color also felt general trust in their healthcare provider, regardless of the participants gender or ethnicity due to the same theme of

having a close relationship with their provider. There were far less explanations as to why participants of color trust their healthcare provider but the participants that did explain why they trusted their healthcare provider described a long term relationship with their provider. For example, one African American/ Black female stated *"8 My primary healthcare provider has been the same person from adolescence to adulthood so I've built a pretty good rapport with her. She's an older south Asian woman who sees primarily black and brown people so she's built a community of trust"*.

Summary for question 1: Both participant groups, regardless of race, expressed trust in their healthcare providers. There were some answers with no explanation as to why, but a common reason for trust was because of having a close relationship with their provider.

Question 2: "To your memory, have you received any discrimination from your healthcare provider? If yes, what was the scenario and how did it make you feel? If no, then how has your healthcare provider made you feel in your past visits?"

- **Theme 1: Safe, Welcomed, Heard.**

White Participant Responses: Most White Participants reported no experiences with discrimination from their healthcare providers and actually expressed gratitude for their healthcare providers for making them feel safe, welcomed and heard. One white male reported *"No, to my memory, my healthcare provider has always seemed to have my best interests at heart, the doctors always take care of me. They make me feel heard generally".* Another White woman claimed *"No, they have made me feel comfortable and made the experience pleasant for me by not looking at me differently for any reason".* Many of the White participants, regardless of gender, had similar responses to the ones previously stated.

Outliers for White Participants: There were two White female participants who reported discrimination based on gender rather than race during health check ups. One White female stated *"Yes, because I am a woman I have been refused pain medications, birth control, and other medications based off my genetics even though the medications don't have different effects based off being a man or woman".* The other White female stated *"I can't think of a specific time I felt discrimination but I remember feeling increasingly more uncomfortable with my pediatrician as I got older, especially after I hit puberty. I felt like physical boundaries were crossed and when I expressed concerns about my mental health those concerns were not taken seriously and I was told to just "sleep more."* Another White participant who identified as non binary only had feelings of concern rather than anxiety due to their health issues, *"I am considered medically obese so all of my health concerns are based on my weight"*

- **Theme 2: Mistreatment/ Uncomfortable Comments Made By Healthcare Providers**

Participants of color responses: Participants of color reported that they perceived discrimination or biased comments from healthcare providers which made them feel uncomfortable. There was a theme for women of color participants, African American/ Black women specifically feeling mistreated or uncomfortable due to comments made by healthcare providers about the participants lifestyle. One African American/ Black woman participant reported *"No but, I have been made uncomfortable by comments on my activities in my outside life when in a doctor's appointment. Other than odd questions I have felt comfortable in my identity when going to see a healthcare provider".* Another female participant who was also African American/ Black stated *"Yes I went to my pediatrician and most of the people around me where Hispanic and the nurses were Hispanic and my mom and I were the only black people I*

would say that the show of the amount of care wasn't really there because I felt like she just rushed through my visit and my mom and I weren't sure if the results were accurate" Another female participant who is White and Asian stated, *"Yes: I was at the Emergency Room for abdominal pain, extreme nausea, vomiting, and dizziness. The ER doctor (white cis-het male) took one look at my chart and said "Sounds to me like you're just an anxious teenage girl with an eating disorder." He also went on about my prescriptions making no sense and that "idiots" wrote those. However I have known my PCP for 15 years and the decisions made were careful. I've known that ER doctor for less than 10 minutes. I was extremely shocked and took offense to his comments. I was given 1L of fluids and then discharged. I had been 6 months clean of my binge ED, but his comments triggered my anorexia nervosa to return. I underwent tests back home to discover the cause of my symptoms and I had an ulcer".*

- **Theme 3: Familiarity**

Participants of color responses: The rest of participants of color perceived no discrimination from their healthcare providers due to how familiar participants are with their providers. Participants reported to have close relationships with their provider and/or their provider was the same race as them. One Hispanic/Latin/Caribbean participant who identified as female shared that there is some comfort being Puerto Rican and having Puerto Rican healthcare providers, *"No, living in Puerto Rico, the healthcare providers are also like me (ethnicity and skin color) so I have always felt comfortable with them, as well as visits have always ran smoothly".* One Asian participant who identified as female stated a similar experience with her healthcare provider being the same race as her *"No - My healthcare provider is of the same race as me, so she has always made me feel seen and understood any issues that I go through".*

Outliers for Participants of Color: Only two participants of color reported no discrimination from their healthcare provider. One African American/ Black female reported no discrimination from her healthcare provider, stating *"My main healthcare provider is great! She makes sure to keep the environment light and happy"*. One Hispanic/Latin/Caribbean identifying male also stated that he has received no discrimination by simply stating *"no"*.

Summary for question 2: White participants reported no perceived discrimination from their healthcare providers except for two White participants who were female, reporting gender discrimination. Participants of color reported perceived discrimination by either mistreatment or uncomfortable comments made by providers.

Question 3: "Do you feel any type of nervousness or anxiety while at the doctor's office and/or being in any health care setting? If yes, what makes you nervous? If no, what do you feel in any healthcare setting?"

- **Theme 1: Nervousness or Anxiety due to Medical Equipment**

White participant responses: Some White participants reported nervousness and anxiety due to seeing medical equipment, this entails receiving shots, getting blood work done and seeing needles. One White female reported *"Yes, they make me a little uncomfortable but not because of the staff. I just feel uncomfortable with anything related to needles, shots, or pulses"*. Followed by a variety of responses reporting feelings of anxiety about injections and needles. Another participant who identified as a White male claimed *"Yes, I get anxious about my vitals and weight. I also get anxious about needing to get a shot though I have gotten better with that"*.

- **Theme 2: Anxiety from the uncertainty/ bad health results**

White Participant responses: White participants also reported anxiety in the healthcare environment due to hearing bad results about their health and the uncertainty of what you can be told in the doctor's office. One White female participant reported that *"yes, I feel the anxious of getting a bad result".*

Participant of color responses: Far more participants of color reported anxiety from hearing bad health results and the uncertainty of what could happen in the doctor's office. A Hispanic/Latino/Caribbean male stated *"Yes. What makes me nervous is overthinking what I may be diagnosed with".* While another multiracial participant who identified as White and Asian reported *"I don't know what I'm there to do, or what will be expected of me. I don't know the vast majority of the employees too".* An African American/ Black participant who identified as female/other stated *"I do always feel a bit of anxiety in doctors offices, I have it in my mind that they'll find something bad or wrong with me every time I go".*

- **Theme 3: No anxiety or nervousness due to trusting their provider**

White participant responses: White participants reported no anxiety and nervousness due to feeling welcomed and trusting their healthcare provider. One White male reported feeling comfortable regardless of the setting and provider, *"No, I feel very safe and welcome in any healthcare setting".* Another White male reported *"No, I feel like it's good conversation with someone I trust".* A White female participant stated, *"No, I think because of my familiarity and how often I need to attend these offices I've had to get used to the setting".*

Outlier for White participants: One White male participant reported anxiety from getting sick by other patients in the environment and not the healthcare providers themselves *"The doctors don't do anything that would make me nervous, the only nerves I would get are from maybe getting sick from the other people that are there".*

- **Theme 4: Anxiety due to racial perception**

Participants of color responses: Participants of color, especially African American/ Black participants reported feelings of anxiety due to how they will be perceived due to their race. One African American/ Black female talked about the anxiety with how a healthcare provider talked poorly about her weight, *"yes what makes me nervous is how this one nurse talked to me about my weight so now when I go to the doctors office I'm a little on the edge about how their going to communicate to me about my weight, but the nurse who talked to me about my weight in way made me uncomfortable like I know I'm supposedly to lose it, but she didn't even think of mentioning why might be the reason that I'm putting on the weight then she printed a piece of paper that said gave me doctors note saying NEEDS TO GO ON DIET in all caps like I'm not consciously aware that I have to lose weight".* Another participant who is African American/ Black stated *"Yes, I know discrimination is real and health care providers are humans too with their own opinions and ideas of my race".*

Outlier for participants of color: The only outlier reported was from an Asian female participant who works in the medical field so she is familiar with the healthcare field, *"No - I work in the medical system in my area and am very familiar with the system, so it is just routine and familiar to me".*

Summary for question 3: White participants either reported anxiety from shots and needles and from the potential of receiving bad news about their health, or reported no anxiety at all due to trust. Participants of color also reported feelings of anxiety due to the potential of receiving bad news about their health, but also from racial perception healthcare providers may have against them.

Question 4: "Would you feel more comfortable with a healthcare provider of the same race as you? Further explain your choice"

- **Theme 1: No preference**

White participant responses: White participants reported that they didn't care about the race of their provider. White participants didn't have a preference as to what race their provider was, as long as they were caring and knew what they were doing. One White female participant stated *"No, most of my doctors are not white and I honestly really enjoy hearing their experiences and perspectives in medicine. I don't think my medical care will be changed by the race of the doctor is treating me".* A White male stated he has had providers from multiple backgrounds and that it hasn't impacted him personally, "*No, I have had many doctors of multiple different races and I still expect them to take care of me no matter what race they are".*

- **Theme 2: Preference and/or already having a healthcare provider of their race**

Participants of color: Participants of color claimed that they would be more comfortable with a healthcare provider that is of their race because they feel like they can feel more comforted and connect with their provider better or already feel comfortable because they have a healthcare provider of their race. One participant who identified as a Hispanic/Latin/Caribbean female stated *"Yes, as I mentioned, living in PR my healthcare provider is the same ethnicity as me so I feel comfortable with them always".* Another participant who identified as an Asian female also already has a provider of her race but reflected on her experience with having a White male healthcare provider, *"I luckily already have a provider that is the same race as me, but in the past when I had a white male provider, I was definitely more on edge and more uncomfortable than I am now".* An African American/ Black who identified as female/ other explained how you

can feel more empathy when you are with a provider similar to you, *"Absolutely. I think that seeing yourself in others makes you more trusting and empathetic"*.

Outliers for participants of color: One Hispanic/Latin/Caribbean identifying male claimed that race doesn't matter for him when seeing a healthcare provider.

- **Theme 3: Preference of female healthcare provider for female participants**

White participant responses: White female participants reported uncomfortability when talking about a White man being their healthcare provider. One White who identified as female and nonbinary participant reported no concern for the race of their provider but would prefer if specifically their gynecologist was a woman, *"No, but I would feel more comfortable with a female gynecologist"*.

Participants of color responses: Women of color also reported feelings of uncomfortableness about having a male healthcare provider. For instance, a White and Asian female participant expressed that she feels indifferent about race but would rather the provider to not be a White cis man, *"Yes and no because it doesn't really matter as much to be the "same" as me than I'd rather it not be a cis-het white male"*.

Summary for question 4: White participants reported to have no racial preference for their healthcare provider, compared to participants of color, who either prefer or already have a provider of their race. There were a few reports from females in both participant groups stating that they would prefer a woman provider over a cis male.

Question 5: "There have been reports of discrimination amongst patients of color in the healthcare industry, "Twenty-one percent of Black patients reported implicit bias or

discrimination from their physicians, compared to 11 percent of Hispanic and 8 percent of Asian respondents" (Heath et al. 2021). Briefly provide your thoughts and opinions on this".

- **Theme 1: Frustration and shock while/or trying to find solutions**

White participant responses: White participants either seemed more shocked and frustrated than participants of color about the discrimination patients of color experience or tried to suggest ways to limit said discrimination. One White female stated her shock because people in healthcare shouldn't discriminate at all, *"it surprises me honestly because if you're going into the healthcare field the main goal is to help people and examine them for health issues not judge them based on race".* Another White participant who is male suggested post visit surveys for patients to fill out, "*I think there should be guidelines as to the treatment that patients should receive. Maybe a survey after care has been received that is taken into the consideration of the doctors tenure and career".* One White participant who was also male recognized their privilege but still felt frustrated when reading into the findings about the discrimination against patients of color, *"It is sad to see that patients feel that way about their physicians, and I wish that they didn't have to deal with that. I know for a fact I have never felt any bias from my doctor so I am very grateful that this scenario hasn't been applicable to me".*

Outliers for White participants: One White participant who identified as male wasn't shocked about these findings and rather than trying to find a solution, simply stated that work needs to be done to change this, *"People are racist, so it makes sense that there is racism, even in the health sector. Though it is unfortunate and I think some work needs to be done to correct this".*

- **Theme 2: Desensitization**

Participants of color responses: Participants of color had a theme of being desensitized to the statistics of patients of color being discriminated against. One participant who is African

American/ Black and female stated that *"I completely believe this. People all over the world hold bias not only in race but in basic cultural differences. Physicians are people too, with their own thoughts and ideas".* Another female participant who is White and Asian shared her experience of her mother's coworkers who were biased and had to take care of the patients of color due to her identity, *"That makes sense, my mom has received many patients that had been transferred to her because their past doctors wouldn't provide proper care from racial bias. My mom is Indian (South Asian) for context".* Another female participant who is African American/ Black stated, "*I think it shows how people of minorities don't get treated as well and need to be shown more thoughtfulness and respect and fairness within the healthcare setting".*

Outliers for participants of color: A Hispanic/Latin/Caribbean woman shared her views on the United States healthcare system, being from Puerto Rico. She states that she tries to avoid healthcare settings in the United States due to these findings, *"Due to the lack of healthcare in the US because of being from PR, I try to avoid the hospitals as much as I can, but I have heard a lot of stories and situations from when my parents had to go to hospitals or doctors in the US and how they didn't necessarily feel welcomed or properly provided for".*

Summary for question 5: White participants found this research to be frustrating and shocking and tried to find solutions to "fix" the issue. On the other hand, participants of color seemed unsurprised and desensitized to the findings.

Discussion:

The goal of this study was to examine the experience of healthcare provider bias by White students and students of color. It was hypothesized that patients of color will report more perceived healthcare provider bias compared to White patients in medical environments. After conducting elaborate thematic analysis with the five questions from the HPBQ, inspired by the scholarly work of Health et. al (2021), Obsorne, (2007), Tanne et. al (2002), Abdou et al. (2010); Giscombé & Lobel, (2005), the hypothesis was partially supported by a few questions in the HPBQ. Participants of color did not perceive healthcare provider bias when they were familiar with their healthcare provider. Participants of color who weren't familiar with their healthcare providers perceived more healthcare provider bias. The vast majority of White participants reported no perceived healthcare provider bias. A small portion of female participants regardless of racial identity reported gender bias from healthcare providers. There were many similarities and differences within each participant group and within each overarching theme per question.

Similarities in themes between White participants and participants of color

Throughout the study there was a common theme of participants, regardless of race, being able to trust their providers and perceiving less bias when they are comfortable and familiar with them. Familiarity can include having a close relationship with your provider, knowing your provider for a long period of time or having the healthcare provider have the same identities as the participant. Participants who reported trust with their providers due to familiarity claimed that their providers knew what they were doing and always had their best interest for the participant. Every four out of ten patients perceive some type of bias and or discrimination from their healthcare provider (Heath et al. 2022). A healthcare provider holding bias against patients of color causes the provider to not recognize emotional, behavioral and physical issues within

their patients of color, especially children of color (Cameron & Guterman, 2007). Limiting that chance of receiving bias and or discrimination by having a healthcare provider of your identity can potentially feel relieving and reduce anxiety within patients of color (Tanne et al. 2021). Although this study aimed to record the experiences of healthcare provider bias between racial groups, some female participants reported feeling gender biases from having healthcare providers who are male. Participants who reported gender bias reported similar feelings of feeling uncomfortable having uncomfortable comments being made about their health compared to participants who reported racial bias.

Another similarity to note was that all participants regardless of their identity was the recognition of healthcare discrimination against people of color. There are reports of patients of color acknowledging that medical professionals may hold biases against them and express that it is a prevalent issue which needs to be addressed (Abdou et al. 2010). White participants acknowledged the issue of discrimination against people of color in the medical field but reported feelings of shock, frustration and eagerness to provide solutions to "fix" this issue. Participants of color also acknowledged the discrimination people of color faced in the medical field with the minor difference of reporting feeling desensitized to the information.

Differences in themes between White participants and participants of color

Although the hypothesis was partially supported, the vast majority of reports of racial discrimination and perceived bias were from participants of color while the majority of White participants expressed no encounters with discrimination and bias pertaining to race. A lot of participants of color reported feelings of nervousness due to how they are racially perceived by healthcare providers throughout the HPBQ compared to some White participants who reported anxiety due to medical procedures such as receiving/ shots and blood work. A lot of providers

can hold negative perceptions against patients of color due to stereotyping. Research has shown a vast majority of healthcare providers viewing patients of color, especially African American/ Black patients as incompetent and incapable (Williams et al. 2000). The feeling of nervousness due to the racial perception from others is considered stereotype threat, which causes an immense amount of emotional and psychological stress in people of color which tends to either limit their comfortability in public spaces or causes the avoidance of certain spaces in general (Osborne, 2007). Due to the reports of feeling nervous about healthcare providers having a negative perception of certain racial identities, eventually leads to the increase of people of color avoiding medical environments (Abdou & Fingerhut, 2014). Specifically African American/ Black participants who were women when reported nervousness and anxiety due to racial perceptions that may be held by medical professionals mentioned receiving uncomfortable comments made about their outside life compared to other participants who received gender biased comments about their bodies. African American/ Black women in particular have been stereotyped into partaking in “risky behaviors" such as doing drugs and partaking in unsafe sex and are generally hypersexualized by medical professionals (Abdou & Fingerhut, 2014). These assumptions can potentially lead to the refusal of treatments and limits access to resources that may be useful to the patient. (Abdou & Fingerhut, 2014).

Another significant difference within participant groups is healthcare provider bias racial preference. Although a similarity amongst female participants is the preference of not having a male provider, racially all White participants didn’t care about the race of their provider, compared to participants of color, where the vast majority preferred a provider of their race. White participants reported no preference of the racial identity of their healthcare provider, as long as they were caring and knew what they were doing compared to participants of color who

preferred a healthcare provider of their race to increase feelings of comfort, relatability and familiarity. Patients of color have reported awareness about healthcare providers holding negative perceptions about their racial identity (Abdou et al. 2010). Having a healthcare provider of color or the exact race as the patient can potentially reduce feelings of stereotype threat and anxiety for patients and increase feelings of comfort so the patient can feel represented and seen through their provider (Tanne et al. 2021).

Limitations and Strengths:

The main limitation throughout this study was the small sample size. Allegheny College is a fairly small predominantly White institution and finding multiple participants, especially participants of color, was very difficult. Due to the small sample size, the data provided within this study has the potential to have low external validity due to low generalizability from the small sample size. The recruitment of participants of color in particular was more difficult due to the general sample of students of color that attend Allegheny College. Throughout the study, only female participants of color were represented compared to one male participant of color, which adds on to the low external validity of the data represented. This also raises curiosity of patients of color who are men and their experiences with healthcare provider bias. Another limitation that I ran into is the lack of follow up questions within participant responses. In particular, less explanations provided by participants of color in question one. This can be due to how much healthcare provider bias and overall discrimination in the medical field can be a sensitive topic for some participants, therefore not wanting to type out in full detail what their experiences are to protect their emotional well-being.

Although this study ran into a small sample size, a strength this research had was the ability to recruit an almost equal number of participants per participant group and was able to get

an almost equal amount of responses per participant in each group, despite Allegheny College being a primarily White institution with a smaller school population. Another strength that was encountered was the creation and credibility of the Healthcare Provider Bias Questionnaire given to participants. This was an open-ended questionnaire, inspired by scholarly research on healthcare provider bias and other racial disparities in the medical field, which helps increase the validity of the study, although there is a small sample size to work with. Along with the ability to obtain results from both participant groups despite limited sources, the use of thematic analysis to identify themes within data sets allowed a variety of descriptive responses to better understand participants' experiences with healthcare provider bias through the HPBQ.

Recommendations For Future Researchers:

Future research pertaining to healthcare provider bias should aim to obtain a larger sample size in order to collect more data that achieves higher validity. To achieve this, a study pertaining to different experiences amongst racial identity groups in the healthcare system should be conducted at locations with a larger population, including a college/university with a large number of students or an institutional hospital. A larger area of population increases the chance to obtain a larger sample size that is diverse amongst all identities. A way for future researchers to collect data pertaining to this topic would be to ask follow up questions after the participant takes the study to ensure care for the participants well being. Having participants do an online study about their experiences in the medical field can be challenging due to the sensitivity of the subject. Asking follow up questions to participants can gain knowledge as to how participants felt about the study and what can researchers do better for future reference. Future researchers can also find different methodologies to collect more descriptive data and can potentially conduct a more elaborate thematic analysis. If this study were to be replicated, a way to gain more

perspective on healthcare provider bias is to scope out the demographics in more detail. Not much information was provided based on the type of appointment experience participants had whether it was for physical, mental or developmental health. This should be looked into with more detail in the future to execute the importance of early intervention of health diagnoses within patients, in particular patients of color who are children with a mental or neurodevelopmental disability. A major problem with medical professionals having healthcare provider bias is the inability to address the cognitive, emotional and behavioral needs of children of color with care and concern and would label their needs as a behavioral disorder, which limits the access of proper resources and treatment of children of color and their families (Cameron & Guterman, 2007). Looking into the implications of healthcare provider bias in better detail depending on the different types of medical appointments whether it is for physical, mental or neurodevelopmental health by White patients and patients of color would be able to provide more validity and perspectives as to which participant groups perceive healthcare provider bias.

Conclusion

This study aimed to look into the perceptions of healthcare provider bias by White students and students of color attending Allegheny College. With the support from findings from multiple sources of peer reviewed work relating to the topics of healthcare provider bias, discrimination against people of color in the medical field, and health disparities against patients of color impacting the receival an early intervention diagnosis, it was hypothesized that students of color will report perceiving more healthcare provider bias compared to White students. After conducting an elaborate thematic analysis on each question in the HPBQ, the findings of this study partially support the hypothesis, being that participants of color perceive more healthcare provider bias compared to their White counterparts unless the participant of color is familiar with their provider. Although there were a lot of strengths and limitations to this study, it is important to recognize the importance of conducting more research revolving around healthcare provider bias. Research relating to the experiences of people of color in the healthcare system is credential to learn how to accommodate to all patients and avoid certain health disparities such as late intervention and biased diagnoses. Due to the vague research on healthcare provider bias, this is an issue in the healthcare field that is not well researched and examined enough, which allows for these biases held by medical professionals to continue and put the health of patients of color in jeopardy.

References

Abdou, C. M., & Fingerhut, A. W. (2014). Stereotype threat among black and white women in health care settings. *Cultural Diversity and Ethnic Minority Psychology*, *20*(3), 316–323. https://doi.org/10.1037/a0036946

Aylward, B. S., Gal-Szabo, D. E., & Taraman, S. (2021). Racial, Ethnic, and Sociodemographic Disparities in Diagnosis of Children with Autism Spectrum Disorder. *Journal of Developmental & Behavioral Pediatrics*, *42*(8). https://doi.org/10.1097/dbp.0000000000000996

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bronson, B. E., By:, & Written By Eric Bronson. (n.d.). *What is medical racism?*. YWCA Seattle | King | Snohomish. https://www.ywcaworks.org/blogs/firesteel/what-medical-racism

Brownstein, Michael, "Implicit Bias", *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2019/entries/implicit-bias/>.

Cameron, M., & Guterman, N. B. (2007). Diagnosing conduct problems of children and adolescents in residential treatment. *Child and Youth Care Forum*, *36*(1), 1–10. https://doi.org/10.1007/s10566-006-9027-6

Conduct disorders. Symptoms, Causes, Diagnosis and Treatment. (n.d.). Retrieved April 24, 2023, from https://www.nationwidechildrens.org/conditions/conduct-disorders

Denis, F., Maurier, L., Carillo, K., Ologeanu-Taddei, R., Septans, A.-L., Gepner, A., Le Goff, F., Desbois, M., Demurger, B., Silber, D., Zeitoun, J.-D., Assuied, G. P., & Bonnot, O. (2022, May 16). *Early detection of neurodevelopmental disorders of toddlers and postnatal depression by mobile health app: Observational cross-sectional study*. JMIR mHealth and uHealth. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9152715/#:~:text=Among%20these%20impairments%2C%20a%20neurodevelopmental,age%20%5B5%2D9%5D.

FitzGerald, C., & Hurst, S. (2017). Implicit bias in healthcare professionals: A systematic review. *BMC Medical Ethics*, *18*(1). https://doi.org/10.1186/s12910-017-0179-8

Habayeb, S., Kenworthy, L., De La Torre, A., & Ratto, A. (2022). Still left behind: Fewer Black school-aged youth receive ASD diagnoses compared to White youth. *Journal of Autism and Developmental Disorders, 52*(5), 2274-2283. https://doi.org/10.1007/s10803-021-05118-1

Heath, S. (2020, October 16). *What Is Implicit Bias, How Does It Affect Healthcare?* PatientEngagementHIT. https://patientengagementhit.com/news/what-is-implicit-bias-how-does-it-affect-healthcare

Heath, S. (2021, June 14). *Most patients say implicit bias in medicine is a problem for patient trust*. PatientEngagementHIT. https://patientengagementhit.com/news/most-patients-say-implicit-bias-in-medicine-a-problem-for-patient-trust

Heath, S. (2022, December 20). *Implicit bias is still a hallmark of patient experience*. PatientEngagementHIT. https://patientengagementhit.com/news/implicit-bias-is-still-a-hallmark-of-patient-experience#:~:text=Overall%2C%20four%20 in%2010%20 patients,demographic%20group%2C%20the%20survey%20found.

Hopkins Tanne, J. (2002). Patients are more satisfied with care from doctors of the same race. *BMJ : British Medical Journal*, *325*(7372), 1057. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1124573/#:~:text=The%20authors%20suggest%20that%20patients

Horowitz, J. M. (2019, April 9). *Race in America 2019*. Pew Research Center's Social & Demographic Trends Project. https://www.pewresearch.org/social-trends/2019/04/09/race-in-america-2019/

Kurylo, A. (2012). What AreTheyLike? Non-Expert Definitions of Stereotypes and Their Implications for Stereotype Maintenance. *Qualitative Research in Psychology*, *9*(4), 337–350. https://doi.org/10.1080/14780887.2010.500517

Latoya Hill, N. N. (2023, July 10). *Key data on health and health care by race and ethnicity*. KFF. https://www.kff.org/racial-equity-and-health-policy/report/key-data-on-health-and-health-care-by-race-and-ethnicity/

Lopez, A. (2022). *Examining Black and White children's symptom severity and type of primary caregiver concern at the time of first autism diagnosis* (Order No. AAI28771248).

Available from APA PsycInfo®. (2650021463; 2022-34076-164). https://www.proquest.com/dissertations-theses/examining-black-white-childrens-symptom-severity/docview/2650021463/se-2

Lynn Kern Koegel, Koegel, R. L., Ashbaugh, K., & Bradshaw, J. (2013). The importance of early identification and intervention for children with or at risk for autism spectrum disorders. *International Journal of Speech-Language Pathology*, *16*(1), 50–56. https://doi.org/10.3109/17549507.2013.861511

Neff, M. A. (2023, February 24). *Attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (odd), and racial bias*. Insights of a Neurodivergent Clinician. Retrieved April 24, 2023, from https://neurodivergentinsights.com/adhd-infographics/adhd-odd-and-racial-bias

Osborne , J. W. (2007, May 16). *Linking stereotype threat and anxiety*. Taylor & Francis. https://www.tandfonline.com/doi/full/10.1080/01443410601069929

Pham, H. H., Sandberg, N., Trinkl, J., & Thayer, J. (2022). Racial and Ethnic Differences in Rates and Age of Diagnosis of Autism Spectrum Disorder. *JAMA Network Open*, *5*(10), e2239604. https://doi.org/10.1001/jamanetworkopen.2022.39604

Williams, D. R., & Rucker, T. D. (2000). *Understanding and addressing racial disparities in health care*. Health care financing review. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4194634/

Appendix A

Demographic questionnaire:

1. What is your race (Select more than one if applicable)

☐ White

☐ African American

☐ Asian

☐ Native American

☐ Pacific islander

Ethnicity: (if applicable)

☐ Hispanic/Latinx

2. What is your gender identity?

☐ Male

☐ Female

☐ Nonbinary

☐ Other

3. What is your academic class year?

☐ 2027

☐ 2026

☐ 2025

☐ 2024

4. What is your major?:
5. What is your age?:

6. Check off what you have seen a healthcare provider for:

☐ Physical health

☐ Mental health

☐ Neurodevelopmental help (diagnosis of autism, adhd, etc)

Appendix B

Healthcare Provider Bias and Discrimination Questionnaire:

1. On a scale of 1-10, 1 being the lowest and 10 being the highest, how much do you trust your healthcare provider to give you the best treatment? Provide an explanation.

2. To your memory, have you received any discrimination from your healthcare provider? If yes, what was the scenario and how did it make you feel? If no, then how has your healthcare provider made you feel in your past visits?

3. Do you feel any type of nervousness or anxiety while at the doctor's office and/or being in any health care setting? If yes, what makes you nervous? If no, what do you feel in any healthcare setting?

4. Would you feel more comfortable with a healthcare provider the same race as you? Further explain your choice.

5. There have been reports of discrimination amongst patients of color in the healthcare industry, “Twenty-one percent of Black patients reported implicit bias or discrimination from their physicians, compared to 11 percent of Hispanic and 8 percent of Asian respondents" (Heath et al. 2021). Briefly provide your thoughts and opinions on this.

Appendix C

Figure 1:

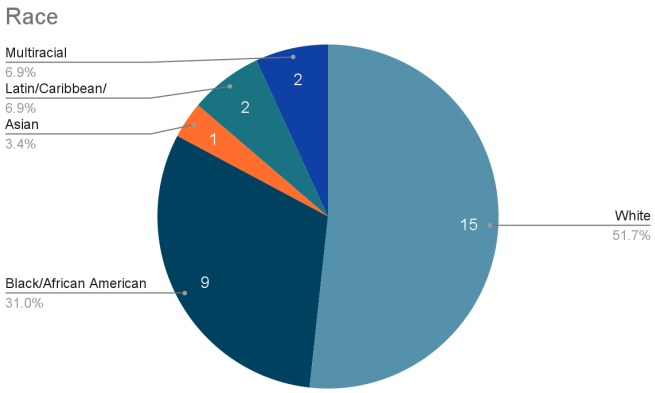

Figure 2:

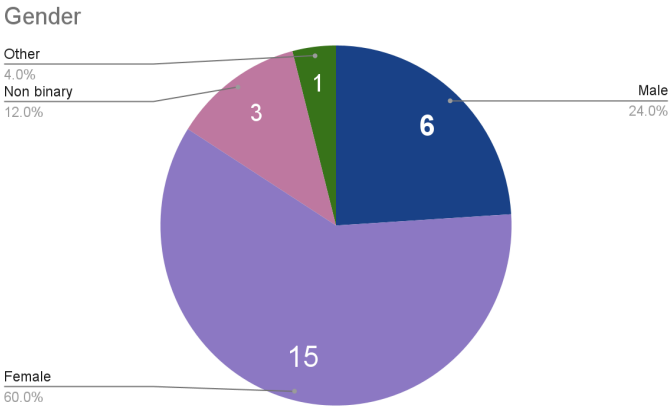

Figure 3:

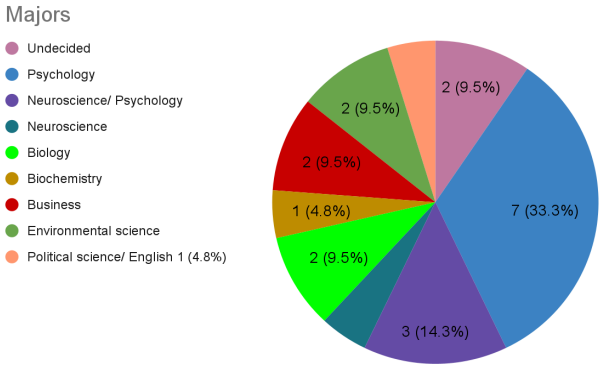

Figure 4:

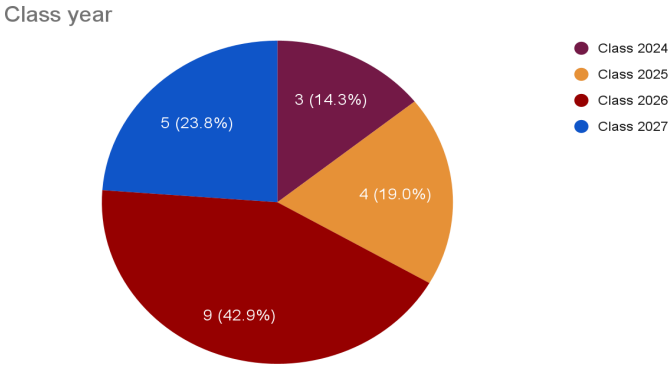

Figure 5: