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## The Impact of Perceived Discrimination and Stigma Consciousness on Connectedness, Trust, and Satisfaction in Healthcare Domains During the Covid-19 Pandemic

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LOYOLA UNIVERSITY CHICAGO

THE IMPACT OF PERCEIVED DISCRIMINATION AND STIGMA CONSCIOUSNESS ON  
CONNECTEDNESS, TRUST, AND SATISFACTION IN HEALTHCARE DOMAINS  
DURING THE COVID-19 PANDEMIC

A THESIS SUBMITTED TO  
THE FACULTY OF THE GRADUATE SCHOOL  
IN CANDIDACY FOR THE DEGREE OF  
MASTER OF ARTS  
PROGRAM IN APPLIED SOCIAL PSYCHOLOGY

BY  
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## TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF TABLES	v
ABSTRACT	vi
THE IMPACT OF PERCEIVED DISCRIMINATION AND STIGMA CONSCIOUSNESS CONNECTEDNESS, TRUST, AND SATISFACTION IN HEALTHCARE DOMAINS DURING THE COVID-19 PANDEMIC	1
APPENDIX A: DEMOGRAPHICS AND HEALTHCARE QUESTIONS	26
APPENDIX B: THE FREQUENCY OF RACE-RELATED EVENTS	30
APPENDIX C: STIGMA CONSCIOUSNESS	32
APPENDIX D: COVID-19 DISCRIMINATION AND CONTROL WRITING TASKS	34
APPENDIX E: MANIPULATION CHECKS	37
APPENDIX F: CONNECTEDNESS TO HEALTHCARE WORKERS	39
APPENDIX G: TRUST OF HEALTHCARE WORKERS	41
APPENDIX H: SATISFACTION WITH HEALTHCARE SERVICES	43
REFERENCE LIST	45
VITA	48

## LIST OF TABLES

Table 1. Healthcare quality as a function of condition and stigma consciousness	17
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## ABSTRACT

This study assessed the relations between perceived experiences of discrimination within healthcare settings and connectedness, trust, and satisfaction with services in healthcare domains among African Americans. It also examined if the Covid-19 pandemic has exacerbated this relationship. The results indicated that African American women reported less healthcare quality compared to African American men. Also, participants that had a White healthcare professional reported less healthcare quality when compared to any other racial identification. Furthermore, individuals that reported poorer health quality also reported less healthcare quality. Consistent with my predictions, we found that African Americans in the COVID-19 discrimination condition exhibited lower levels of healthcare quality when compared to those in the control condition. However, stigma consciousness did not moderate the relation between perceived discrimination and healthcare quality as predicted. That is, the effect of stigma consciousness on reported levels of healthcare was not significantly different in the COVID-19 discrimination condition versus the control condition. The current study revealed that African American participants exhibited feeling disconnected and untrusting of their healthcare professionals and less satisfied with the healthcare services they received. Therefore, these findings can offer an additional explanation for the observed health disparities and the lack of engagement with the healthcare system.

THE IMPACT OF PERCEIVED DISCRIMINATION AND STIGMA CONSCIOUSNESS ON  
CONNECTEDNESS, TRUST, AND SATISFACTION IN HEALTHCARE DOMAINS  
DURING THE COVID-19 PANDEMIC

Past research has exhibited the existence and large-scale implications of prejudice and discrimination within healthcare contexts (Peek et al., 2010; Jones, 2020). Due to institutional and systemic racism negatively impacting outcomes and access, underrepresentation in healthcare domains, instances of prejudice and stereotype application, and expectancies about being perceived as a negative stereotype, navigating healthcare systems as an African American poses many difficulties (Gollust et al., 2018; Peek et al., 2010; Jones, 2020). The health disparities and disproportionate effects of the Covid-19 pandemic for African Americans especially brought these difficulties and healthcare system characteristics to the forefront of conversation (Lopez et al., 2021). Furthermore, the Covid-19 pandemic likely exacerbated some of these disparities within healthcare settings, specifically differential treatment and instances of prejudice and stereotype application by healthcare professionals. Understanding the complexities and the frequency of these negative experiences and the affective responses to discriminatory practices is important for better understanding their unique experiences. Therefore, this study aims to gain an in-depth gauge of the relation between experiences of discrimination and connectedness, trust, and satisfaction with services with stigma consciousness as a moderating variable.



## **Impact of Racial Discrimination**

Regardless of individual demographic variables, such as socio-economic status and gender, Black individuals encounter more experiences of discrimination when directly compared to White individuals (Lewis et al., 2012). Consistently encountering these negative experiences negatively impact Black individuals in a variety of important life domains. Experiencing repeated instances of discrimination and limitations to important life domains directly impacts the well-being of stigmatized individuals, both psychologically and physically (Major & O'Brien, 2005). Criticism, prejudice, rejection, stigmatization, ostracism, and other slights can elicit various negative emotions from the target (Richman & Leary, 2009). These negative reactions from the perpetrator can directly influence the target's sense of belonging and acceptance from their respective social environments (Richman & Leary, 2009). While navigating these social systems, Black individuals have to endure a multitude of racially charged verbal comments on a regular basis. Constantly occurring negative experiences specifically motivated by an individual's race and identity can elicit a range of emotions such as surprise, anger, discomfort, and feeling threatened (Swim et al., 2003). Feeling inadequately valued and accepted in social contexts makes individuals more prone to these negative emotions (Leary, 2005). Although these experiences of racial discrimination and other expressions of racial bias are often recognizable to Black patients and elicit a variety of emotions varying in strength, these instances are usually not confronted (Stangor et al., 2003).

Since targets of discrimination and bias typically do not express their dissatisfaction of these experiences, Black individuals will often internalize these negative interactions and feel threatened when navigating these environments. Uncertainty based on status and identity and

chronic stress caused by repeated instances of discrimination poses a risk of general well-being, social outcomes, health outcomes, and poor relationship functioning. (Destin et al., 2019; Ong et al., in press; Thompson & Bolger, 1999). Previous studies have documented these consistent associations between reported experiences of discrimination and race-based physical health disparities that encompasses mental and physical health issues among Black individuals (Mays et al., 2007; Pieterse et al., 2012).

When Black individuals decide to seek care to improve their mental and physical well-being, they are often faced with similar experiences of discrimination when interacting with professional healthcare workers in clinical settings. The similar phenomenon observed in other social spaces can be applicable in healthcare settings when Black patients experience discrimination and application of stereotypes by healthcare workers (Gollust et al., 2018). Understanding discrimination within specific clinical settings is important to understanding all of the factors that contribute to the observed racial disparities in healthcare and health outcomes.

### **Racial Discrimination in Healthcare**

Racial discrimination within healthcare contributes largely to racial disparities in outcomes and poses extensive risks for African Americans navigating these systems (Smedley et al., 2003; Alsan et al., 2019). Racial discrimination within this context presents itself in a variety of ways. Institutionalized racism, personally-mediated racism, and internalized racism disproportionately impacts Black individuals and can manifest through various mechanisms of engagement with this system (Jones, 2020). Institutionalized racism can be defined as differential access to good services, and opportunities by race (Jones, 2020). In regards to healthcare, this encompasses workforce issues, such as lack of diversity in staff, systemic differences in quality

of healthcare, and time constraints (spending less time with Black patients) that inhibit rapport building with patients (Gollust et al., 2018). All of these factors, specifically the underrepresentation of minority staff members in healthcare contexts, negatively impact minority patients, specifically Black patients. Generally, physicians reported feeling less affiliation and closeness with Black patients (Abdou & Fingerhut, 2014). This lack of rapport building leads to communication disparities and limited interactions that may lead to physicians not viewing their Black patients in a holistic, sincere approach. This, in turn, impacts health outcomes, level of engagement with the healthcare system, and trust of the healthcare professionals (Alsan et al., 2019). Health outcomes have been shown to improve when physicians more closely represent the patients they care for due to increased trust and engagement (Alsan et al., 2019).

Institutionalized racism then inherently contributes and perpetuates personally-mediated racism. Personally-mediated racism can be defined as differential assumptions about the abilities, motives, and intentions of others according to their race and differential actions toward others according to their race (Jones, 2000). This type of racism is directly facilitated by staff members through disrespect, patient labeling, provider bias, and exaggeration and over-generalization of stereotypes (Gollust et al., 2018; Peek et al., 2010). When navigating these systems and environments, it is important for people to feel heard, respected, and included and not disregarded, excluded, and disrespected (Murphy et al., 2018). However, Black patients often feel isolated, disrespected, and ignored in these contexts (Peek et al., 2010). Furthermore, physicians believed their Black patients were less intelligent, more likely to engage in behaviors that pose a risk to health, and more likely to ignore treatment recommendations. Also, medical doctors demonstrated an implicit (overlearned, automatic) preference for White Americans

relative to Black Americans (Sabin et al., 2009). These attitudes and beliefs are definitely reflected in negative verbiage employed and biased actions displayed toward their Black patients and are the result of lack of familiarity and contact with Black patients (Alsan et al., 2019).

Physicians will display these attitudes through their interactions and level of engagement with their patients. Expressions of explicit and implicit biases are linked to causing direct harm that can be psychologically and physically damaging or even deadly (Riddle & Sinclair, 2019).

Another important consideration that contributes to Black patient stress and worry is healthcare stereotype threat primarily elicited by the presence of a predominantly White staff. Similar to stereotype threat in other domains, such as academia, healthcare stereotype threat represents a situational predicament in which stereotypes are salient for minorities in healthcare settings which leads to chronic stress and fear of being treated in a different way (Abdou & Fingerhut, 2014). When Black individuals are aware of these negatively based expectations, they may spend most of their cognitive resources attempting to disconfirm or disprove it. Therefore, the existence of a negative stereotype towards an individual or a specific group means that in situations where the stereotype is applicable, such as healthcare contexts, an individual is at risk of confirming it (Steele & Aronson, 1995). This threat can be disruptive enough to inhibit interactions with staff and cause hurdles with receiving adequate care. Black women are especially aware of negative stereotypes directed toward their race and often worry that doctors and other medical professionals will treat them differently due to their race (Abdou & Fingerhut, 2014). Also, some Black individuals may feel demotivated to speak up to their physicians and ask questions regarding their treatment in response to feeling threatened (Peek et al., 2010).

Clearly, there are individual differences that could exist within this social identity in response to experiences of discrimination within this setting.

### **Stigma Consciousness as a Moderator**

Stigma consciousness addresses the individual differences within groups that experience stereotyping and discrimination (Pinel, 2002). Not everyone is expected to respond the same way to perceiving discrimination within healthcare settings. Individuals are expected to vary in their belief that the negative characteristics commonly associated with their group will permeate interactions with out-group members. Minority individuals that are high in stigma consciousness are more primed to perceive discrimination against themselves and others within their group (Pinel, 1999; James, 2020). Specifically, Black individuals high in stigma consciousness are more likely to perceive instances of stereotyping and discrimination when compared to individuals low in stigma consciousness (Pinel, 1999). These individuals high in stigma consciousness easily access stereotypes about their race and this can contribute to chronic stress and concern about their behaviors. For some individuals, this stress is rooted in avoiding stereotype confirmation. When minority individuals expect to be the target of prejudice, interethnic interactions tend to be negative (Shelton & Richeson, 2005). The anticipation of threatening social situations have been linked to feelings of low self-esteem and lower levels of social connectedness (Knowles et al., 2010). Also, the anticipation of being stereotyped can negatively impact the overall mental health of Black individuals (Sawyer et al., 2012; Gary, 2005).

Expectancies about being reduced and solely defined by negative stereotypes should also impact perceptions about the quality of services received in healthcare domains. This same

phenomenon can be impacting feelings of connectedness with healthcare workers, specifically physicians. Potentially threatening situations may lead individuals to feeling that their direct services are inadequate and do not best serve their needs. Most patients are reluctant to engage in self-advocacy, such as asking questions during medical visits, when receiving care (Pickett et al., 2012). When considering connectedness and interaction expectancies, these self-advocacy outcomes may be exacerbated. Individuals who feel that providers ignore their efforts to talk about their treatment, and/or that their opinions about their care are disregarded by professionals, are less likely to ask questions and follow prescribed treatment regimens (Pickett et al., 2012). Black individuals may even feel demotivated to receive healthcare services due to these outcomes. Therefore, these negative outcomes can be directly associated with their perception of satisfaction with the services that they receive from healthcare professionals.

### **The Impact of the Covid-19 Pandemic**

These existing interaction issues within this setting may have been exacerbated during the pandemic. Recent research has shown that pandemic safety protocols implemented in healthcare settings have put a strain on effective doctor-patient interactions and communication (Gopichandran & Sakthivel, 2021). Due to physical distancing, masks, the use of other personal protective gear, and the introduction of time constraints, more difficulties in interactions within this setting have been created. Patients may find it challenging to connect with their doctors due to the addition of these protocols. This lack of rapport building and limited interactions further leads to communication difficulties and disparities. In turn, these challenges in connection may be compromising patient trust perceptions. Therefore, this may be especially negatively impacting an already vulnerable population prone to negative experiences within this setting.

Understanding these shifts in approaches within healthcare settings is important to understanding all of the factors that contribute to the observed racial disparities in health outcomes during the pandemic.

### **Proposed Research**

Although there is prevalent literature on the doctor's perspective of closeness, affiliation, and negative out-group perceptions, the perspective of African American patients and their perceived level of connection and closeness with healthcare professionals, satisfaction with services, and overall race-based discriminatory experiences in detail has been understudied and overlooked. This perspective is important to examine because it may differ from the perception of doctors and offer some additional explanations regarding improving the healthcare system engagement for African Americans. Therefore, the study offers a differing perspective about interactions within this setting between African Americans and healthcare workers, proposing that their perception has changed (gotten worse) due to the pandemic. Also, depending on their strength of identification with stigma consciousness, the moderating variable, the relation between perceived experiences of discrimination and connectedness, trust, and satisfaction will either be attenuated or strengthened.

### **Hypotheses**

I predict that African Americans in the COVID-19 discrimination condition will report being less connected to healthcare workers, less trustful of healthcare workers, and less satisfied with their services compared to African Americans in the control condition. Based on previous literature, it is hypothesized that stigma consciousness will moderate the relation between experiences of discrimination and connectedness, trust, and satisfaction with services in

healthcare contexts. The negative relation between experiences of discrimination and perceptions of connectedness, trust, and satisfaction with services will be strengthened or attenuated by the individuals' identification with stigma consciousness.

**Hypothesis 1.** African Americans in the COVID-19 discrimination condition (versus control) will exhibit lower levels of connectedness to healthcare workers, trust of healthcare workers, and satisfaction with healthcare services. Specifically, African Americans in the Covid-19 discrimination condition will report significantly lower satisfaction, connectedness, and trust when compared to African Americans in control condition.

**Hypothesis 2a.** In the COVID-19 Discrimination Condition, African Americans high in stigma consciousness will report lower levels of connectedness to healthcare workers, trust of healthcare workers, and satisfaction with healthcare services compared to those lower in stigma consciousness (see Figure 1 for predicted effects). In the Control condition, African Americans high in stigma consciousness will report (albeit significantly weaker than in the discrimination condition) lower levels of connectedness, trust, and satisfaction with health care services compared to people low in stigma consciousness.

**Hypotheses 2b.** Stigma Consciousness will moderate the effect of Discrimination (versus Control). Among individuals possessing High Stigma Consciousness (1 s.d. above mean), the Discrimination condition (versus control) will produce a relatively large reduction in levels of connectedness to health care workers, trust of health care workers, and satisfaction with health care workers. Among individual's possessing Low Stigma Consciousness (1 s.d. below mean), this Discrimination (versus Control) effect will also emerge, but the magnitude of the difference between the Discrimination and Control condition will be smaller.



## Methods

### Participants

Only 198 participants were included in the final analyses. The participants' ages ranged from 19 to 72. There were 72 men and 122 women in the study. The median individual income (\$25,000 to \$50,000) is comparable to that reported in national surveys of African Americans (Chatters et al., 2008). There were 98 participants in the COVID-19 discrimination condition and 100 participants in the control condition.

### Power Analyses.

We conducted some apriori G\*power analyses (Regression  $R^2$  increase) to determine the sample size needed to detect the predicted effects. If we assume a medium size effect ( $f^2 = .15$ ), 80% power, and  $\alpha = .05$ , a  $N = 55$  is needed. If we assume a small size effect ( $f^2 = .02$ ), 80% power, and  $\alpha = .05$ , a  $N = 395$  is needed. If we assume a small/medium effect size ( $f^2 = .04$ ), 80% power, and  $\alpha = .05$ , a  $N = 191$  is needed. Therefore, the recruited sample size of 198 was enough to detect a small/medium effect ( $f^2 = .04$ ).

### Procedure

African American participants were recruited via MTurk to take part in an online study pertaining to their respective experiences in the healthcare system during the COVID-19 pandemic. After giving consent, the participants completed demographic information and healthcare insurance and utilization questions. Then they completed measures of frequency of race-related events and stigma consciousness. Then, participants were randomly assigned to the Covid-19 pandemic discrimination condition or the control condition. Lastly, participants completed a manipulation check, an assessment of healthcare connectedness, a measure of trust

of healthcare workers, and a scale that measures satisfaction with healthcare service.

## **Measures**

### **Demographics.**

Participants provided general information including ethnicity, gender, age, education, household income, employment, marital status, insurance access, and healthcare utilization which were used as covariates. Some items (e.g., ethnicity) served as a check to ensure that participants are deemed eligible for this study in the screening phase (Appendix A).

### **Frequency of Race-Related Events.**

In order to measure the frequency and effect of race-related events in general, the Harrell (1995) daily life experience scale was adapted and utilized to measure the frequency of perceived race-related events and how much these events bothered the participants. The adapted scale contained 20 items (e.g., “How often because of race are you not being taken seriously?”). The participants answered on a 5-point scale (0=never, 4=always). Experiences of discrimination was be computed by averaging scores across all 20 items ( $\alpha = .95$ ) (Appendix B).

### **Stigma Consciousness.**

The Pinel (1999) Stigma Consciousness Questionnaire was used to assess the participants' level of stigma consciousness. This measure aims to assess their awareness and expectancies of being reduced to a specific stereotype about their race. Participants were asked to rate 10-items (e.g., “I never worry that my behaviors will be viewed as stereotypical of my ethnicity”) on a 7-point scale (1 = strongly disagree, 7 = strongly agree). The recorded scores were averaged across items so that higher numbers indicate higher stigma consciousness ( $\alpha = .79$ ) (Appendix C).

**Discrimination Manipulation.**

Participants were randomly assigned to either the COVID-19 pandemic discrimination condition or the control condition. Participants in the COVID-19 discrimination condition recalled a time since the pandemic began in 2020 when they were the target or witness of discrimination or prejudice based on their ethnicity by a healthcare professional. In the control condition, participants were asked to recall the process of scheduling their last appointment with their healthcare provider. It served as a recent and neutral experience in a healthcare setting (Appendix D). For the participants in the COVID-19 discrimination condition, 70% responded to the open-ended questions reporting experiences about being the target of discrimination, 28% wrote about witnessing someone else as the target, and 2% wrote about both. Also, 70% of participants wrote about being the target while receiving medical services, 26% reported experiencing discrimination during the process of waiting to receive services, and 4% wrote about both. Lastly, 92% of participants wrote about these experiences in the context of medical professionals, 6% wrote about experiences at the dentist, and 2% reported experiences while receiving mental health services. Afterwards, we coded the content that the participants wrote about. Common experiences among the participants were significant delays in receiving care seemingly motivated by race, ignored while waiting to be seen by a professional, and differences in tone and approaches utilized. Once African American patients are seen by a healthcare professional, they experience being disrespected, instances of stereotype activation, feeling disregarded, and pain expression being ignored.

**Manipulation Check.**

To assess whether the COVID-19 discrimination manipulation successfully resulted in the participants recalling an incident of discrimination in healthcare settings involving a healthcare professional, the participants responded to 2 questions that indicates their affective responses to describing their experience (e.g. How discriminated against did you feel during the event?) ( $\alpha = .94$ ) (Appendix E).

**Connectedness to Workers.**

In order to measure the degree of connectedness and closeness participants feel to healthcare workers and the overall healthcare system, the Aron and colleagues (1992) Inclusion of the Other in the Self (IOS) scale was adapted to fit the healthcare context. The adapted scale contained 1 item (e.g., Which picture best describes your relationship with healthcare professionals?). Respondents chose a pair of circles (labeled self and healthcare professionals) from seven with different degrees of overlap (1 = no overlap, 7 = most overlap). A higher degree of overlap suggests that participants feel a strong sense of connection and closeness to the healthcare workers (Appendix F).

**Trust of Healthcare Workers.**

The Tropp and colleagues (2006) Trust and Acceptance Scale was adapted to measure the participants' perception of trust in their healthcare workers. The adapted scale contained 5 items (e.g., "I felt I could trust the healthcare workers I described in the scenario") on a 7 point scale (1=strongly disagree, 7= strongly agree) ( $\alpha = .97$ )(Appendix G).

### **Satisfaction With Services.**

The Mayston (2017) Service Satisfaction Scale was adapted and used to examine the participants' satisfaction with their healthcare services. The adapted scale contained 9 items (e.g., "The healthcare workers listened to me carefully") on a 7-point likert scale (1 = strongly disagree, 7 = strongly agree). Satisfaction with services was computed by averaging scores across all 9 items. A higher score will indicate higher levels of satisfaction with services ( $\alpha = .94$ ) (Appendix H).

## **Results**

### **Random Assignment Check**

To determine whether random assignment was successful, I conducted independent samples t-tests, comparing group means on stigma consciousness, income, education, age, and health quality. This analysis revealed that participants in the discrimination condition ( $M = 4.81$ ) reported marginally significantly higher stigma consciousness than participants in the control condition ( $M = 4.60$ ),  $t(196) = 1.66, p < .10$ . None of the other analyses were significant, all  $t$ 's  $< 1.20$  (or  $> -0.41$ ), all  $p$ 's  $> 0.35$ . Next, I conducted two-way chi-square analyses comparing participants in the discrimination manipulation and control conditions on the race of their healthcare provider, employment status, marital status, gender identity, and insurance coverage. Analyses revealed that there was a marginally significant difference in the race of the healthcare provider reported across the two conditions. Participants in the discrimination condition reported having more white healthcare providers than those in the control condition,  $\chi^2(1) = 3.1, p < 0.09$ . None of the other analyses were significant, all  $\chi^2$ 's  $< 0.29$ , all  $p$ 's  $> 0.66$ . Results indicated that random assignment was successful, apart from marginally significant differences in stigma

consciousness and the race of the healthcare provider, which we controlled for in other analyses.

### **Manipulation Check**

To test whether the discrimination manipulation effectively resulted in participants recalling an incident of discrimination in a healthcare setting, an independent-samples t-test was conducted comparing participants in the discrimination condition and control condition on their responses to the two manipulation check items (i.e., “How negative was the event you just described?” and “How discriminated against did you feel during the event?”). The analysis revealed that participants in the discrimination condition ( $M= 5.56$ ) reported that the event was more negative compared to those in the control condition ( $M= 3.11$ ),  $t(196) = 8.80$ ,  $p < .001$ . It also revealed that participants in the discrimination condition ( $M= 5.71$ ) felt more discriminated against compared to those in the control condition ( $M=2.87$ ),  $t(196) = 10.00$ ,  $p < .001$ . This suggests that the discrimination manipulation was successful. However, it is important to note that the “neutral”

Next, I conducted a multiple regression analysis predicting participants’ endorsement of the manipulation check items from manipulation condition (-1 = control, 1 = discrimination manipulation), stigma consciousness (continuous), and the two-way interaction of Stigma Consciousness x Condition. All subsequent multiple regression analyses follow these same procedures. I centered the continuous predictor variables (i.e., stigma consciousness) by subtracting the sample mean from each score. The centered predictors were also used in all of the analyses.

The analysis revealed a significant main effect for condition when predicting endorsement of the manipulation check item, such that participants in the discrimination

manipulation condition more strongly endorsed the item compared with those in the control condition,  $B = 1.40$ ,  $\beta = .57$ ,  $t(197) = 9.75$ ,  $p < .001$ . In addition, there was a marginally significant main effect of stigma consciousness, which revealed that endorsement was higher among the participants who were high (versus low) in stigma consciousness,  $B = .36$ ,  $\beta = .14$ ,  $t(197) = 2.37$ ,  $p = .02$ . However, the two-way interaction was not significant,  $t(197) = .71$ ,  $p = .48$ . Even though there was a significant main effect of stigma consciousness, it did not appear to interact with the condition in predicting responses to the manipulation check item. Most importantly, participants in the discrimination manipulation condition endorsed this item more strongly than those in the control condition, which was expected. These results suggest that the manipulation was effective in manipulating participants' thoughts about discrimination experienced in healthcare settings and this was not different for participants high versus low in stigma consciousness.

### **Multiple Regression Analyses**

To test my hypotheses that stigma consciousness would moderate the discrimination manipulation, I conducted a series of multiple regression analyses predicting healthcare quality outcomes controlling for gender, health quality, income, age, insurance coverage, employment status, marital status, education, and the race of the healthcare provider (See Table 1). Trust, satisfaction, and connectedness were highly correlated and were combined to one variable of healthcare quality ( $\alpha = .87$ ). Gender was a significant predictor of reported healthcare quality,  $B = .35$ ,  $\beta = .20$ ,  $t(181) = 2.97$ ,  $p = .003$ . This indicates that African American women reported less healthcare quality compared to African American men. The race of the healthcare provider was also significant,  $B = .24$ ,  $\beta = .14$ ,  $t(181) = 2.10$ ,  $p = .04$ . Participants that had a White healthcare

professional reported less healthcare quality when compared to any other racial identification.

Healthcare quality was marginally significant,  $B = -.23$ ,  $\beta = -.12$ ,  $t(181) = -1.79$ ,  $p = .075$ .

Individuals that reported poorer health quality also reported less healthcare quality. None of the other covariates were significant (all  $p$ 's  $> .34$ ). To examine my first hypothesis, I examined the main effect of COVID-19 discrimination condition predicting healthcare quality outcomes.

Consistent with my predictions, the main effect was significant,  $B = -.62$ ,  $\beta = -.37$ ,  $t(181) = -5.54$ ,  $p = <.001$ . African Americans in the COVID-19 discrimination condition exhibited lower levels of healthcare quality when compared to those in the control condition. There was also a significant (unpredicted) effect of stigma consciousness, such that participants who were higher (versus lower) in stigma consciousness reported lower healthcare quality outcomes,  $B = -.32$ ,  $\beta = -.18$ ,  $t(181) = -2.71$ ,  $p = .008$ . To test my second hypothesis, I examined the two-way Condition x Stigma Consciousness interaction for predicting healthcare quality. Contrary to my predictions, there was not a significant Condition x Stigma Consciousness interaction,  $B = -.12$ ,  $\beta = -.06$ ,  $t(181) = -.99$ ,  $p = 0.33$ . Therefore, the effect of stigma consciousness on healthcare quality was the same in the discrimination and control conditions.

Table 1. Healthcare quality as a function of condition and stigma consciousness

	$B$	$\beta$	$t$	$p$
Income	-.05	-.05	-.546	.59
Race of Provider	.24	.14	2.11	.04
Age	.01	.03	.49	.63



Health Quality	-.23	-.12	-1.79	.18 .08
Employment Status	.01	.01	.09	.93
Marital Status	-.03	-.02	-.25	.81
Education	.09	.05	.73	.46
Gender	.35	.20	2.97	.003
Insurance Coverage	-.26	-.04	-.65	.51
Stigma Consciousness	-.32	-.18	-2.71	.008
Condition	-.62	-.37	-5.54	<0.001
Stigma Consciousness x Condition	-.12	-.06	-.99	.33

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### **Exploratory Analyses**

Next, I examined the potential role of the included covariates on predicting healthcare quality. Individual differences, such as gender, health quality, income, age, employment status, marital status, education, and the race of the healthcare provider, could explain some differences observed in the healthcare quality reported. I did not have any directional hypotheses centered on the effects of these covariates. However, I speculated that there might be some differences among this specific population based on individual differences. To assess this, I conducted multiple regression analyses predicting healthcare quality from condition, stigma consciousness,

the two-way interactions, and the three-way interactions from each covariate specified above. None of the significant three-way interactions between the covariates, condition, and stigma consciousness were significant (all  $F$ 's < 1.98, all  $p$ 's > .16). Therefore, it appears that none of these covariates seem to moderate the predicted healthcare quality outcomes.

### **Discussion**

The first hypothesis was that African Americans in the COVID-19 discrimination condition would report feeling significantly less trustful, connected, and satisfied with healthcare workers and services when compared to those in the control condition. Consistent with this prediction, African American participants in the COVID-19 discrimination condition reported less healthcare quality when compared to those in the control condition. The second hypothesis was that stigma consciousness would moderate the COVID-19 discrimination condition predicting healthcare quality. Inconsistent with my predictions, stigma consciousness did not moderate the effect of COVID-19 discrimination condition and healthcare quality. However, participants high in stigma consciousness did report significantly lower levels of healthcare quality when compared to those low in stigma consciousness (regardless of which condition participants were in). These findings suggest that stigma consciousness and instances of discrimination can serve as a predictor of healthcare quality, but stigma consciousness is not a significant moderator between perceived discrimination and healthcare quality outcomes.

Although it was not a prediction, the results also revealed that gender, the race of the healthcare provider, and health quality also had an effect on the participants' perception of healthcare quality. The results indicated that African American women reported less healthcare quality compared to African American men. Also, participants that had a White healthcare

professional reported less healthcare quality when compared to any other racial identification. Furthermore, individuals that reported poorer health quality also reported less healthcare quality. This shows that individual characteristics also play an important role in the perception of healthcare quality. Individuals with these specific characteristics may be having different experiences within this context which offers more research to further explore.

Previous research highlighted (white)physicians' negative perceptions toward their African American patients. Physicians believed their African American patients were less intelligent, more likely to engage in behaviors that pose a risk to health, and more likely to ignore treatment recommendations (Peek et al., 2010). Also, medical doctors demonstrated an implicit (overlearned, automatic) preference for White Americans relative to Black Americans (Sabin et al., 2009). These perceptions and beliefs are manifested through their interactions, verbiage, and approaches displayed toward these individuals. These findings suggest that African American patients are aware of the negative perceptions held by healthcare professionals and how they are reflected through their biased actions. Furthermore, it also reveals that recalling these events directly impacts their perception of healthcare quality. African American patients exhibited feeling disconnected and untrusting of their healthcare professionals. Therefore, these findings can offer an additional explanation for the observed health disparities and the lack of engagement with the healthcare system. Health outcomes have been shown to improve when patients are willing to engage and trust their healthcare professionals (Alsan et al., 2019).

## **Strengths and Limitations**

One strength of this current study is utilizing the perspective of African American patients to examine their experiences in healthcare settings. To our knowledge, most publications that discuss in detail the degree of connection and trust between African American patients and healthcare professionals, specifically medical doctors, have been largely limited to the perspective and reports of medical doctors (Abdou & Fingerhut, 2014; Sabin et al., 2009; Alsan et al., 2019). Although this research does offer an interesting perspective about how doctors feel about their African American patients, it does not gauge how African American patients feel about their interactions with medical professionals. Gaining this perspective about the unique experiences of African Americans within the healthcare context contributes to more diversity in perspectives in psychological sciences (Buchanan et al., 2021).

Another strength of the current study is the use of qualitative data to better understand the types of discriminatory experiences that African American patients have to endure within this setting. The use of open-ended short-responses, allowed for more depth and additional explanations behind participants perceptions of connection, trust, and satisfaction with healthcare workers. Due to the use of this qualitative data, unique experiences were discovered that would have gone unnoticed with just the use of quantitative data. Due to this, we discovered a complexity of experiences within this setting that starts upon arrival into the healthcare setting utilized and extends longer term discrimination in healthcare treatment. This allowed for understanding a much more complex experience. Before African American patients even get in to see their healthcare professionals, some participants reported issues with scheduling appointments, significant delays in receiving care seemingly motivated by race, ignored while

waiting to be seen by a professional, and differences in tone and approaches utilized. Once African American patients are seen by a healthcare professional, they experience being disrespected, instances of stereotype activation, feeling disregarded, and ignored in a variety of ways. The most common experiences noted was health concerns, symptoms, and pain being minimized or completely ignored. Clearly, these are experiences that would have gone undetected with just the use of survey items.

A third strength of this study is the use of a quasi-experimental design. The quasi-experimental design utilized allows causal statements to be made about perceptions of discrimination in health care settings predicting lower healthcare quality. Therefore, it can be concluded that recalling instances of discrimination within healthcare settings negatively impacts perceived healthcare quality. This study revealed that remembering these events are causing individuals to feel disconnected and less satisfied with the healthcare system. These findings have implications that can offer explanations about hesitancy or reluctance to engage with this system. Observational research would not have allowed for these same statements to be made.

One limitation of the current study is that the control condition was not completely devoid of reports of discrimination. Participants in the control condition were prompted to write about the process of scheduling an appointment during the COVID-19 pandemic. We expected this to be a neutral experience for participants, but this was not the case. After reading responses, participants reported experiences of discrimination while scheduling appointments. This may be why we did not see that stigma consciousness moderated the observed effects. We predicted to only see effects of stigma consciousness in the COVID-19 discrimination condition—but the control condition (surprisingly) also elicited reports of discrimination although significantly less

than in the discrimination condition. Future studies should find a better way to establish a more neutral control condition.

Another limitation of the current study is that we recruited participants online via MTurk, which potentially minimizes the validity and generalizability of our dataset. Due to using online surveys, participants can lie or fabricate data. A benefit of using MTurk is that the inclusion criteria was clearly outlined and only participants who identified as African American saw the study recruitment information, which reduces the possibility of the sample including ineligible participants. However, future research should explore using other mechanisms of data collection to better understand experiences of discrimination of African Americans in healthcare settings. For example, phone interviews or in-person experiments could improve these concerns. Additionally, individuals using MTurk may differ from a nationally representative sample of African Americans. Therefore, future studies should supplement data collected online with data from other sources.

Another limitation of the current study is the sample size of 198 participants. Perhaps a larger nationally representative sample would have yielded different results. A larger sample could have more statistical power to yield significant results pertaining to stigma consciousness acting as a moderating variable. That is, if the moderating effect of stigma consciousness is a small effect, there is not enough power in the current sample to detect the effect. Also, a larger sample size might have revealed other moderating variables based on demographic variables and individual characteristics, such as income, education, and insurance coverage. Future research should examine these effects in a larger more representative sample of African Americans.

## **Future Directions**

Future research should evaluate the experiences of African Americans within healthcare settings and the impact of their perception of healthcare quality by improving the writing task provided. Specifically, a more neutral writing task for the control condition should be used to decrease the amount of discrimination that participants reported. In the current study, I initially thought that scheduling an appointment with a healthcare provider will be a neutral experience that participants would be able to write about without many reports of discrimination. However, the participants in the control condition reported experiencing discrimination throughout this seemingly simple process. Although this highlighted the complexities of the experiences of African Americans within healthcare settings, it may have impacted the results of the study. Future research should also include more demographic information from the participants and the healthcare providers that are described in the writing tasks. For the participants, sexual orientation was not included as a demographic variable and could potentially be a significant moderating variable. African Americans that do not identify as heterosexual might have a different experience that was not captured by this current study. For healthcare providers, their gender identity was not assessed. In this study, African American women reported less healthcare quality compared to African American men. It would be important to understand if their experiences are due to being the target of sexism (from male doctors) and racial discrimination from healthcare providers. Gaining this knowledge would help better understand the gender differences observed within the current study.

While navigating a variety of social contexts, African Americans are often the targets of racial discrimination. Past research has shown that repeated instances of discrimination in these

contexts directly impacts the psychological and physical well-being of the stigmatized individuals (Major & O'Brien, 2005). These experiences lead to chronic stress that negatively impacts physical and mental health outcomes. A similar phenomenon observed in other social spaces can be applicable in healthcare settings as well. The current study affirmed prior research centered on difficulties African Americans face when seeking care to improve their mental and physical well-being. They are often faced with similar experiences of discrimination when interacting with professional healthcare workers. The current study revealed that these experiences directly impact their perception of healthcare quality. Understanding discrimination within this setting is important to understanding all of the factors that contribute to the observed racial disparities in healthcare and health outcomes. Therefore, gaining knowledge about the unique experiences of African Americans in healthcare will impact research on stereotyping and prejudice, health policy, and Covid-19.



APPENDIX A  
DEMOGRAPHICS AND HEALTHCARE QUESTIONS

## Demographics

### 1. Race/ Ethnicity

- White
- Black/African American
- American Indian
- Alaska Native
- Native Hawaiian
- Pacific Islander
- Asian
- Hispanic
- Some other race
- 2+ races

### 2. Gender identity

- Male (1)
- Female (2)
- Transgender Male
- Transgender Female
- Gender Non-binary
- Prefer to self-describe (Open Space)

### 3. Age

- Select Age (18+)

### 4. Education

- Less than High School Graduate (1)
- High School Graduate or GED (2)
- Some college (3)
- Associate's Degree (4)
- Bachelor's Degree (5)
- Graduate, Doctorate, or Professional Degree (6)

### 5. Household Income

- Less than \$25,000
- \$25,000-\$50,000
- \$50,001-\$75,000
- \$75,001-\$100,000
- \$100,001-\$125,000
- \$125,001-\$150,000
- \$150,001-\$175,000
- \$175,001-\$200,000
- Over \$200,00

#### 6. Employment Status

- 1 = Working - as a paid employee
- 2 = Working - self-employed
- 3 = Not working - on temporary layoff from a job
- 4 = Not working - looking for work
- 5 = Not working – retired
- 6 = Not working – disabled
- 7 = Not working – other

#### 7. Marital Status

- 1=married
- 2=single/never married
- 3=divorced
- 4=widowed

#### 8. Zip Code

- Numerical Entry

### **Insurance and Healthcare Utilization Questions**

#### 1. Are you covered by any kind of health insurance or some other kind of health care plan?

- 1 Yes
- 2 No

#### 2. What kinds of health insurance or health care coverage do you have?

- 01 Private health insurance
- 02 Medicare
- 03 Medigap
- 04 Medicaid
- 05 Children's Health Insurance Program (CHIP)
- 06 Military related health care: TRICARE (CHAMPUS) / VA health care / CHAMPVA
- 07 Indian Health Service
- 08 State-sponsored health plan
- 09 Other government program
- 10 Other
- 11 No coverage of any type

#### 3. Would you say your health in general is excellent, very good, good, fair, or poor?

- 1 Excellent
- 2 Very Good
- 3 Good

- 4 Fair
- 5 Poor

4. About how long has it been since you last saw a medical professional about your physical or mental health?

- Never
- Within the past year (anytime less than 12 months ago)
- Within the last 2 years (1 year but less than 2 years ago)
- Within the last 3 years (2 years but less than 3 years ago) 4
- Within the last 5 years (3 years but less than 5 years ago) 5
- Within the last 10 years (5 years but less than 10 years ago) 6
- 10 years ago or more

5. How often do you visit a doctor for your own health (physical or mental) in a typical year?

- Pull down menu (1-100+)

6. How often do you visit a doctor for someone else's health in a typical year? (e.g. parent, child, etc)

- (1-100+)

7. What kind of place do you go to most often?

- A doctor's office or health center
- Urgent care center or clinic in a drug store or grocery store
- Hospital emergency room
- A VA Medical Center or VA outpatient clinic
- Some other place
- Does not go to one place most often

8. During the past 12 months, have you DELAYED getting medical care because of the cost?

- Yes
- No

9. In the last two years, have you delayed getting medical care because of Covid-19?

- Yes
- No

APPENDIX B  
THE FREQUENCY OF RACE-RELATED EVENTS

**How often do these experiences happen to you because of your race or because of racism?**

0	1	2	3	4
Never	Rarely	Sometimes	Often	Always

1. Being ignored, overlooked, or not given service (in a restaurant, store, etc.)
2. Being treated rudely or disrespectfully
3. Others reacting to you as if they were afraid or intimidated
4. Being observed or followed while in public places
5. Being treated as if you were "stupid," being "talked down to"
6. Being treated in an "overly" friendly or superficial way
7. Being avoided, others moving away from you physically
8. Being stared at by strangers
9. Being mistaken for someone else of your same race (who may not look like you at all)
10. Being considered fascinating or exotic by others

APPENDIX C  
STIGMA CONSCIOUSNESS

**Please indicate how much you agree with the following statements on the scale provided:**

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree Or Disagree			Strongly Agree

1. Stereotypes about my ethnicity have not affected me personally.
2. I never worry that my behaviors will be viewed as stereotypical of my ethnicity.
3. When interacting with others who know of my ethnicity, I feel like they interpret all of my behaviors in terms of the fact that I am my ethnicity.
4. Most others do not judge ethnicities on the basis of their ethnicity.
5. My being my ethnicity does not influence how Whites interact with me.
6. I almost never think about the fact that I am my ethnicity when I interact with others.
7. My being my ethnicity does not influence how people interact with me.
8. Most others have a lot more ethnically prejudiced thoughts than they actually express.
9. I often think others are unfairly accused of being ethnically prejudiced.
10. Most others have a problem viewing ethnic minorities as equals.



APPENDIX D

COVID-19 DISCRIMINATION MANIPULATION AND CONTROL WRITING TASK





APPENDIX E  
MANIPULATION CHECKS

**Now that you have described this event, please report how severe and negative the event**

**was to you:**

1	2	3	4	5	6	7
Not very negative						Extremely negative

How discriminated against did you feel during the event?

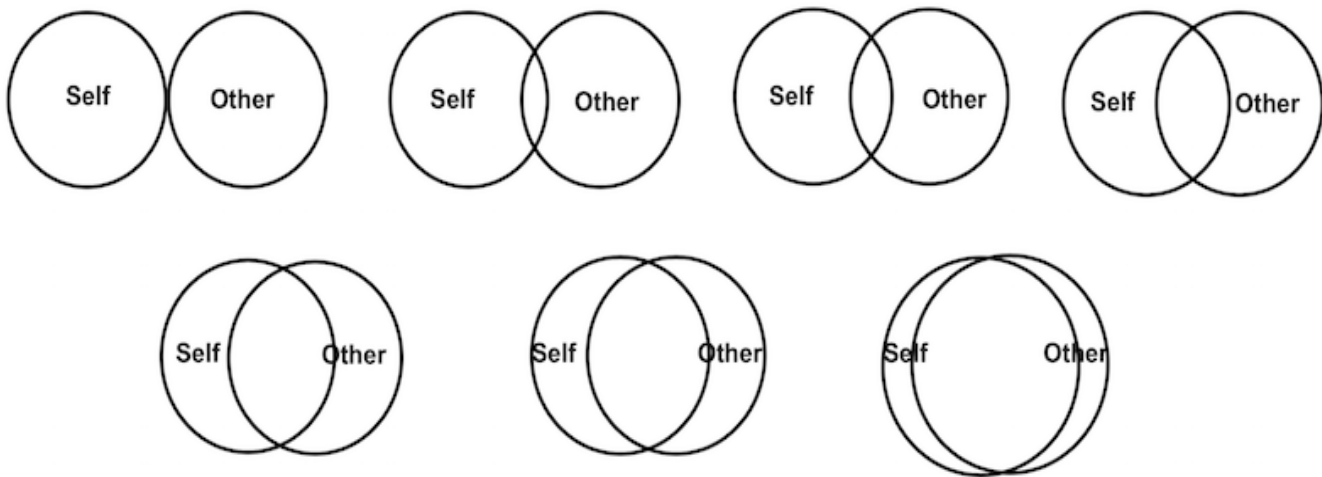
1	2	3	4	5	6	7
Not at all						Very

What was the race of the healthcare provider you interacted with in the previous scenario you described?

- White
- Black/African American
- American Indian
- Alaska Native
- Native Hawaiian
- Pacific Islander
- Asian
- Hispanic
- Some other race
- 2+ races

APPENDIX F  
CONNECTEDNESS TO HEALTHCARE WORKERS

**Which picture best describes your relationship with healthcare professionals? (Do you feel connected to the healthcare workers you often engage with?)**



APPENDIX G  
TRUST OF HEALTHCARE WORKERS



**Continue to think about the healthcare workers you interacted with in the previous scenario you described. Please indicate how much you agree with the following statements on the scale provided:**

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree Or Disagree			Strongly Agree

1. I felt I could trust the healthcare workers that I described in the scenario.
2. I felt respected by the healthcare workers that I described in the scenario.
3. I felt treated as an equal by the healthcare workers I interacted with.
4. I felt comfortable with the healthcare workers I interacted with.
5. I would want to be friends with the healthcare workers I interacted with.

APPENDIX H  
SATISFACTION WITH HEALTHCARE SERVICES

**Please indicate how much you agree with the following statements:**

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree Or Disagree			Strongly Agree

1. The healthcare workers treated me with courtesy
2. The healthcare workers listened to me carefully
3. The healthcare workers explained things to me in a way I understood
4. The waiting time was acceptable
5. I had enough time to discuss with healthcare worker
6. I received helpful advice
7. My privacy was respected
8. I have the opportunity for follow up with the same healthcare worker
9. My personal information was kept confidential

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## VITA

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