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# Role of Racially Concordant Patient-Physician Relationships in Health Outcomes Among African American Women

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# Walden University

College of Health Sciences and Public Policy

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Joy Thomas

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Walden University
2023

Abstract

Role of Racially Concordant Patient-Physician Relationships in Health Outcomes Among African American Women

by

Joy Thomas

MA, Walden University, 2014

BS, Auburn University, 1989

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

May 2023

## Abstract

There are gaps in the literature regarding how patient-physician racially concordant relationships affect African American women's health. This quantitative study evaluated the effects of non-minority physician influence on the perceptions of medical mistrust, racial discrimination, and healthcare-specific racial discrimination on African American women. The behavioral model for vulnerable populations guided the study. Two research questions involved understanding the relationship between trust in the physician scale and medical mistrust and the association between racial discrimination and perceived healthcare-specific racial discrimination among African American women living in a Southern U.S. state. A stratified random sampling strategy was used to obtain a purposive homogenous subgroup of 816 African American women ages 30-55. Chi-squared and Pearson correlation analyses were used to test relationships. The Medical Distrust Scale and Trust in Physician Scale scores were significant, $r = -.64$, $p < .001$. Healthcare-specific Racial Discrimination was significantly correlated with the Schedule of Racist Events-Entire Life scale, $r = .69$, $p < .001$. Implications for positive social change include facilitation of conversations between minority patients and non-minority physicians about the significance of racially concordant patient-physician relationships based on trust. This can lead to increased training and education of minority physicians and healthcare personnel so that African American women can choose qualified physicians who look like them and thus contribute to better health outcomes for minority women.

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# Dedication

To my Mother Cora Brown Thomas who always believed in me and my Father Bill Thomas who loved and encouraged me to be all I could be

Acknowledgements

Thank you to the Center for Social Change for awarding me a Social Change Grant for 2022-2023, Giving me the Lifelong honor of being a Social Change Fellow

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# Chapter 1: Introduction to the Study

## Introduction

The dissertation sought to identify whether race-concordant patient-physician relationships affect African American women's health outcomes. Quality healthcare accessibility should be provided regardless of an individual's race or background; however, this remains a challenge, resulting in health disparities among specific racial and ethnic populations (Moy & Freeman, 2014). Even today, African American populations continue to be affected by cultural stereotypes, resulting in an implicit and explicit bias of providers, which only increases the prevalence of health disparities and poor health outcomes (Chapman et al., 2013). Research reveals that poor health outcomes are directly correlated to patient-physician relationships (Nelson, 2016).

Evidence shows that discrimination against minority populations, especially African American women, is connected to adverse health outcomes for them. Moreover, there are gaps in the research regarding the role of minority physicians and whether minority patients feel they will receive better treatment from a physician who looks like them. Limited research indicates that a match between the racial characteristics of patient and physician impacts patient care (Bleich et al., 2012; Hall et al., 2015; Schoenthaler et al., 2012; Thomas, 2014). Kaplan (2012) suggested that patients respond more positively to physicians with whom they feel some concordance, whether it is due to culture, race, language, or gender. The role of minority physicians can influence the impact of race as a salient measure for health inequalities, both present in and perceived by African American women (Perez-Sable & El-Toukhy, 2018). Few quantitative studies have

examined how medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination impact the health of African American women. Research findings and analyses, however, provide minimum knowledge about the extent of non-minority physicians on the health consequences of African American women. Inquiries show that further research can provide additional clarity and knowledge.

This chapter provides a summary of the scope of literature research. The problem and purpose of the study are stated, as also any gaps noted in the current literature. The chapter sets out the research questions and hypotheses, along with the conceptual or theoretical framework. It describes the nature of the study, definitions, assumptions, delimitations and scope, limitations, and a summary of the main points.

**Background**

Medical mistrust and feelings of discrimination can prevent vulnerable ethnic and racial populations from seeking healthcare. Not seeking healthcare can present significant challenges, increasing the likelihood of ethnic and racial minority populations contracting life-threatening diseases (Jackson & Gracia, 2014). Hence, understanding the correlations existing in patient-physician relationships and their role in the health disparities and health perceptions among African American women is important for remediation (Thomas, 2014). Hall et al. (2015) indicated that implicit attitudes displayed by providers such as physicians are challenges to the formulation of appropriate patient-physician relationships. The attitudes of physicians and other healthcare providers in racially discordant relationships can promote racial disparities for African Americans, impacting their health and healthcare (Hall et al., 2015). The behaviors and decisions of physicians

and other healthcare providers are significant components of trust, which, in turn, is one of the most significant components in patient-physician relationship building (Shan et al., 2016). Consequently, trust plays a significant role in how patients perceive the healthcare they receive; so, it is vital that race-concordant patient-physician relationships be studied in depth to determine whether having a physician who looks like the patient increases trust and leads to positive healthcare benefits.

Many barriers and factors prevent African American women from accessing the healthcare they need, beyond lack of resources (the inability to pay) (Levesque et al., 2013) and lack of insurance (Wang et al., 2013), which are common influencers of healthcare use. Other barriers that act as critical determinants include provider interactions with patients, the patient's trust in providers, and patient involvement in healthcare decisions (Hall et al., 2015). Wang et al. (2013) found that 23.63% of African Americans expressed inability to obtain needed healthcare services, causing treatment delays or foregoing of treatment. Nuru-Jeter et al. (2011) found that lack of healthcare and reduced healthcare perceptions has caused African American women to develop age-related diseases earlier than whites. Additionally, Thrope et al. (2016) concluded that African Americans have consistently exhibited higher rates of stroke, diabetes, and hypertension in all age groups, than Whites.

Carter et al. (2016) averred that African American woman who perceived more racial discrimination experienced more diagnoses of chronic illness. Discrimination may influence all African Americans substantially. Greer et al. (2014) posited that perceived discrimination from providers is a barrier effecting quality provider relationship for

African Americans. As such, African Americans are more likely to perceive healthcare-specific racial discrimination (Abramson et al., 2015). Higher levels of discrimination cause African Americans to report increased levels of medical mistrust and poor communication with their healthcare providers, specifically their physicians (Cuevas & Brien, 2016). Feagin and Benefied (2014) found that though African Americans prefer healthcare practitioners from their own racial, ethnic group, they face a healthcare system that is non-black.

This study addresses the perceptions of African American women in Selma, Alabama, regarding whether they felt they received better treatment from a physician who looks like them than one who does not. The study is necessary to gather data, information, and knowledge about the influence of non-concordant patient-physician relationships on healthcare perceptions and outcomes for African American women. On this topic, Krieger (2012) said it best: the responsibility of research is to provide clarity regarding the extent and health consequences of racial discrimination.

**Problem Statement**

A significant amount of research that identifies discrimination (Forsyth et al., 2014; Greer et al., 2014), poor patient-physician relationship communication (Rim et al., 2011), and medical mistrust (Sheppard et al., 2013) as barriers to competent healthcare for African American women. Perez-Stable and El-Toukhy (2018) identified numerous factors related to the patients, clinicians, and the healthcare system, all contributing to unequal healthcare. Specifically, there are gaps in the literature regarding the role of racially concordant patient-physician relationships in health outcomes. Therefore,

examining medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination can provide additional clarity and information on the significance of racially concordant patient-physician relationships.

**Purpose of the Study**

The purpose of this quantitative research was to evaluate the effects of non-minority physician influence on perceptions of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination on African American women in Selma, Alabama. The research also evaluates how patient-physician relationships influence African American women's decision to access healthcare. Positive minority physicians' relationships may be a key to improving the health of African American women, as demonstrated by reductions in medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination experienced by them. The study will evaluate the role of trust in non-concordant and concordant patient-physician relationships.

Research can assist in determining patient needs and requirements to make a transformation in physician relationships and encourage formation (Tapp et al., 2013). Further, the research seeks to provide additional evidence to fill a gap in the literature regarding a correlation between minority physicians and better health outcomes for African American women. This research could shed light on the perceptions of discrimination and racial biases experienced in race discordant patient-physician relationships, and the results could prompt new conversations about the significance of

the patient-physician relationship and how negative relationships affect ethnic and minority patients.

**Research Questions and Hypotheses**

RQ1: Is there an association between the Trust the physician scale, and medical mistrust scale (quantitative)?

Ho1: There is no association between the Trust the physician scale and medical mistrust scale.

HA1: There is an association between the Trust the physician scale and medical mistrust scale.

RQ1 Data Analysis Plan: Examine data using Pearson's correlations to examine the correlations between the Group-Based Medial Mistrust Scale (GBMMS) and The Trust and Physician Scale (TPS).

RQ2: Is there an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women (quantitative)?

Ho2: There is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women.

HA2: There is an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women.

RQ2 Data Analysis Plan: Use Pearson's correlations to examine the correlations between the scores on the Healthcare Specific Discrimination Measure (HCSD),

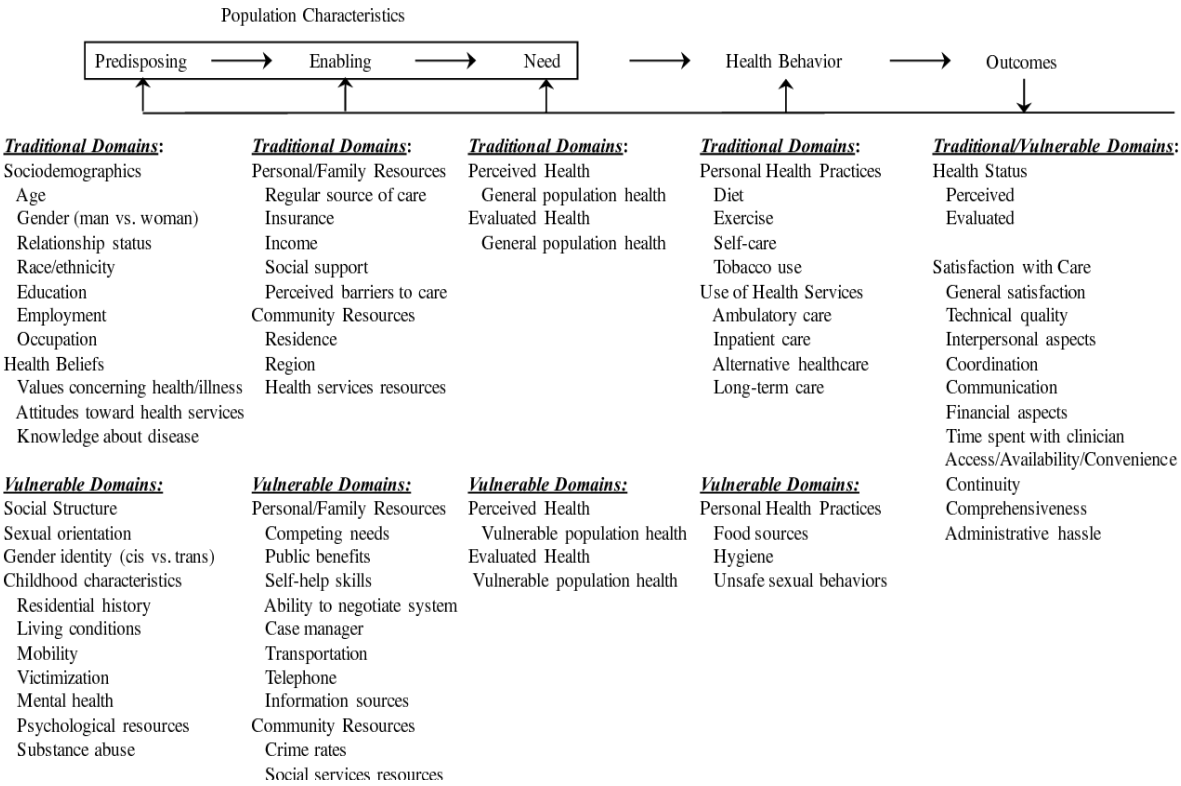
Schedule of Racist Events-Lifetime (SRE-L), and the Everyday Discrimination Scale (ED).

**Theoretical Framework**

The theory best suited for the dissertation is the behavioral model for vulnerable populations (BMVP) developed by Gelberg et al. (2000). The BMVP theory provides a theoretical structure to examine the variables of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination, as well as the adverse effects of non-minority physicians. The BMVP theory has been used in research to clarify and provide understanding concerning physical and mental healthcare among vulnerable populations (Bazarga et al., 2005; Krahn et al., 2006; Austin et al., 2008). The theoretical structure of BMVP enables the examination of factors associated with mistrust, healthcare discrimination, and stressors, along with how these issues affect the health outcome utilization of African American women (Fernandez & Morales, 2007; Levine et al., 2011; Napoles-Springer et al., 2007; Nandi et al., 2008; Varma et al., 2008). The model may increase understanding of the barriers that contribute to healthcare discrimination against African American women and provide insights into ways of improving the health status of African American women. BMVP framework allows for examination of mechanisms that narrate the intentions of African American women to seek medical help and how medical help is perceived. The core components of the BMVP framework are predisposing, enabling, and need factors, which are classified as predictors of health attitudes, behaviors, and perceptions of health behavior outcomes.

**Figure 1**

*Behavioral Model for Vulnerable Populations*




*Source:* Gelberg, L., Anderson, R. M., Leake. B. M. (2000) Application for medical care use and outcomes. *Health Services Research, 34*(6), 1273-1302.

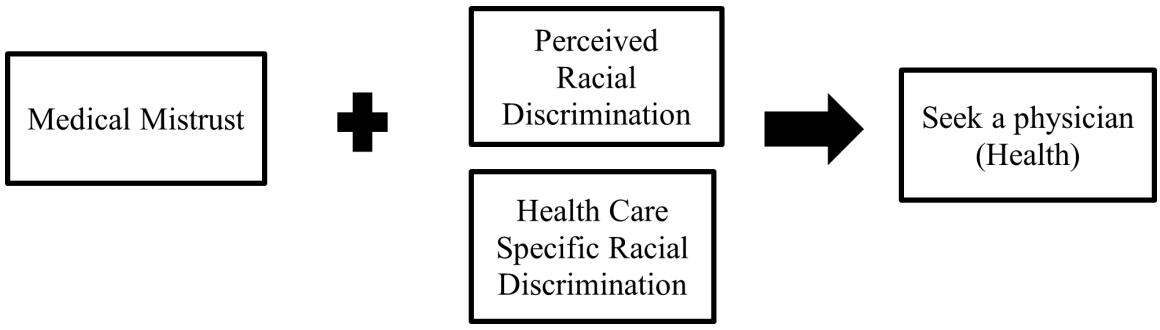
The BMVP predisposing components are pre-existing conditions that influence a person's use or lack of use of medical services. Traditional domain variables are gender, race, education, age, ethnicity, and attitudes and beliefs about health services. Vulnerable domain variables include sexual orientation, acculturation, birth country, and mental illness. Predisposing conditions are significant because they influence one's probability of healthcare service utilization that is not directly responsible for medical services (Andersen & Davidson, 2007). Medical mistrust is represented as a predisposing traditional domain variable since it represents African American women's beliefs or

attitudes toward health service physicians. Anderson and Davidson (2007) defined enabling components as variables that either impede or facilitate healthcare service usage. Enabling domains are traditional and vulnerable. The traditional domains include insurance status, care source (regularly), income, barriers to healthcare, social support, and care seeking. Resources in health services include healthcare distribution, the process of care, population ratio, and price, which are vulnerable domains. For dissertation purposes, healthcare-specific racial discrimination, and general discrimination (perceived) are under the vulnerable enabling domains.

The need component of the BMVP includes the reorganization of objective evaluations of conditions or health and self-perceptions (Andersen & Davidson. 2007; Gelberg et al., 2000). Traditional domain need components include the perceived need for care, perceived health status, and evaluated need (Gelberg et al., 2000). The vulnerable domain includes evaluated conditions of relevance to the vulnerable population and perceptions of the population (Gelberg et al., 2000). The need component includes objective evaluation and self-perception of conditions that require medical treatment (Andersen & Davidson, 2007; Gelberg et al., 2000). African American women's perceived need for medical care evaluation may be related to their vulnerable health status. African American women's intentions to seek a physician will be considered under the vulnerable need domain.

**Figure 2**

*Behavioral Model for Vulnerable Populations*




**Nature of the Study**

The study had a quantitative focus due to the numerous advantages of this method. Quantitative data enables the researcher to assess the validity, reveal relationships, and make predictions (Creswell & Plano Clark, 2011; Fetters et al., 2013; Shi, 2008). The research used descriptive to make general inferences regarding the population sample's attitudes, behaviors, characteristics, and descriptions, and to interpret the current status of individuals, settings, conditions, or events (Allen, 2017). Surveys using questionnaires (mail or direct administration) were adopted for data collection due to their advantages like economy, ease of design, flexibility, and attribute identification (Fowler, 2009; Creswell, 2014).

The study used a cross-sectional design to measure outcomes and exposure, collect and analyze data, and examine the characteristics or possible differences among the population at a point in time. Cross-sectional design can be used in both social sciences and survey research (Frankfort-Nachmias et al., 2015; Shi, 2008). There are limitations to cross-sectional surveys such as limitations to precision information

measurement, faulty respondent memory, and inability to depict causal relationship direction, which thereby eliminate alternative interpretations (Shi, 2008).

The transformative design was chosen because it can be paired with any design that uses a pervasive influence as the theoretical lens throughout the research process (Mertens, 2003). Transformative designs in research seek to change and advance social justice by identifying power imbalances and empowering individuals (Greene, 2008; Mertens, 2003, 2009). Transformative design works well with BMVP theory. Therefore, the explanatory sequential design was used for understanding the impact of non-minority physicians on African American women.

**Definitions**

*African American*: A non-Hispanic, non-White person who identifies with African heritage instead of European heritage (Bryc et al., 2015).

*Concordant Relationships*: Patient-physician relationships where both are of the same race (Hall et al., 2015).

*Non-Concordant Relationships*: Patient-physician relationships where the patient belongs to an ethnic or racial minority, and the physician is White (Hall et al., 2015).

*Discrimination:* A unjustified or unfair behavior of one group that systematically disadvantages members of another group (Dovidio et al., 2008, p. 479).

*Medical mistrust*: A case where non-minority clinicians do not show respect to African American women, making them feel that the clinician's treatment was discriminatory (Cuevas & Brien, 2016).

*Minority:* Not a majority person, therefore a person who is not White (Bryc et al., 2015).

*Non-Minority:* Meaning not a minority, therefore a non-minority physician is a non-Hispanic White person (Bryc et al., 2015).

*Patient-Physician Relationships*: Interactions between the physician and patient that facilitate mutual trust through shared decision-making (Eliacin et al., 2015).

*Trust:* An essential component of a clinical relationship (Shan et al., 2016; Hall et al., 2015; Hall et al., 2002). The conviction of truth, ability, strength, and reliability in something or someone.

*Trust in Physicians:* The belief that the physician will care for the needs and interests of the patients under their care (Chang et al., 2013; Hall et al., 2015; Hall et al. 2001).

**Assumptions**

The study's assumptions include one about the participants responding to the surveys honestly and completely. An additional assumption is that the population studied will be adequate for the study, as volunteers may withdraw their participation at any time without ramifications. Participant confidentiality and anonymity will always be preserved during the study. Finally, the inclusion criteria for participants are appropriate if each participant has related experiences that are similar or identical.

**Scope and Delimitations**

The study's scope comprises African American women's choice of physician. The inclusion criteria limited participants to African American women aged 30-55 who

resided in Selma, Alabama. The quantitative research methodology was chosen so that quantitative data could be integrated to provide enhanced results and greater clarity.

**Limitations**

The study's eternal validity may be affected by the selection of participants (only African American women aged 30-55), the setting, and the interaction history. The study will use random selection to assign study participants. Internal validity may also be affected by maturation, history, regression, and selection. A study with low internal validity will produce conclusions that have little or no evidence of causality (Michael, 2016). Consequently, to reduce or control internal validity threats, consistency of observational instrument points and select study participants that are not extreme and be aware of any event that will impact study results.

**Significance of the Study**

Institutional as well as structural discrimination and racism have been linked to stress, poor quality healthcare, reduced access to healthcare, and health disparities for minority patients (Feagin & Benefield, 2013). The study's benefit and impact on social change could be increased awareness of the negative impact non-minority physicians' implicit, structural, and institutionalized racism has on the mental and physical health outcomes of African American women. The objective is to determine whether minority physicians who are of the same color as their patients are linked to better health outcomes for African American women.

**Summary**

The relationship dynamics between physicians and African American women need to be studied to determine their correlations to health outcomes and health disparities and to develop ways to remediate the disparities (Belgrave & Abrams, 2016). Patient-physician relationships have the greatest impact on the patient's satisfaction during medical service interactions, and trust in the physician is the essential component (Chang et al., 2013). Chang et al. (2013) elucidates that satisfaction is influenced by interpersonal based physician and medical service encounters affecting quality and trust building. Physicians and patients must engage in consistent, meaningful interaction to facilitate the building of trust (Peters et al., 2014).

Based on the above, this study's results could empower vulnerable minority populations through knowledge concerning the importance of race-concordant patient-physician relationships. Chapter 2 includes a literature review, covering published research and scholarship on the topic. These studies will be summarized to provide an in-depth explanation of the importance of race-concordant patient-physician relationships, medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination, and their effects on African American women in Selma, Alabama.

# Chapter 2: Literature Review

## Introduction

Healthcare disparities remain a persistent but preventable problem for African American women that affects treatment, management, and prevention of disease. A greater understanding of the influence perception of patient-physician race-concordance may provide clarity and contribute to reducing disparities for racial and ethnic minorities. The literature review examines factors that can impact the intentions of African American women to seek medical help and whether having a physician who looks like them plays a role in their intentions. The specific caucus will be African American women, and their feelings of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination and how these factors together influence intentions to seek healthcare. Medical mistrust perceived racial discrimination, and perceived healthcare-specific racial discrimination can be reduced by improved, racially concordant patient-provider relationships and in turn, reduce pervasive problems of ethnic and racial disparities in the healthcare of African American women.

Discrimination against minority populations including African American women has been connected to adverse health outcomes (Bailey et al., 2017; Benjamins & Whitman, 2014). Baily et al. (2017) revealed how structural racism can be a crucial determinant affecting minority health in a range of disciplines including but not limited to medicine, patient-clinician relationships, housing, human resources, and public health. Moreover, there are gaps in the research regarding the role of minority physicians and whether minority patients feel hopeful of receiving better treatment from a physician that

looks like them. Baily et al. (2017) explained that a central aspect of structural racism expressed consciously and unconsciously by physicians and clinicians is detrimental to minority health. Limited research indicates that a match between the racial characteristics of patient and physician matters to patient care (Benjamins & Whitman, 2014; Bleich et al., 2012; Cuevas et al., 2016; Schoenthaler et al., 2012). The argument is that the physician's race may play a role in the health equity of African American women. A more in-depth understanding of how a physician's race impacts African American women's perceptions of quality of care can contribute to understanding how these factors influence their intentions regarding their healthcare needs and choices.

Evidence going back to van Ryn and Burke (2000) shows that both provider and patient contribute to health outcomes, specifically showing that non-minority physicians consider African American patients as less compliant and intelligent and engaging in risky health behaviors, more so than patients of other races (van Ryn & Burke, 2000). Green et al. (2007) showed non-minority physicians as having implicit stereotypes regarding African Americans, often considering them as less than cooperative. Penner (2014) provided a model for the role of race-related influences in race-discordant patient-provider relationships and how they contribute to negative health-related behaviors. Cuevas et al. (2016) qualitative study showed that perceived discrimination, medical mistrust, and perceived healthcare-specific racial discrimination have an adverse effect on the health of African American women. In sum, discrimination harms health, continues to be a form of societal injustice personifying inequality, and manifests in

health inequities for African Americans (Jacobs et al., 2014; Krieger, 2012; Williams & Mohammed, 2009).

**Literature Search Strategy**

The literature search began with a well-organized systemic search from published data identifying peer-reviewed quality references for the specific research topic of discrimination (Rau, 2004). The dissertation's research topics include medical mistrust, perceived racial discrimination, and healthcare-specific racial discrimination experienced by African American women aged 30-55. Although the primary purpose of this literature search is to formulate the research question using available literature, it can also evaluate and identify gaps amenable to further research (Anju et al., 2016).

The literature search was conducted using peer-reviewed journals found on Pro Quest, CINAHL, Medline, EBSCOhost, Google Scholar, Academic Search Complete, Ovid, Socindex, and ERIC. The following key terms were used in the search: *African American women, Black women, medical mistrust, perceived racial discrimination, perceived healthcare-specific racial discrimination, health distrust, non-minority physicians, minority physicians, health, communication, structural racism, institutional racism, physician relations*, and *health disparities*. Peer-reviewed articles used in the literature review were published between 2013 and 2022; any relevant, peer-reviewed articles with earlier dates were used to provide a historical foundation for medical mistrust and perceived discrimination faced by African American women.

## Theoretical Framework

The theoretical framework is the foundation of the dissertation, and the research knowledge constructs are both literal and metaphorical. According to Grant and Osamloo (2014), the theoretical framework serves as the support and structure providing a rationale for the study, purpose, problem statement, significance, and research questions. It also serves as a grounding base or anchor for the dissertation's literature review, methods, and analysis**.**

The theoretical framework of the behavioral model for vulnerable populations (BMVP; Gelberg et al., 2000) describes how enabling factors and predisposing factors are the core components in predicting health behaviors and healthcare service usage. Similarly, it shows how African American women's health behavior impacts outcomes correlated with their perception of health status and care satisfaction. The BMVP divides health behavior components of need, enabling, and predisposing into vulnerable and traditional domains. The vulnerable domains can be tailored to specific vulnerable populations when applying the model (Gelberg et al., 2000). The dissertation will concentrate on need, enabling, and predisposing components to assess the feelings of African American women regarding medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination.

## Behavioral Model for Vulnerable Populations

The behavioral model for vulnerable populations (BMVP; Gelberg et al., 2000) provides a theoretical foundation and structure for the examination of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination as

indicators or predictors of whether having a physician that looks like them makes a difference in how African American women perceive their healthcare outcomes. The BMVP can assist in understanding racial health disparities by examining factors associated with healthcare utilization by racial or ethnic minority populations (Jacobs et al., 2014; Levine et al., 2011; Myers et al., 2018; Nandi et al., 2008).

The BMVP model was adapted from the behavioral model of health services as a model to better define healthcare utilization in vulnerable populations (Aday, 1994; Gelberg, 1996; Rew, 1996). The model can be used to develop insights and expand understanding of barriers to care, thereby improving the health status of populations considered vulnerable. Gelberg et al. (2000) defines vulnerable populations as undocumented immigrants, children and adolescents, minorities, the chronically ill, mentally ill, the disabled, the elderly and impoverished and homeless people.

**History of Conceptual Framework Constructs**

The original behavioral model was developed in the late 1960s to understand why health services are used by people (Andersen, 1968; 1965). The original model explains how people's use of health services are predisposed, as well as which factors impede or enable people's care needs. In the 1970s, the behavioral model underwent another revision and update. Gelberg et al. (2000) elaborated on measures related to health service usage that were also tied to specific episodes and conditions of illness and consumer satisfaction. In the last decade, recognition of personal practices, maintenance, and improvement of health have become explicit goals and outcomes of health service delivery (Gelberg et al., 2000). During this period, the model dynamic nature influenced

outcomes, health services research (February 2000), and predisposition, enabling resources, need, and health behaviors (Anderson, 1995). The above adaptation phases revisions and expansions were developed and defined by the BMVP.

**Alternative Theories**

Andersen's behavioral model of health services (BMHS) was developed in the 1960s (Andersen, 1995) to assist in understanding family health service use, assist in the development of policies that promote equitable access, and to define measurable equitable healthcare access (Andersen, 1968). The BMHS attempts to integrate the how's and why's of health service usage and ideas. The initial focus of the model was on the family unit, but in subsequent work, the model shifted to the individual unit (Andresen, 1995). The model has been revised several times to include health services and health status outcomes (Aday et al., 1980; Aday et al., 1985; Andersen & Newman, 1973; Andersen et al., 1970; Aday & Andersen, 1974). The BMHS model is like the BMVP because it uses predisposing characteristics, demographic factors, and traditional measures as components of social structures. All these factors contribute to an individual's health beliefs. Health beliefs provide a means to explain how social structures influence enabling resources, perceived needs, and use (Andersen, 1995).

The Health Belief Model (HBM) was developed in the 1950s by public health researchers during the development of psychological models designed to enhance the effectiveness of health education programs (Rosenstock, 1966; 1974; Rosenstock, 1988). The development of the first HBM is attributed to Hochbaum (1958). The model represents two aspects of individual behavior, health behavioral evaluation, and threat

perception. HBM can be applied to a wide range of populations on a broad range of health behaviors. One of the three broad areas that HBM can examine is health promotion and disease prevention. This dissertation focuses on whether having a physician looking like them affects the perception of the healthcare African American women receive. The HBM model could be considered a building block for BMVP. HBM is derived from behavioral and psychological theories, both of which are health-related and provide the foundation for individuals to avoid illness or get well and the belief that their health actions will prevent or cure illness.

**Rationale for using the BMVP in the Study**

The BMVP theory's theoretical foundation provides a model to understand the relationships between medical mistrust, perceived racial discrimination, healthcare-specific racial discrimination, and the intentions behind African American women's physician choice. Mistrust is the predisposing factor, the enabling factors are perceived racial discrimination and healthcare-specific racial discrimination and seeking a physician for medical care is a need factor. The outcome variable is African American women's intentions to seek medical care. Rickles et al. (2010) and Varga and Surratt (2013) have documented the negative relationship between perceived racial discrimination and care satisfaction. Literature has several studies indicating that perceived discrimination and experiences of discrimination inside and outside of healthcare could compromise Africa Americans' intention to seek medical assistance (Gibbons & Yamg, 2014; Greer, 2010; Mouton et al., 2010; Burgess et al., 2008). This dissertation will provide a systematic study of how choice of physician affects medical

mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination effects on African American women perceptions of their healthcare. Using the BMVP will fill in a gap in the literature by providing perspectives from a specific group of African American women about the physician relationship effects on their healthcare.

**Theoretical Applications or Conceptual Framework**

The BMVP theory has been used in several studies that help to understand and explain both physical and mental healthcare in vulnerable populations (Austin et al., 2008; Babitsch et, al., 2012; Bazargan et al., 2005; Hall, 2017; Ortega & Alegria, 2002). Homeless population research has used the BMVP to provide an in-depth focus on that population's healthcare (Austin et al., 2008; Gelberg et al., 2004; Linton & Shafer, 2014). However, despite the possible versatility of BMVP, few studies have used it as a theoretical structure to examine African American women's attentions to seek healthcare vis-a-vis the physician's race.

Jacobs et al. (2014) aimed to understand the role discrimination plays in receiving cervical and breast cancer screening among multiethnic women. Many studies have found perceived racial and ethnic discrimination associated with service utilization decreases, particularly with breast (Born et al., 2009), colorectal (Benjamins, 2012), prostate, and cervical cancer screenings (Gonzales et al., 2013). Discrimination was measured generally as everyday discrimination. The effects of everyday discrimination were shown to have a negative impact on health (Jacobs et al., 2014; Barnes et al., 2008). The authors used a sample of 3,258 women, half Caucasian and the other half from four racial and

ethnic groups: Chinese, Japanese, Hispanic and African American women (Jacobs et al., 2014). The study found that perceived racial discrimination was higher among Hispanic, African American, and Asian women, compared to Caucasians. The utilization of predisposing, enabling, and need factors allowed the study to add to a growing body of literature, further defining the relationship between health, healthcare, and discrimination.

Patient-clinician communication (PCC) may help reduce disparities in healthcare (Perez-Stable & El-Toukhy, 2018). The authors used the BMVP to show evidence of disparities, using a selected narrative review of ethnic and racial minorities and their experiences of PCC between clinician and patient factors and inferior health outcomes (Perez-Stable & El-Toukhy, 2018). Perez-Stable and El-Toukhy (2018) found that effective communication between patients and clinicians is an essential element for the improvement of healthcare, for vulnerable populations. Clinician performance, patient strategy, and the certification processes were noted as the root causes of poor PCC and need to be addressed to improve PCC and reduce biases and health equity (Perez-Stable & El-Toukhy, 2018). Perez-Stable and El-Toukhy (2018) contributed to the literature by using a framework to establish the effects of PCC on racial and ethnic minority health.

Linton and Shafer (2014) applied the BMVP to data collected from a population of 260 unsheltered homeless individuals who were chronically ill. The study addressed gaps in health status, health utilization, and healthcare access among a unique population. The authors wanted to answer the following questions: what are the enabling, predisposing, and need factors associated with the use of mental health, substance abuse, and physical health services? The study found that substance abuse, mental health, and

hospital treatment services are enabling factors associated with health insurance use when controlling for other variables. In the study, health insurance had a common association with health service utilization (HSU) and related variables uniquely associated with HSU. The study did have limitations of generalizability, reliability, and potential fidelity issues. Linton and Shafer (2014) contributed to the literature by using nontraditional ways to address the gap in the health of homeless individuals.

Varga and Surratt (2013) used the BMVP to examine self-reported data among a sample of 546 Black female, street-based sex workers' utilization of health services in Miami, Florida. The authors used logistic regression analysis to determine which variables predict regular sources of care. The findings showed that enabling variable models predicted the utilization of healthcare efficiency, which in turn predicted the utilization of services. The research showed that reliable and consistent sources of healthcare could increase healthcare consumption, thereby decreasing disparities in health among marginalized and vulnerable populations, as well as contributing to public health efforts encouraging preventive health (Varga & Surratt, 2013). Varga and Surratt (2013) contributed to the literature by using the BMVP to predict female, Black street-based sex workers' utilization of healthcare.

The above studies illustrate how the BMVP can be used as a foundation to explore and understand healthcare among minorities. The literature provides research using the BMVP to describe the factors that influence African Americans' healthcare service usage in numerous areas and the comprehensive effects of discrimination. This dissertation will use the BMVP to examine the relationship between enabling and

predisposing factors relating to the intentions of African American women in Selma, Alabama to seek a physician and whether they feel the race of the physician will affect their healthcare outcomes.

**Literature Review on Medical Mistrust and Perceived Racial Discrimination**

A systematic review is a collation of all relevant evidence that fits the pre-specified eligibility criteria of the dissertation into answering a specific research question (Moher et al., 2015). The dissertation will use an explicit, systematic method that will minimize bias in the identification synthesis, selection, and summary of the studies. A significant and essential characteristic of the systematic review in a dissertation is clearly stated objectives with explicit, reproducible mythology, identification of all studies that meet the eligibility criteria for the study, assessment of the validity of findings, and presentation of the study's characteristics (Moher et al., 2015). The literature review will examine factors that can impact the intentions of African American women to seek medical help and whether having a physician who looks like them plays a role in their intentions. The specific focus will be on African American women, and their feelings of medical mistrust, perceived racial discrimination and perceived healthcare-specific racial discrimination and how these factors together influence intentions to seek healthcare. Further review of the literature found relevant historical and present-day research providing further evidence and knowledge concerning the dissertation topic.

**History of Discrimination and Racism among African Americans**

Historically, African Americans have suffered from and dealt with racism and discrimination since the time of slavery. The combined effect of the two is a reduction in

the power, resources, and intrinsic worth of African Americans. Medical mistrust had its origins in Virginia in 1619, when the first slave disembarked from a slave ship (Morgan, 2003). Slaves were both invisible and powerless (Washington, 2006). Healthcare for slaves was nonexistent and what care was available was limited and mandated by insurance companies (slaves were property) (Baker et al., 2009; Washington, 2006). During the antebellum period, slaves were used as "guinea pigs" to advance the medical health of Whites (Gamble, 1997; Jennings, 1990; Roberts-Kennedy et al., 2007). Physicians prescribed whipping as medication for sick slaves, and because of this, slaves avoided treatment from White physicians, no matter how ill they were (Byrd & Clayton, 2000; Suite et al., 2007). Patient-physician relationships were broken from the time African Americans were brought to the U.S. against their will; this set the groundwork for medical mistrust and poor patient-physician relationships (Benkert et al., 2006; Byrd & Clayton, 2002). Even after emancipation, African Americans, supposedly no longer property, continued to face issues of exploitation and inadequate healthcare access. Healthcare received was inferior, causing poorer health outcomes. The Civil Rights Act of 1965 forbids discrimination in government-funded facilities (Washington et al., 2009). The Act did not stop exploitation studies such as the Tuskegee Syphilis Study, and Eugenics (involuntary sterilization and birth control), nor did it stop healthcare discrimination against ethnic and racial minorities. Patient-physician relationships were broken during slavery and continue to be fragmented even today. These broken relationships cause inequalities in healthcare access, treatment, and outcomes (Ford & Airhihenbowa, 2010).

**Current Status of Discrimination and Racism among African Americans**

Cuevas et al. (2016) used nine focus groups to examine and explore participants' perspectives concerning quality patient-provider relationships and how the race of the provider affects such relationships from the perspective of the study participants. Participants had either hypertension or diabetes both, necessitating regular interactions with clinicians. African American participates felt that perceived racial discrimination, medical mistrust, and poor communication were present in most race-discordant patient-provider relationships (Cuevas et al., 2016). The study had the limitation of the data collection having been done approximately ten years ago. The study continues to be applicable today because evidence shows that issues of racial discrimination and medical mistrust in healthcare have not changed dramatically over the past decade. The authors concluded that reducing patient-provider situations that pose barriers of perceived racial discrimination, medical mistrust, and poor communication can improve the interactions of patients and providers, and this, in turn, may reduce the pervasive problem of ethnic and racial disparities in healthcare.

Maina et al. (2018) suggest that bias by providers plays a role in disparities in healthcare for racial and ethnic minorities. The authors did a systematic review and meta-analyses of several databases between May 2015 and September 2016 to synthesize the role of implicit bias currently experienced by ethnic and racial minorities and their impact on healthcare disparities. The literature review found a growing body of research suggesting that most healthcare personnel, across multiple training levels and disciplines, have implicit biases against African Americans, Hispanics, American Indians, and dark-

skinned individuals. Hall et al. (2015) found that healthcare outcomes and treatment decisions had an equivocal effect related to implicit bias, while explicit bias had a more consistent effect on interactions between patients and providers. The study had limitations but showed the need for further examination of the effects of race-discordant relationships between African American women and non-minority physicians.

Hagiwara et al. (2013) aver that "physician racial bias and patient-perceived discrimination have each been found to influence perceptions of and feelings about racially discordant medical interactions" (p.123). The authors examined African American patients' perceptions of past discrimination effects on patient-physician communication time ratios. The study consisted of 112 low-income African American patients and 14 non-African-American primary care physicians who completed measures of explicit and implicit racial bias along with demographic characteristic measurements (Hagiwara et al., 2013). The study found that racially discordant medical interactions are more affected by physicians' implicit racial attitudes rather than their explicit or conscious attitudes toward race (Hagiwara et al., 2013). Further, the study replicated the findings of Cooper et al. (2012) that physicians' implicit racial bias affects their own communication time significantly but not the patients' talk time (Hagiwara et al., 2013). Physicians who talk more during racially discordant medical encounters and interactions have more implicit negative racial attitudes, compared to physicians who have less implicit racial attitudes (Hagiwara et al., 2013). The findings call for further study of racially discordant physician and patient relations, using both qualitative and quantitative methodology.

Benjamins and Whitman (2014) conducted a multivariate logistic regression study with a population-based sample of 1699 (African Americans, Whites, Puerto Ricans, and Mexican respondents). The study concluded that overall, 23% of the sample reported discrimination in healthcare (Benjamins & Whitman, 2013). Levels of perceived racial discrimination varied significantly along racial and ethnic lines. In the study, the discrimination rate experienced by African Americans was 31% while the rate for Whites was 4%. Participants explained that discriminatory treatment and provider relationships were associated with more unmet healthcare needs and perceived poor healthcare quality. The study findings, though in line with other studies, still provide additional information and literature expansion.

Abramson et al. (2015) used empirical analysis to understand the relationship between perceptions of discrimination and the social characteristics of healthcare encounters. The study consisted of 43,020 adults, aged 18 to 85 (Abramson et al., 2015). Logistic regression and descriptive statistics models weighed which factors were associated with perceived discrimination, charting the variations between ethnicity and race. The study examined patterns of persistence and substantial racial discrimination in healthcare, which cause poor health outcomes. Abramson et al. (2015) explicated that if understanding the sources of racial disparities in healthcare is the goal, a multilevel approach is required, which provides for a micro-and macro-level factor approach showing the factors that shape individual experiences in healthcare and defines behaviors and outcomes. The study sample was limited to the state of California, restricting generalizability. Though the study was a cross-sectional and limited direct longitudinal

examination of perceptions of healthcare discrimination over time, it found that racial group membership influences strongly perceived discrimination and negative feelings, and interactions are powerful perceptions of perceived racial discrimination.

The literature review summarizes the critical findings during the review and provides a conclusion that justifies the dissertation's proposals. The conclusion of the review lists the strengths of the main argument and reiterates the arguments and the supporting evidence, therefore. The conclusion provides a clear statement of the background context and research problem related to the investigation and the gap or gaps found in the literature.

**Trust in Provider**

Hall et al. (2001) defined trust in the physician as the belief that the physician will care for the needs and interests of the patients under their care. Trust is an essential component of clinical relationships and provides for a more significant chance of desirable health outcomes and behaviors. Trust in physicians among African Americans and other racial and ethnic minorities is often lower, compared to Whites (Hausmann et al., 2013). The study raises concerns, given the positive correlations between physician trust and positive health outcomes. Identifying whether race-concordant patient-physician relationships can improve physician trust is essential to advancing African American women's healthcare.

Trust is a building block of a relationship and is a vital aspect of the patient-provider relationship. Patients seek medical and healthcare for numerous reasons, placing their very lives in the hands of other healthcare personnel and their physicians. Patients

and clinicians need to cultivate a mutual level of trust and sustainability, maturing and re-appraisable over time (Waltzman, 2014). For ethnic and racial minorities, these relationships are especially tenuous. Cuevas and O'Brien (2017) found that perceived discrimination is felt by African Americans, especially women when non-minority physicians discredit their problems or symptoms. The study found that African American women experienced medial mistrust when non-minority clinicians did not show respect, making them find the clinician's treatment discriminatory (Cuevas & O'Brien, 2017). Trust should be inherent in patient-provider relationships, but for ethnic and racial minorities, it is not. The legacy of mistreatment ethnic and racial minorities have faced in the past and continue to face from physicians and other medical professionals causes significant and lasting skepticism and mistrust of the medical system (Scharff et al., 2010; Cuevas & O'Brien, 2017).

Medical mistrust is a potential social determinant of health, particularly for ethnic or racial minorities, causing health disparities (Healthy People 2020, 2017). A correlation exists between medical mistrust and health disparities, leading to poor health outcomes (Gaston, 2013). African Americans' lack of trust is associated with lower patient satisfaction and medication adherence (Schoenthaler et al., 2014). Therefore, the historic mistreatment of African Americans, especially women, in healthcare settings makes it essential to determine and examine how medical mistrust affects the choice of physician. Scales such as The Trust physician Scale (TTPS) and Group-Based Medical Mistrust Scale (GBMMS) have been developed to assess trust in the medical profession and medical providers, especially physicians. Evidence shows that medical mistrust is a

barrier to health and is associated with outcomes that are worse across many healthcare continuum areas (Williamson & Bigman, 2018).

Thompson et al. (2004) developed a scale that provides a more significant depth of the empirical literature systematically on medical mistrust, the Group-Based Medical Mistrust Scale (GBMMS). The scale is a 12-item measure that comprehensively assesses provider and medical system mistrust (Thompson et al., 2004). Multiple samples have validated the GBMMS and have the following factors: lack of support from healthcare providers, suspicion, and group disparities in healthcare (Thompson et al., 2004; Shelton et al., 2010; Williamson & Bigman, 2018).

**Perceived Racial Discrimination**

The U. S. racial climate has not improved much over time and discrimination continues to prevail regularly right from the times of slavery. In 1999, Clark et al. found that discrimination included "beliefs attitudes, institutional arrangements, and acts that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic groups affination" (p.805). Perceived racial discrimination affects and impacts nearly every domain of African American lives, especially those of women. A literature review found that racial discrimination affects career advancement, job hiring, and performance evaluations (Dovidio et al., 2002; Benjamins & Whitman, 2014). Also, racial discrimination occurs daily in all activities of African American lives, including shopping, public transportation, restaurants, housing, the criminal justice system, and education (Pager & Shepherd, 2008; Williams & Mohammed, 2009; Bouchard et al., 2015).

Perceived healthcare-specific racial discrimination experiences have been measured using the Everyday Discrimination measure developed by Bird and Bogart, (2001), Williams et al. (1997), and Schedule of Racist Events (SRE) by Lanndrue and Klonoff (1966). The Everyday Discrimination (ED) scale measures unfair treatment in the healthcare system specifically. The ED scale has been used in African American samples, demonstrating coefficient alphas of .85-.94, and the internal consistency is good (Bird et al., 2004; Hausmann et al., 2008; Hausmann et al., 2010; Shelton et al., 2010; Purnell et al., 2010; Peek et al., 2011). Dehkordy et al. (2016) used the ED scale to examine the negative effects of perceived discrimination on a routine basis on health status and healthcare utilization, especially among women of reproductive age. The study used the ED scale as the primary independent variable. The authors claimed that the ED scale is the most widely used measure for perceived discrimination in studies related to well-being and health. Landrine and Khonoff (1996) wanted to assess the frequency of perceived racism in a large variety of areas and developed the Schedule of Racist Events (SRE) was developed. As the SRE scale's focus is on the stress theory, the scale measures stressors that are culturally specific (racist events) rather than life stressors that are generic. The SRE internal consistency has a high Cronbach's alpha of .92-.95, demonstrating the scale's reliability (Watkins et al., 2012; Klonoff & Landrine, 1999; Landrine & Klonoff, 1996). The current dissertation uses the SRE and ED scales.

There remain controversies around the levels of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination psyches among younger and older African American women. One goal of this dissertation is to determine

the perceptions of race-concordance between African American women aged between 30 and 55, race-concordance between client and physician, and whether having a physician who looks like them makes a difference in their healthcare perceptions and expected healthcare outcomes. Studies exploring medical mistrust, perceived racial discrimination, and healthcare-specific racial discrimination have used one-two item measurement instruments as constructs (Kaiser et al., 2010; Burgess et al., 2008; Williamson & Bigman, 2018). Instruments that use one-item can be susceptible to methodological issues such as construct validity, compromising measuring constructs, and range restrictions. The dissertation uses multiple-item measurement with psychometric properties to measure medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination, GBMMS (Thompson et al., 2004), SRE (Landrine & Klonoff, 1996), and ED scale (Bird & Bogart, 2001; Williams et al., 1997) all measures have proven reliability and demonstrate respective constructs.

African Americans' perceptions of discrimination affect their perceptions of healthcare experiences, causing higher levels of medical mistrust that can affect patient-provider relationships (Cuevas & O'Brien, 2016). Therefore, investigations into what experiences shape and manifest patient-provider interactions are essential in the promotion of African American women's healthcare perspectives. Schoenthaler et al. (2014), Bleich et al., (2012), and Penner et al. (2013) indicate that a match or concordance of provider and patient on racial characteristics matters to patient care. Abramson et al. (2015) found that African American women are more likely to perceive discrimination in healthcare and were less likely to obtain preventive healthcare

screening. These perceptions have an association with lower patient adherence and high-quality treatment (Forsyth et al., 2014; Cuffee et al., 2013).

Mistrust can be either learned from other members of one's reference group or gathered from personal experience. One possible consequence of past discrimination is medical mistrust; learned mistrust could be part of a schematic framework, in which African American women see themselves and their responses to medical interactions (Cuevas et al., 2016). Mistrust can be linked to low patient satisfaction and lower adherence to medical treatment protocols and recommendations (Moore et al., 2013; Martin et al., 2013). Cuevas et al. (2016) cite recent study findings to show that African American patients in race-discordant relationships rate their visits significantly less participatory than patients in race-concordant relationships. Race-concordant relationship interactions were found to have more collaborative interactions and adherence.

The literature defines the barriers of perceived discrimination and medical mistrust. Ample evidence shows how each of these barriers affects the quality of patient-physician relationships and care (Cuevas et al., 2016). There is a paucity of research about how specific barriers are experienced by African Americans (Cuevas et al., 2016) with very few studies exploring the effects of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination on African American women's physician and healthcare choices. This dissertation will seek to explore how race discordance influences African American women's physician choice.

**Summary and Transition**

Social ills that result from structural inequalities impact vulnerable populations, causing homelessness, higher rates of poverty, and violence (Lewis & Van Dyke, 2018; Unnever, 2014; Lazrus et al., 2011; O'Daniel, 2011). These structural factor interactions are often embedded in sexist and racist ideologies and can affect the healthcare utilization patterns of marginalized populations (Varga & Surratt, 2013). African American women in the low-income group have shown vulnerability to adverse health outcomes. The Institute of Medicine (IMO), as far back as 2002, found that African American women are doubly marginalized; due to their race and gender inequalities, they experience lower life expectancies, higher rates of disease (obesity, cancer, heart disease, stroke, and diabetes) and higher age-adjusted death rates than women of other ethnicities. Chapter 3 explains in detail the research methodology adopted to collect and analyze the research data.

# Chapter 3: Research Method

## Introduction

The purpose of this quantitative research is to evaluate the effects of non-minority physician influence on perceptions of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination among African American women in Selma, Alabama. To do this, the study evaluates non-concordant and concordant patient-physician relationships. Research can assist in determining patient needs and requirements to make a transformation in physician relationships and encourage formation (Tapp et al., 2013). Also, it evaluates the influence patient-physician relationships could have on African women's decision to access healthcare. Positive patient-minority physician relationships may be key to improving the health of African American women, as demonstrated by reductions in medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination.

The research provides additional evidence to fill a gap in the literature regarding the correlation between minority physicians and better health outcomes for African American women. The intention of this study is to shed light on the perceptions of discrimination and racial bias experienced in race discordant patient-physician relationships. The research may facilitate new conversations about the significance of the patient-physician relationship and how negative relationships affect ethnic and minority patients.

Chapter 3 includes descriptions of the setting, research design, rationale, and the researcher's role. It also provides in-depth data concerning the methodology.

Methodology encompasses participant selection, instrumentation (quantitative components), data collection procedures, data analysis plan (quantitative components), threats to validity, trustworthiness issues, and ethical procedures (IRB considerations).

The setting comprises the social, cultural, and physical sites. The setting chosen is relevant to the research study because the study will examine race-concordant and race-discordant relationships between African American women, noting specifically whether they feel that a physician who looks like them will provide them with greater care and improve their healthcare status overall. The physical site will be Selma, Alabama in the participants' home or workplace or wherever they chose to answer the research questionnaires. The ambiance for the research study is a small town with a population between 17,000 and 18,000 (Alabama Demographics, 2019; 2018). The population is 80% African American, 17% white, and 1.2% Hispanic (Alabama Demographics, 2019; 2018). The median household income in 2017 was $24,223, with the median age being 37.1 (Alabama Demographics, 2019; 2018).

**Research Design and Approach**

The study has a quantitative focus due to the numerous advantages of this method. Quantitative data enables the researcher to assess the validity, show relationships, and make predictions (Creswell & Plano Clark, 2011; Fetters et al., 2013; Shi, 2008). The research will use descriptive to make general inferences regarding the population sample's attitudes, behaviors, characteristics, and descriptions, and interpret the current status of individuals, settings, conditions, or events (Allen, 2017). Surveys using questionnaires (mail or direct administration) will be the procedure for data collection.

Some of this method's advantages are being economical, design, flexibility, and attribute identification (Creswell, 2014; Fowler, 2009). The study used a quantitative methodology for the evaluation of the effects of non-minority and minority physicians' experiences with African American women in Selma, Alabama. Watson (2015) explained that quantitative methodology enables data analysis for the inference of conclusions. While there is difficulty in measuring individual thought patterns, quantitative research can determine the relationship or trends within the data (Watson, 2015). Having a quantitative focus will allow the author to show relationships and make predictions between variables (Fetters et al., 2013; Shi, 2008).

The study uses cross-sectional design to measure outcomes and exposure, collect and analyze data of the study participants, and examine the characteristics or possible differences among the population at a specific point in time. Cross-sectional design can be used in both social sciences and survey research (Frankfort-Nachmias et al., 2015; Shi, 2008). There are limitations to cross-sectional surveys such as limitations to precision information measurement, faulty respondent memory, and inability to depict causal relationship direction, thereby eliminating alternative interpretations (Shi, 2008). Therefore, a cross-sectional design will be chosen to assist in understanding the impact of non-minority physicians on African American women.

Transformative design may provide a balance with a design that uses a pervasive influence as the theoretical lens throughout the research process (Mertens, 2003). Transformative designs in research seek to change and advance social justice by

identifying power imbalances and empowering individuals (Greene, 2008; Mertens, 2003, 2009). The transformative design works well with BMVP theory.

## Methodology

### Target Population

The population under study is African American women. The participants for the study are African American women recruited from Selma, Alabama, aged 30-55. A requirement for participation in the study the participant needs to have had an experience with a non-minority physician while seeking medical care within the past five years. African American women agreeing to participate in the study will be asked the following questions to determine whether an individual can be in the sample: what is your age, and have you been to a non-minority physician for health reasons in the past five years?

### Sampling and Power Calculations

The sampling strategy for the quantitative participant selection will be stratified random (probability sampling). Hamed (2016) explains that a probability sample is when everyone in the population has an equal chance of being included in the sample. A stratified sample is where the population is divided into subgroups (strata), and randomized samples are taken from each subgroup (Hamed, 2016). The subgroup will be considered homogenous (African American women). Purposive refers to where the researcher has knowledge or experience of the sample group (Hamed, 2016). The number of participants will be determined by the formula from Bartlett et al. (2001): n=p (100-p) z2/E2, where E is the margin of error, *z* =the level of confidence, and *p* is the estimation of heterogeneity or variance. Based on a sample size with a 95% confidence level and a

margin of error of 3, the total number of participants should be 964 (Gill et al., 2010, Appendix F).

**Instrumentation and Operationalization of Constructs**

Scales such as The Trust Physician Scale (TTPS) (see Appendix D) and the Group-Based Medical Mistrust Scale (GBMMS) (see Appendix C) have been developed to assess trust in the medical profession and medical providers, especially physicians. Evidence shows that medical mistrust is a barrier to health and is associated with unfavorable outcomes across many healthcare continuum areas (Williamson & Bigman, 2018). Thompson et al. (2004) developed a scale that provides a more significant depth of the empirical literature systematically on medical mistrust titled the Group-Based Medical Mistrust Scale (GBMMS). The scale is a 12-item measure that comprehensively assesses provider and medical system mistrust (Thompson et al., 2004). Multiple samples have validated the GBMMS and listed the following factors: lack of support from healthcare providers, suspicion, and group disparities in healthcare (Shelton et al., 2010; Thompson et al., 2004; Williamson & Bigman, 2018).

Perceived healthcare-specific racial discrimination experiences have been measured using the Everyday Discrimination (ED) measure developed by Bird and Bogart (2001) and Williams et al. (1997), as well as the Schedule of Racist Events (SRE) (see Appendix E) by Lanndrine and Klonoff (1966). The study used the ED scale as the primary independent variable. The Everyday Discrimination (ED) (see Appendix F) scale measures unfair treatment in the healthcare system specifically. The authors consider the ED scale the most widely used measure for perceived discrimination in studies related to

well-being and health. The ED scale has been used in African American samples demonstrating coefficient alphas of .85-.94, and the internal consistency is good (Bird et al., 2004; Hausmann et al., 2008; Hausmann et al., 2010; Peek et al., 2011; Purnell et al., 2010; Shelton et al., 2010). In a study done by Hausmann et al. in 2010, the HCSD was found to have a significant positive correlation with both multiple-item measures ($rQ=.55$, $p<.0001$). The scale is also used to measure experiences of perceived discrimination (Landrine & Klonoff, 1996; Williams et al., 1997). The Healthcare-Specific Racial Discrimination Measure (HCSD), an adapted version from Williams et al. in 1997, was developed by Bird and Bogant in 2001; it measures perceived racial discrimination, unfair treatment, and access in healthcare systems (see Appendix G). The ED and HCSD provide a foundation and direction for the development of focus group research questions.

Landrine and Khonoff (1996) wanted to assess the frequency of perceived racism in a large variety of areas, so the Schedule of Racist Events (SRE) was developed (see Appendix E). The SRE scale focus is on stress theory; therefore, the scale measures culturally specific stressors (racist events), rather than generic life stressors. The SRE internal consistency has a high Cronbach's alpha of .92-.95, demonstrating the scale's reliability (Klonoff & Landrine, 1999; Landrine & Klonoff, 1996; Watkins et al., 2012). The dissertation will use the SRE and ED Scale.

**Recruitment and Data Collection**

African American women aged 30-55 will be recruited via regular mail for participation in the research study. Based on a chart by Gill et al. (2010), the sample size

should be 964 (Appendix F). The anticipation is that at least 2500 individuals will be mailed research packets. Participants can express interest by returning completed research packets to the researcher. Research packets contain the Informed Consent and Confidentiality statement (see Appendix A), Demographic questionnaire (see Appendix B) constructs for medical mistrust (GBMMS see Appendix C), perceived racial discrimination (TPS see Appendix D), and healthcare-specific racial discrimination (SRE see Appendix G), schedule of racist events-lifetime (SRE-L see Appendix E), and everyday discrimination scale (EDS see Appendix F). Participants have to answer the surveys in the packet received in the mail with a return mailing enclosed once IRB approval is received. The estimated time to complete all surveys is approximately 120 minutes. Unfortunately, participants cannot receive study data analysis at the end of research completion due to IRB confidentiality requirements.

**Data Analysis Plan**

SPSS version 28 was used for quantitative analysis. Data cleaning is defined by Polit (2010) as preparing data for analysis statistically by performing checks ensuring data accuracy and internal consistency. Cleaning includes cross-tabulations and searching for data outliers. Data cleaning is also defined by Polit (2010), as checking data for accuracy and internal consistency by performing checks during data preparation for statistical analysis. Consistency checks involve crosstabulations and looking for consistent patterns of data (Polit, 2010). Likewise, searching for outliers was defined by Polit (2010) as values outside normal ranges for values seen in other cases. Outliners are found through frequency distribution inspection. Sometimes, outliers can be legitimately

based on the data collected. Data can be entered in error, causing wild codes. Once data cleaning is complete, then a set of new frequency distributions will be done to ensure that all problems have been corrected.

**Research Questions and Hypotheses**

The study seeks to explore the effect of race-concordant patient-physician relationships on African American women's perceptions of the quality of care they receive.

Research Question 1. Is there an association between the Trust the physician scale and medical mistrust scale (quantitative)?

Ho1: There is an association between the Trust the physician scale and medical mistrust scale.

$H_A1$: There is no association between the Trust the physician scale and medical mistrust scale.

Data Analysis Plan. This examines the correlations between the Group Based Medial Mistrust Scale (GBMMS) and The Trust the Physician Scale (TPS) using Pearson's. Pearson's correlation determines the direction and magnitude of the association using correlation coefficients between two variables measured on an interval scale. The variability of one variable can be explained or accounted for by the second variable. Pearson's correlation will assess the variability of the variables of perceived racial discrimination and perceived healthcare-specific racial discrimination. The interpretation of Pearson's ρ will depend on the absolute value of the correlation

coefficient; the higher the absolute value correlation, the stronger the association (Polit, 2010). The null hypothesis will be rejected if $p < .05$.

Research Question 2. Is there an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women (quantitative)?

Ho2: There is no association between perceived racial discrimination and perceived healthcare- specific racial discrimination among African American women.

$H_A2$: There is an association between perceived racial discrimination and perceived healthcare- specific racial discrimination among African American women.

Data Analysis Plan. Used Pearson's correlation to examine the correlations between the scores on the Healthcare-Specific Discrimination Measure (HCSD), Schedule of Racist Events-Lifetime (SRE-L), and the Everyday Discrimination Scale. Pearson's correlation determines the direction and magnitude of the association using correlation coefficients between two variables that are measured on an interval scale. The variability of one variable can be explained or accounted for by the second variable. Pearson's correlation will assess the variability of the variable perceived racial discrimination and perceived healthcare-specific racial discrimination. The interpretation of Pearson's $\rho$ will depend on the absolute value of the correlation coefficient; the higher the absolute value correlation, the stronger the association (Polit, 2010). The null hypothesis will be rejected if $p < .05$.

## Ethical Procedures

All data-sharing rules and federal and state laws that apply to the study will be known before the research begins. Participants' rights to privacy and confidentiality will be the central tenet of the study. The consent process will be done ethically, and participants will have full knowledge of the relevant risks and benefits of participating in the study. Participants will be informed about sharing of data and how or whether data will be shared anonymously. Participants' records will be stored in a secure area with limited access. Identifying information will be left off records if possible, and records will be kept confidential. The American Psychological Association (APA) (2013) points out that the researcher must be aware of situations that will inadvertently result in a breach of participants' confidentiality.

Doctoral students are required to obtain approval from Walden's Institutional Review Board (IRB) before recruiting participants for the research study or collection of data. IRB's ethical approval will be given only when the researcher demonstrates that the benefits of the study outweigh the burdens and risks placed on the participants, as per Walden's ethical standards and federal regulations (Walden University, n.d.i). The IRB's ethical review occurs after the full committee approves a defended study. Any ethical questions or concerns can be posted to the IRB at any time by emailing IRB@waldenu.edu (Walden University, n.d.i).

## Threats to Validity

The instrument chosen by the researcher should measure what the researcher intends or is interested in; these factors are why research validity is important (Watson,

2014). Types of validity are external, internal, and statistical conclusions. Researchers should make active efforts to incorporate validity strategies into research during all phases.

**External Validity**

External validity threats are factors in the study that reduce its generalizability. External threats include testing interaction, history interaction, setting interaction, selection interaction, and treatment threats; all these can affect the generalizability of conclusions. Assigning participants using random selection can help control external validity threats. Ihantola and Kihn (2011) state that if a random selection is not available, then statistical techniques such as analysis of covariance should be used to account for individual attributes. Other external validity controls include data collection in the blind and variables defined so that meaningfulness extends beyond the present research study.

**Internal Validity**

The focus of internal validity is on a relationship of cause and effect, i.e., one aspect will lead to another aspect. Research is done to determine what causes the effect of the relationship. Michael (2016) explains that a study conclusion of little or no evidence of causality is the result of low internal validity. Regression, maturation, history, testing, selection, and instrumentation affect causality internally. Internal validity threats are controlled by being consistent during observational points. Some strategies to ensure internal validity are avoiding the use of extreme scores of participants, reducing the pre- and post-test time, having a comparison group, reducing follow-up time and awareness of any events that may impact study results (Michael, 2016).

## Statistical Conclusion Validity

Statistical conclusion validity (SCV) is a research conclusion founded on adequate data analysis (Gareia-Perez, 2012). SCV can generally mean that the research question is considered logically proficient when the statistical methods are adequate in small-sample behavior (Gareia-Perez, 2012). SCV is vital because inadequate analysis of data can yield improper conclusions not supported by analysis. There are three common threats to SCV listed by Gareia-Perez (2012)–repeated testing, optional stopping, and rand-using regression in bivariate relation. SCV breaches arise from a poor understanding of statistical procedures and training, and lack of a statistical foundation. SCV enables understanding and the ability to apply the training, even if no explicit formal training was received (Gareia-Perez, 2012). Threats to internal and external validity are addressed by the following no selection bias, validated instruments, and ensuring that the participants were a part of the subgroup selected for the study.

## Summary and Transition

Chapter 3 focused on methods that measure the levels of medical mistrust, perceived racial discrimination, and healthcare-specific racial discrimination in African American women aged 30-55 in Selma, Alabama. The chapter defined and explained which specific research analysis and designs will provide answers for data collection, recruitment, settings, and inquiry. While the chapter provides descriptions of methods, Chapter 5 will provide researched answers to study settings, demographics, data collection, data analysis, results (quantitative), and evidence of trustworthiness.

# Chapter 4: Results

## Introduction

This quantitative research study aimed to identify whether race-concordant patient-physician relationships affect African American women's health outcomes, and the effects of non-minority physicians' influence on perceptions of medical mistrust, perceived racial discrimination and perceived healthcare-specific racial discrimination of African American women in Selma, Alabama. Similarly, the influence of patient-physician relations on African American women's intent to access healthcare was examined. The study evaluated the role of trust in non-concordant and concordant patient-physician relationships. The data was collected through surveys.

The surveys used for the study were demographic, developed by the student. The Group-Based Medical Mistrust Scale (GBMMS) developed by Thompson et al. (2004) indicates a significant dearth of systematic empirical literature on medical mistrust. GBMMS is a 12-item measure that comprehensively assesses the mistrust of the provider and the medical system (Thompson et al., 2004). Multiple samples have validated the GBMMS and indicate the following factors: lack of support from healthcare providers, suspicion, and group disparities in healthcare (Shelton et al., 2010; Thompson et al., 2004; Williamson & Bigman, 2018).

Perceived health-care-specific racial discrimination experiences have been measured using the Everyday Discrimination (ED) measure developed by Bird and Bogart (2001) and Williams et al. (1997), as well as the Schedule of Racist Events (SRE) by Lanndrue and Klonoff (1966). The ED scale precisely measures unfair treatment in the

healthcare system. The scale has been used in African American samples, demonstrating coefficient alphas of .85–.94, and the internal consistency is good (Bird et al., 2004; Hausmann et al., 2008; Hausmann et al., 2010; Purnell et al., 2010; Peek et al., 2011; Shelton et al., 2010). Hausmann et al. (2010), found the Healthcare-Specific Racial Discrimination Measure (HCSD) to have a significant positive correlation with both multiple-item measures ($rQ=.55$, $p<.0001$). The scale is also used to measure the experiences of perceived discrimination (Landrine & Klonoff, 1996; Williams & Mohammed, 1997), along with the HCSD, an adapted version from Williams et al. (1997), developed by Bird and Bogant (2001); this measure perceived racial discrimination, unfair treatment, and access to healthcare systems.

Landrine and Khonoff (1996) assessed the frequency of perceived racism in many areas and developed the Schedule of Racist Events (SRE). The SRE scale focuses on the stress theory and specific racist events, rather than generic life stressors. The SRE internal consistency has a high Cronbach's alpha of .92–.95. Therefore, the scale measures stressors that culturally demonstrate its reliability (Klonoff & Landrine, 1999; Landrine & Klonoff, 1996; Watkins et al., 2012). This dissertation used both SRE and ED scales. SPSS 28 analyzed the data from all 816 participants.

**Research Question 1.** Is there an association between the Trust the physician scale and medical mistrust scale? The related null hypothesis was Ho1: There is no association is there an association between the Trust the physician scale and medical mistrust scale. Hypothesis $H_A1$ was supported (Group Based Medical Mistrust and Trust in Physician scales).

**Research Question 2.** Is there an association between perceived racial discrimination and perceived health-care-specific racial discrimination among African American women? The related null hypothesis was Ho2: There is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women. Hypothesis $H_A2$ was also supported (Healthcare Specific Racial Discrimination, Everyday Discrimination, and Schedule of Racist Events Lifetime scales).

Chapter 4 details data collection (data collection time frame, response rates, demographic and descriptive characteristics, discrepancies, and analyses), results (descriptive statistics, assumptions of evaluation statistics, additional statistics emergence, and inclusion of tables and figures), and summary (summarization of the research questions).

## Data Collection

Data was obtained from 816 African American women aged 30–55 living in Selma, Alabama. The target population was located using the Selma area phone book and cross-referenced with a list of names and addresses from U.S. Representative Teri Swell. The time frame of the study was approximately 26 weeks. Over this period, 1500 survey packets were mailed to African American women in Selma, Alabama. A total of 845 (56%) of them returned the packets. Only 816 (96%) surveys of the 845 met the inclusion criteria.

### *Data Collection and Ethical Issues*

Data collection was done entirely by mail over the 26 weeks due to COVID-19, as no in-person data collection was allowed. To maintain the confidentiality of participants and the researcher, IRB would not allow identifying information such as text and email. Phone calls were allowed to home phone numbers only. The caller ID had to be off. Consent forms informed participants that if they had concerns and questions, they would have to call back if they received no answer. Due to IRB constraints, no return addresses were allowed on mailed packets. Therefore, no study results could be mailed to participants.

### *Characteristics of Study Participants*

The sample represented the African population of Selma, Alabama, as reported in Alabama Demographics (2019). Selma's median household income in 2017 was $24,223, with the median age being 37.1 years (Alabama Demographics, 2019). The sample had an income range of $0–$14,999 (49.8%) to $50,000 or more (12.0%), with a median income of *Mdn = $22,500*. The median age of the sample was *M=44.6*.

## Results

### *Reliability Analysis with Evaluation of Statistical Assumption*

According to the Laerd Statistics website (Laerd, 2022), five assumptions need to be met for Pearson correlations and must underpin data analyses. Assumption 1 is that the dependent variable measurements should be either ratio or interval levels, meaning that they are continuous. Assumption 1 (continuous variables) was met because each of the variables was an interval-level scale score with acceptable levels of reliability.

Assumption 2 (the dependent variable) has a consistency of two related groups, matched pairs, or two categories (Laerd, 2022). Assumption 2 (paired variables) was met by the study's design in that each respondent's individual scale scores were matched to produce the Pearson correlations. Assumption 3 is that outliers in related groups' differences should not be significant. Assumption 3 (linear relationship) was met by the inspection of scatterplots, which indicated strong relationships between each of the variables. Laerd (2022) stated that the distribution differences of the dependent variable between two related groups should be approximately normal. Assumption 4 (no significant outliers) was not met due to dozens of outliers, as shown in the boxplots. In the boxplots, many respondents had significantly higher or lower scores (outliers) than the rest of the sample. Assumption 5 (bivariate normality) was met based on the inspection of the scatterplots. In all, four of the five assumptions were met; however, Spearman correlations were also calculated for statistical verification purposes for hypothesis testing.

***Descriptive Statistics***

Table 1 displays the frequency counts for selected variables. Ages in the sample ranged from 30 to 55 (M = 44.66, SD = 6.61). Most (61.8%) were either employed part-time or full-time. All but 3.1% had a high school diploma, 30.6% had some college qualification, and 13.0% had a bachelor's degree or higher. Income ranged from $0–$14,999 (49.8%) to $50,000 or more (12.0%), with a median income of Mdn = $22,500. Almost all (99.3%) were American citizens. The number of months since receiving care from a White (non-minority) physician ranged from 1 to 3 months (25.0%) to over 12 months (2.7%) with a mean of M = 6.65 (SD = 5.59; see Table 1 below).

**Table 1**

*Frequency Counts for Selected Variables*

| Variable | Category (years) | N | % |
|---|---|---|---|
| **Age Category**[a] | 30 to 34 | 72 | 8.8 |
| | 35 to 39 | 104 | 12.7 |
| | 40 to 44 | 223 | 27.3 |
| | 45 to 49 | 183 | 22.4 |
| | 50 to 55 | 234 | 28.7 |
| **Occupation** | Employed | 282 | 34.6 |
| | Employed part-time | 94 | 11.5 |
| | Employed full-time | 222 | 27.2 |
| | Retired | 6 | 0.7 |
| | Disabled | 35 | 4.3 |
| | Unemployed | 177 | 21.7 |
| **Education** | Less than high school | 25 | 3.1 |
| | High School Graduate | 435 | 53.3 |
| | Some college | 250 | 30.6 |
| | Bachelor's degree or Higher | 106 | 13.0 |
| **Income Category** | $0–$14,999 | 406 | 49.8 |
| | $15–$2,9999 | 209 | 25.6 |
| | $30–$49,999 | 103 | 12.6 |
| | $50,000 or more | 98 | 12.0 |
| **Country** | **USA** | 810 | 99.3 |
| | Other | 6 | 0.7 |
| **Months Since Care from White Physicians** | 1 to 3 | 204 | 25.0 |
| | 4 to 6 | 250 | 30.6 |
| | 7 to 9 | 227 | 27.8 |
| | 10 to 12 | 113 | 13.8 |
| | Over 12 | 22 | 2.7 |

*Note. N = 816. a Age: M = 44.66, SD = 6.61. b Months: M = 6.65, SD = 5.59.*

Table 2 displays the psychometric characteristics of the six summed scale scores and the Spearman Intercorrelations Among the Scale Score. All Cronbach alpha reliability coefficients were more than $\alpha > .90$, suggesting that all scales had acceptable levels of internal reliability. Bhandan (2022) explained that internal validity makes the researcher confident that other factors cannot describe the relationship between cause and effect in the research study.

**Table 2**

*Psychometric Characteristics for the Summated Scale Scores*

| Variable | Items | M | SD | Low | High | α |
|---|---|---|---|---|---|---|
| Medical Mistrust Scale | 12 | 3.56 | 0.73 | 1.00 | 5.00 | .94 |
| Trust the Physician Scale | 11 | 1.92 | 0.88 | 1.00 | 5.00 | .99 |
| Schedule Racist Events - Past Year | 17 | 2.65 | 0.58 | 1.65 | 5.35 | .96 |
| Schedule Racist Events - Entire Life | 17 | 2.83 | 0.71 | 1.65 | 5.35 | .97 |
| Everyday Discrimination Scale | 9 | 3.89 | 0.49 | 2.22 | 4.89 | .94 |
| Healthcare Specific Discrimination | 7 | 3.68 | 0.77 | 1.43 | 5.00 | .98 |

*Note. N = 816.*

**Table 3**

*Pearson Intercorrelations Among the Scale Scores*

| | Scale Scores | | | | | |
|---|---|---|---|---|---|---|
| Pearson Correlations | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Medical Mistrust Scale | 1.00 | | | | | |
| 2. Trust in Physician Scale | -.64 | 1.00 | | | | |
| 3. Schedule Racist Events - Past Year | .40 | -.62 | 1.00 | | | |
| 4. Schedule Racist Events - Entire Life | .38 | -.61 | .95 | 1.00 | | |
| 5. Everyday Discrimination Scale | .32 | -.45 | .67 | .67 | 1.00 | |
| 6. Healthcare-specific Discrimination | .26 | -.38 | .69 | .69 | 1.00 | |

*Among the Scale Spearman Intercorrelations Scores*

| | Scale Scores | | | | | |
|---|---|---|---|---|---|---|
| Spearman Correlations | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Medical Mistrust Scale | 1.00 | | | | | |
| 2. Trust in Physician Scale | -.55 | 1.00 | | | | |
| 3. Schedule Racist Events - Past Year | .42 | -.65 | 1.00 | | | |
| 4. Schedule Racist Events - Entire Life | .38 | -.59 | .85 | 1.00 | | |
| 5. Everyday Discrimination Scale | .31 | -.43 | .75 | .69 | 1.00 | |
| 6. Healthcare-specific Discrimination | .27 | -.40 | .72 | .68 | .92 | 1.00 |

*Note.* N = 816. All correlations were significant at $p < .001$.

*1*=Group Based Medical Mistrust; *2*=Trust in Physician Scale; *3*=Schedule of Racist Events Entire Year; *4*=Schedule of Racist Events Lifetime; *5*=Everyday Discrimination; and *6*=Healthcare Specific Discrimination

### *Statistical Analysis and Findings*

**Research Question 1.** Research Question 1 was, is there an association between the Trust the physician scale and medical mistrust scale? The related null hypothesis was Ho1: There is no association between is there an association between the Trust the physician scale and medical mistrust scale. HA1: There is an association between the

Trust the physician scale and medical mistrust scale. Table 3 displays the relevant Pearson and Spearman correlations to answer this question reveals significant negative correlations for the medical distrust scale with the Trust in Physician scale using both the Pearson correlations ($r = -.64$, $p < .001$) and the Spearman correlation ($rho = -.55$, $p < .001$). This combination of findings provided support to reject Null Hypothesis 1.

**Research Question 2.** Research Question 2 was, is there an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women? The related null hypothesis is there is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women Ho1. Table 3 displays the relevant Pearson and Spearman correlations to answer this question and reveals significant positive correlations for the Healthcare-specific Racial Discrimination with the Schedule of Racist Events-Entire Life, ($r = .69$, $p < .001$) and ($rho = .68$, $p < .001$). Additionally, significantly and positive correlations exist between for the Healthcare-specific Racial Discrimination and the Everyday Discrimination Scale, ($r = .76$, $p < .001$) and ($rho = .92$, $p < .001$). Null Hypothesis 2 was rejected.

**Summary**

The study uses survey responses from 816 African American women in Selma, Alabama, to evaluate the role of trust in non-concordant and concordant patient-physician relationships, as also the effects of non-minority physician's influence on perceptions of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination. Positive minority physicians' relationships may be a key to improving

African American women's health, demonstrated by reductions in medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination experienced by them, as evidenced by statements made by African American women who participated in the study (Tapp et al., 2013). The study evaluated the role of trust in non-concordant and concordant patient-physician relationships. Using research will assist in determining patient needs and requirements to transform physician relationships and encourage development (Tapp et al., 2013).

This study explored the impact of the behavioral model for vulnerable populations (BMVP). The BMVP provides a theoretical structure that can examine the variables of medical mistrust, perceived racial discrimination, perceived healthcare-specific racial discrimination, and the adverse effects of non-minority physicians. The BMVP theory has been used in research to clarify and provide understanding concerning physical and mental healthcare among vulnerable populations (Bazarga et al., 2005; Krahn et al., 2006; Austin et al., 2008).

The theoretical structure of BMVP enabled the examination of factors associated with mistrust, healthcare discrimination, stressors, and the effect of these issues on health outcome utilization of African American women (Fernandez & Morales, 2007; Napoles-Springer et al., 2007; Nandi et al., 2008; Varma et al., 2008; Levine et al., 2011). The framework allows the examination of the mechanisms that narrate the intentions of African American women to seek medical help and their perceptions thereof. The model can enhance understanding of the barriers of discrimination in African American women's health by providing insights into how to enhance the health status of African

American women while simultaneously addressing existing and perceived barriers Varma et al., 2008; Levine et al., 2011). The model allowed for examination of factors that cause feelings of discrimination. The research found that discrimination plays a direct role in seeking health care and feeling healthy. In Chapter 5, the implications will be considered and evaluated, utilizing the relevant literature. Findings will be interpreted and represented, along with conclusions and implications that will help develop recommendations.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

Chapter Five compares the findings to the literature, draws conclusions and develops implications to determine the recommendations. This quantitative study aimed to evaluate the effects of non-minority physicians' influence on perceptions of medical mistrust, perceived racial discrimination and perceived healthcare-specific racial discrimination for African American women in Selma, Alabama. Research can assist in determining patient needs and requirements, thereby encouraging the formation of transformational patient-physician relationships (Tapp et al., 2013).

Ethical and racial access disparities and poor healthcare quality remain pervasive, and they persistently contribute to negative health outcomes in communities of color (Bailey et al., 2017). Perceived discrimination may contribute to poor health outcomes and healthcare disparities (Benjamins & Middleton, 2019). Perceptions of quality healthcare are an integral part of healthcare outcomes. Healthcare discrimination can lead to poor healthcare outcomes, as well as unmet and delayed healthcare needs. Accessing and identifying how African Americans associate medical mistrust, perceived racial discrimination and perceived healthcare-specific racial discrimination can provide answers for implementing effective interventions.

The dissertation provided additional evidence that may fill gaps in the literature regarding the correlation between minority physicians and better health outcomes for African American women. The dissertation further sheds light on the perceptions of discrimination and racial biases experienced in race-discordant patient-physician

relationships. Conclusions from the study can facilitate new conversations about the significance of the patient-physician relationship and how negative relationships affect ethnic and minority patients.

**Interpretation of Findings**

All efforts were made to obtain a fair number of participants and minimize errors.

**Research Question 1.** Is there an association between the trust the physician scale and medical mistrust scale

Ho1: There is no association between the Trust the physician scale and medical mistrust scale.

HA1: There is an association between the Trust the physician scale and medical mistrust scale.

Research Question 1 Data Analysis Plan: Examines the correlations between the Group Based Medial Mistrust Scale (GBMMS) and The Trust and Physician Scale (TPS) using Pearson's.

**Research Question 2.** Is there an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women?

Ho2: There is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women.

HA2: There is an association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women.

Research Question 2 Data Analysis Plan: Uses Pearson's to examine the correlations between the scores on the Healthcare-specific racial Discrimination Measure (HCSD), Schedule of Racist Events-Lifetime (SRE-L), and the Everyday Discrimination Scale (ED).

**Research Question 1.** Relevant Pearson and Spearman correlations found significant negative correlations for the medical distrust scale with the Trust in Physician scale using both the Pearson correlations ($r = -.64$, $p < .001$), and the Spearman correlation ($rho = -.55$, $p < .001$). The combination of these findings provided support to reject Null Hypothesis 1. Ho1: There is no association between non-minority physicians and medical mistrust

**Research Question 2.** There was a significant positive correlation between Healthcare-Specific Racial Discrimination and the Schedule of Racist Events-Entire Life, using both the Pearson correlations ($r = .69$, $p < .001$) and the Spearman correlation ($rho = .68$, $p < .001$). Also, positive correlations were significant for the Healthcare-Specific Racial Discrimination with Everyday Discrimination using both the Pearson correlations ($r = .76$, $p < .001$) and the Spearman correlation ($rho = .92$, $p < .001$). The related null hypothesis was Ho2: There is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women. The combination of these findings provided support to reject Null Hypothesis 2. Ho2: There is no association between perceived racial discrimination and perceived healthcare-specific racial discrimination among African American women.

Healthcare disparities remain a persistent, preventable problem for African American women, affecting treatment, management, and disease prevention. A greater understanding of how perceptions influence patient-physician race-concordant relationships can provide clarity and assist in determining the contributions that reduce disparities for racial and ethnic minorities; however, gaps remain in the research regarding the role of minority physicians and whether minority patients feel they will receive better treatment from a physician who looks like them. The dissertation showed that a majority of African American women in the study would rather have a physician who looked like them.

Limited research indicates that a match between the racial characteristics of patients and physicians matters in patient care (Benjamins & Whitman, 2014; Bleich et al., 2012; Cuevas et al., 2016; Schoenthaler et al., 2012). The argument that the physician's race plays a role in the health equity perceived by African American women was found to be true. The dissertation provided a better understanding of how the physician's race impacts African American women's perceptions of quality of care, and the factors that influence their intentions regarding their healthcare needs and choices.

The dissertation results were also consistent with those of Penner (2014) that provides a model for the role of race-related influences in race-discordant patient-provider relationships and how these relationships contribute to negative health-related behaviors. Also, the quantitative study by Cuevas et al. (2016) showed that perceived discrimination, medical mistrust, and perceived healthcare-specific racial discrimination have an adverse effect on the health of African American women. Their study further

revealed how feelings of racism and discrimination could harm health and continue to be a form of societal injustice by personifying inequality and manifesting in health inequities for African Americans (Jacobs et al., 2014; Krieger, 2012; Williams & Mohammed, 2009).

## Analysis

### *Theoretical Framework*

The theoretical framework of the behavioral model for vulnerable populations (BMVP; Gelberg et al., 2000) describes how enabling and predisposing factors are the core components for predicting health behaviors and healthcare service usage. Similarly, it shows how African American women's health behavior impacts outcomes correlated with their perception of health status and care satisfaction. The BMVP divides health behavior components of need, enabling, and predisposing factors into vulnerable and traditional domains. When applying the model, the vulnerable domains can be tailored to specific vulnerable populations (Gelberg et al., 2000). The dissertation concentrated on the need, enabling, and predisposing components to assess African American women's feelings of medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination.

The behavioral model for vulnerable populations (BMVP; Gelberg et al., 2000) provides a theoretical foundation and structure to examine medical mistrust, perceived racial discrimination, and perceived healthcare-specific racial discrimination as indicators or predictors of whether having a physician who looks like them makes a difference to how African American women perceive their healthcare outcomes. The BMVP can assist

in understanding racial health disparities by examining factors associated with healthcare utilization by racial or ethnic minority populations (Jacobs et al., 2014; Levine et al., 2011; Myers et al., 2018; Nandi et al., 2008).

***Framework Applications***

The BMVP theory has been utilized in several studies that help to understand and explain both physical and mental healthcare in vulnerable populations (Austin et al., 2008; Babitsch et al., 2012; Bazargan et al., 2005; Hall, 2017; Ortega & Alegria, 2002). Homeless population research has used the BMVP to provide an in-depth focus on their healthcare (Austin et al., 2008; Gelberg et al., 2004; Linton & Shafer, 2014). However, despite the possible versatility of BMVP, few studies have used a theoretical structure to examine the associations of African American women's attention to seeking healthcare while considering the physician's race.

The findings were consistent with the subsequent studies using the BMVP theory's concepts, applications, and frameworks. Studies by Jacobs et al. (2014), Born et al. (2009), Benjamins (2012), and Gonzales et al. (2013) measured discrimination generally as everyday discrimination, which has been shown to have a negative impact on health (Jacobs et al., 2014; Barnes et al., 2008). In this dissertation, the researcher found that perceived racial discrimination was high among African American women.

Patient-clinician communication (PCC) may help reduce disparities in healthcare (Perez-Stable & El-Toukhy, 2018). The authors used the BMVP to show evidence of disparities using a selected narrative review of ethnic and racial minorities' experiences of PCC between clinician and patient factors and inferior health outcomes (Perez-Stable &

El-Toukhy, 2018). Perez-Stable and El-Toukhy (2018) found that effective communication between patients and clinicians is essential to improve the healthcare of vulnerable populations.

BMVP can be used as a foundation to elucidate and explore healthcare among minorities, as illustrated by the above studies. The literature provides research using the BMVP to describe the factors influencing African Americans' healthcare service usage in numerous areas, as well as the comprehensive effects. The dissertation used the BMVP to examine the relationship between the enabling and predisposing factors of the intentions of African American women in Selma, Alabama, to seek a physician, and whether they feel the physician's race will affect their healthcare outcomes.

### *Alternative Theoretical Framework*

Andersen's behavioral model of health services (BMHS) was developed in the 1960s (Andersen, 1995) to increase understanding of family health service use, develop policies that promote equitable access, and define measurable equitable healthcare access (Andersen, 1968). The BMHS attempts to integrate the "how is" and "why is" of health service usage and ideas. The BMHS model is like the BMVP because it uses predisposing characteristics, demographic factors, and traditional measures as components of social structures. All these factors contribute to an individual's health beliefs.

### *Rationale for Using the BMVP in the Study*

The theoretical foundation of BMVP theory provides a model for understanding the relationships between medical mistrust, perceived racial discrimination, healthcare-

specific racial discrimination, and the intentions behind the choice of physician by African American women. While mistrust is the predisposing factor, perceived racial discrimination and perceived healthcare-specific racial discrimination are enabling factors. Seeking a physician for medical care is a need factor. The outcome variable is African Americans' intentions to seek medical care. Studies such as Rickles et al. (2010) and Varga and Surratt (2013) have documented the negative relationship between perceived racial discrimination and care satisfaction. Several studies have indicated that perceived discrimination and experiences of discrimination inside and outside healthcare could compromise African Americans' intention to seek medical assistance (Burgess et al., 2008; Gibson & Young, 2014; Greer, 2010; Mouton et al., 2010). This dissertation provided a systematic study of how physician choice affects medical mistrust, as well as how perceived racial discrimination and perceived healthcare-specific racial discrimination impact African American women's perceptions of their healthcare.

## Summary of the Literature

### *Agrees*

The study's results were consistent with the following studies in the literature review. Cuevas et al. (2016) used nine focus groups to examine participants' perspectives concerning quality patient-provider relationships and explore, and how the provider's race affects patient-provider relationships from their perspective. African American women participants felt that perceived racial discrimination, medical mistrust, and poor communication were present in most race-discordant patient-provider relationships

(Cuevas et al., 2016). The dissertation found evidence that racial discrimination and medical mistrust in healthcare have not changed significantly over the past decade.

Maina et al. (2017) suggested that bias by providers plays a role in disparities in healthcare for racial and ethnic minorities. The authors conducted a systematic review and meta-analyses of several databases to synthesize the role of implicit bias experienced among ethnic and racial minorities and its impact on healthcare disparities, finding that most healthcare personnel across multiple training levels and disciplines have implicit biases against African Americas, Hispanics, American Indians, and dark-skinned individuals.

Hall et al. (2015) found that healthcare outcomes and treatment decisions had a significant effect related to implicit bias, while explicit bias had a more consistent effect on interactions between patients and providers. The African American women surveyed felt that they had poor health and treatment outcomes related to implicit bias, and face-to-face interactions between them and the non-minority physician were terrible, based on explicit bias.

Hagiwara et al. (2013) found that "physician racial bias and patient perceived discrimination have each been found to influence perceptions of and feelings about racially discordant medical interactions" (p.123). The authors examined African American patients' perceptions of past discrimination effects on patient-physician communication time ratios. The study found that physicians' implicit racial attitudes are more affected by racially discordant medical interactions, rather than their explicit or conscious attitudes toward race (Hagiwara et al., 2013). The study replicated the findings

of Cooper et al. (2012) which showed that physicians' implicit racial bias significantly affects their communication time, but not the patient's talk time. The researcher found that physicians' implicit racial bias affected how African American women participants felt about the communication time with non-minority physicians.

Benjamins and Whitman's (2013) multivariate logistic regression study concluded that 23% of the sample reported healthcare discrimination. Levels of perceived racial discrimination varied significantly along racial and ethnic lines. In the study, African Americans experienced a discrimination rate of 31%, while the rate for Whites was 4%. The participants in the dissertation agreed with those in the study of Benjamins and Whitman. Participants explained that discriminatory treatment and provider relationships were associated with more unmet healthcare needs and perceived poor healthcare quality.

Abramson et al. (2015) used empirical analysis to understand the relationship between perceptions of discrimination and social characteristics of healthcare encounter perceptions. The study examined persistence patterns and substantial racial discrimination in healthcare, which cause poor health outcomes. Perceptions of healthcare discrimination over time have not changed, as evidenced by the feelings expressed by African American women in the dissertation. The dissertation found that racial group membership influences strongly perceived discrimination and negative feelings, and interactions are powerful perceptions of perceived racial discrimination, as Abramson et al. too found.

***Disagrees***

Despite an exhaustive search of peer-reviewed literature using key terms in the search (*African American women, Black women, medical mistrust, perceived racial discrimination, perceived healthcare-specific racial discrimination, health distrust, non-minority physicians, minority physicians, health, communication, structural racism, institutional racism, physician relations, and health disparities*), the researcher could not find any recent literature that disagreed with this study's findings. However, the researcher found peer-reviewed articles published between 2019 and now that agreed with the study's findings. These articles are critiqued below to enrich the dissertation's literature review with present-day experiences and concepts.

Chinn et al. (2022), showed that African American women in the United States experience substantial health disparities, even though there have been health improvements. These health disparities and inequalities are measures of economic and social issues. African American women continue to have higher rates of mortality and shorter maternal and life expectancies. Research shows that systematic bias, unequal treatment of African American women, and oppression play significant roles in these disparities. There is substantial evidence that differences in race cause poor socioeconomic (employment and education) and housing outcomes resulting from discrimination. Historical laws and segregation were oppressive and continue to oppress African American women in the United States. Gender and racial discrimination have profoundly impacted African American women's well-being (Chinn et al., 2022).

Thomas et al. (2019)'s research study was based on the differential association between everyday versus institution-specific racial discrimination in health that was self-reported using allostatic load among African American women, who were shown to have the highest allostatic load (AL). AL comprises 15 biomarkers that function across four physiological systems, using cut-points as biomarkers (Geronimus et al., 2009; Seeman et al., 2001; Chyu & Upchurch, 2011; Upchurch et al., 2015). African Americans have shown consent to disproportionately higher AL than any other ethnic/racial group, with African American women having the highest predicted values (Geronimus et al., 2009; Seeman et al., 2001; Chyu & Upchurch, 2011). Research suggests that this is weathering (physiological wear and tear). Weathering among African American women is influenced by lifelong exposure to stressors related to their social identity, such as racial and gender discrimination. Social marginalization experiences are probably incorporated physiologically or embodied in racism and discrimination (Krieger, 2001). Half the African American women in the study sample reported low to moderate levels of everyday discrimination (Thomas et al., 2019). Two out of three African American women (64%) experienced low to moderate levels of institutional racial discrimination (Thomas et al., 2019).

Nong et al. (2022) found that quality healthcare requires information exchange, collaborative communication, and decision-making between providers and patients. Data completeness relies on the patient being comfortable and providing and disclosing information to providers without concerns of privacy or security. African American women have been found to withhold information due to low provider trust. The study

assessed the relationship experiences of discrimination, withholding information from providers, and multiple types of patient mistrust (Nong et al., 2022). A weighted multivariable logistic regression scale identified that experiences of discrimination in healthcare systems are associated with the withholding of information from providers on significant levels (Nong et al., 2022).

In a targeted review focusing on ethnicity and race, Cullen et al. (2022) explained that disparities are widespread in healthcare and continue to exist across ethnicities and races in the United States. These social determinants of health are the most notable racial and ethnic group differences in education, occupational status, and income (Cullen et al., 2022). The authors reviewed a total of 38 conditions for potential disparities, comparing African Americans (AA) with non-Hispanic Whites (NHW) and finding that the incidence of 29 of the 38 disorders in African Americans is excessive, severe, and prevalent, suggesting wide-reaching disparities (Cullen et al., 2022).

Medical mistrust can be defined as the tendency to distrust medical personnel and medical systems while believing that neither system is acting in the patient's best interest (Thompson et al., 2004, Williamson & Bigman, 2018). Medical mistrust has an emerging theme of collective experience in African American women in medical settings (Washington, & Randell, 2022). African Americans build group theme narratives among family and friends to help navigate the negative influences of healthcare providers and systems.

Even though the study was quantitative, many study participants wrote down their feelings about non-minority healthcare providers (nurses, doctors, and physicians). Some direct quotes are as follows:

I feel like I am unimportant

I feel inferior

I feel mistreated

I feel misunderstood

I feel invisible

I get poorer service

Doctor disrespects me

The nurses disrespect me

No one respects you

Doctors and nurses look down on me

White people act like they are better than Black people

The doctor does not listen to me

They treat me like I am stupid

They act as if I don't know my own body

The service is terrible

They lack respect

They lack common courtesy

I feel like they don't see me

I feel like they don't hear me

I feel hated

I feel misunderstood

They want my money but don't want to treat me

They don't want to touch me

Their dislike is palpable

Clear hate

They lie

They obfuscate

They have no compassion

They are straight-up racists

I don't know why they leave their white sheets at home

## Limitations

This study's limitation and possible strength centers around its timeframe and sample uniqueness. It uses a specific sample of African American women aged 30-55 and a specific place: Selma, Al. As the study was conducted during Covid, all contact with participants had to be through the mail.

### *External Validity*

External validity threats are factors that reduce the study's generalizability. Participants were mailed packets which they completed at a place of their choice. The belief is that participants answered questions truthfully and to the best of their ability. The researcher used random selection. Returned packets had no identifying marks, thereby strengthening the random selection.

### *Internal Validity*

The focus of internal validity is on the relationship between cause and effect, one aspect leading to another aspect. Research is conducted to determine what causes the effect of the relationship. Michael (2016) avers that a study's conclusion with little or no evidence of causality results from low internal validity, regression, maturation, history, testing, selection, and instrumentation. Internal validity threats were controlled through consistency during observational points. Assumption 1 (continuous variables) was met because each variable was an interval-level scale score with acceptable levels of reliability. Assumption 2 (paired variables) was met by the study's design in that each respondent's scale scores were matched to produce the Pearson correlations. Assumption 3 is that outliers in related groups' differences should not be significant. Assumption 3 (linear relationship) was met through the inspection of scatterplots. Assumption 5 (bivariate normality) was met based on the inspection of the scatterplots.

### *Statistical Conclusion Validity*

Threats to internal and external validity were addressed by following no selection bias, validated instruments, and ensuring that participants were a part of the subgroup selected for the study. According to the Laerd Statistics website (Laerd, 2022), five assumptions need to be met for Pearson correlations and must underpin data analyses. Overall, four of the five assumptions were met. However, Spearman correlations were also calculated for statistical verification purposes for hypothesis testing.

## Recommendations

### *Future Research*

Future research should explore the intersections of discrimination faced by African American women in personal encounters involving medical non-minority healthcare personnel and the effects of real and perceived discrimination faced during each encounter. The dissertation showed that African American women experience discrimination frequently, if not always, from non-minority healthcare personnel regardless of their healthcare behaviors. Future research should also use mixed methods studies to explore how the medical outcomes of non-minority healthcare workers (especially doctors and physicians) contribute to structural and institutional discrimination and racism and their consequences on African American women's health.

### *Social Change*

The dissertation shows how African American women face extreme social injustice in all areas, specifically in healthcare. Such injustice causes serious injury to health and wellbeing. African American women must defend their color and their genetic makeup. This continual onslaught can contribute to poor health outcomes, mental instability, and trauma.

Many initiatives that have aimed to reduce structural and institutional racism in numerous areas (education, healthcare, policing), seemed not to have achieved much success, considering that healthcare discrimination has roots in the United States since slavery. Researchers, healthcare personnel, educators, and stakeholders in various communities continue to explore strategies to reduce or eliminate structural and

institutional racism and discrimination in healthcare. However, racism and discrimination persist with little abatement. One of the purposes of this dissertation is to provide data on the feelings of African American women concerning racism and discrimination while receiving healthcare in all areas, from non-minority physicians and other healthcare personnel, thus promoting discussions about healthcare-specific racial discrimination, in the hopes of initiating real change.

Another implication for social change is the need for real collaboration and partnerships that will advance minority medical students and physicians so that African American women can choose a physician who look like them. This dissertation showed that African American women who participated in the study preferred physicians who look like them, as they feel that those physicians would have empathy and concern for their healthcare needs.

**Conclusion**

Health in the United States has been declining, a crisis that has been building up for some years (Wolf, 2019). Life expectancy in the United States peaked in 2012 but is falling behind other countries (Murphy et al., 2018). Health is about more than the care itself (drugs and spending). Wolf (2018) explains that healthcare is shaped by five domains: health behaviors, healthcare, physical and social environments, socioeconomic status, and public policy, all of which are interrelated in numerous ways. Socioeconomic status influences health outcomes through wealth, income, and opportunity, all of which enable certain people to afford medical care, homes, nutritious food, and healthy neighborhoods. Policies in the United States have shaped the social divides and

perpetuated inequalities among marginalized populations (African Americans) by entrenching structural and institutional discrimination and racism. Discrimination persists against African Americans, notwithstanding their wealth and socioeconomic status, due to structural and institutional racism and discrimination based on hate. Change requires acceptance and the realization of the fact that some non-minority physicians and other healthcare personnel continue to feel and believe that African Americans are unworthy, are less than Whites, and do not deserve care. These ideas and beliefs will continue to lead to poor health outcomes and reduced access to care for African Americans, especially women. It is perhaps time to move past the hope of equality in healthcare on the part of non-minority physicians and develop policies that will increase the training and education of minority physicians and other minority healthcare personnel. The implementation of such policies will allow African American women to choose qualified physicians who look like them, providing them with a feeling of security that they will be cared for by someone who can connect with them. Quality healthcare is a fundamental right, yet what use is the right if those seeking and in need of care do not receive essential healthcare due to discrimination and racism?

## References

Abramson, C. M., Hashemi, M. & Sanchez-Jankowiski, M. (2015). Perceived discrimination in U.S. healthcare: Charing the effects of key social characteristics within and across racial groups. *Preventive Medicine Reports, 2*, 615-621. http://dx.doi.org/10.1016/j.pmedr.2015.07.006

Aday, L. A., Andersen, R. M. & Fleming, G. V. (1980). *Health care in the U.S.: Equitable for whom?* SAGE.

Aday, L. A., Andersen, R., Loey, S. & Kremer, S. (1985). *Hospital physician sponsored primary care: Marketing and impact.* Health Administration Press.

Aday, L. A (1994). Health status of vulnerable populations. *Annual Review of Public Health, 15*, 487-509.https://doi.org/10.1146/annurev.pu15.050194.002415

Aday, L. A., & Anderson, R. M. (1974). A framework for the study of access to medical care. *Health Services Research, 9*, 208–220.

Alabama Demographics. (2018). Demographic information by county in Alabama. Ret http://www.alabama-demographics.com

Alabama Demographics. (2019). Demographic information by county in Alabama. http://www.alabama-demographics.com

Allen, G. (2017). Quantitative data statistical data integration: Challenges and opportunities. *Statistical Modeling*, (45), 382-387.

American Psychological Association (APA), (2013). Five principles of ethics. Retrieved http://www.apa.org/monitor/jan03/principles.aspx

Andersen, R. (1968). *A behavioral model of families' use of health services*. Center for

Health Administration Studies Research Series. Chicago, IL: University of Chicago Press.

Andersen, R.M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*(1), 1-10. http://doi.org/10.2307/2137284

Andersen, R., Smedby, B. & Anderson, O.W. (1970). Medical care use in Sweden and the United States: A comparative analysis of systems and behavior. *Center for Health Administration Studies, 27*, pp. 34-61.

Andersen, R., L. A. & Newman, J. F. (1973) Societal and individual determinants of medical care utilization in the United States. Milbank Memorial Fund Quarterly-*Health and Society, 51*(1), 95-124. https://doi.org/10.2307/3349613

Andersen, R. M., & Davidson, P. L. (2007). Improving access to care in America: Individual and contextual indicators. In R. M. Andersen, T. H. Rice, & G. F. Kominski (Eds.), *Changing the U.S. healthcare system: Key issues in health services policy management* (pp. 3-31). Jossey-Bass.

Anju, G., Hanish, K. & Dhawan, I. (2016). Literature search for research planning and identification of research problem. *Indian Journal of Anesthesia, 60*(9), 635-639. http://doi.org/10.4103/0019-5049.190618.

Austin, E. L., Andersen, R., & Gelberg, L. (2008). Ethnic differences in the correlates of mental distress among homeless women. *Women's Health Issues, 18*, 26-34. http://doi.org/10.1016/j.whi.2007.08.005

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's behavioral model of health services use: A systematic review of studies from 1998-2011. *Psycho-social medicine*, *9*, Doc11. http://doi.org/10.1007/978-1-4614-9191-0 2

Bailey, Z. D., Krieger, N. … & Age ‘nor, M. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet, 389*, 1453-1463. https://doi.org/10.1016/SO140-6736(17)30569-X

Baker, R. B., Washington, H. A., Olakanmi, O., Savitt, T. L., Jacobs, E. A., Hoover, E., & Wynia, M. K. (2009). Creating a segregated medical profession: African American physicians and organized medicine, 1846-1910. *Journal of the National Medical Association, 101*(6), 501-512. https://doi.org/10.1016/S0027-9684(17)30935-4

Bartlett J., Kotrkik, J. & Higgins C. (2001). Organizational research: Determining appropriate sample size in survey research. *Learning and Performance Journal, 19*, 43-50.

Barnes, L. L., Mendes de Leon, C, Bartlett, J. F., Kotrlek, J. W., & Higgins, C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology Learning and Performance Journal, 19*(1), 430-450.

Barnes, L. L., Mendes de Leon, C. F., … & Lewis, T. (2008). Perceived discrimination and mortality in a population-based study of older adults. *American Journal of Public Health, 98*, 1241-1247. https://doi.org/10.2105/AJPH.2007.114397

Bazargan, M., Bazargan-Heijazi, S., & Baker, R. S. (2005). Treatment of self-reported depression among Hispanics and African Americans. *Journal of Healthcare for the Poor and Underserved, 16(*2), 328-344. https://doi.org/10.1353/hpu.2005.0025

Belgrave, F. Z., & Abrams, J. A. (2016). Reducing disparities and achieving equity in African American women's health. *American Psychologist, 71*(5), 723-733. https://doi.org/10.1037/amp0000081

Benjamins, M., R. (2012). Race/ethic discrimination and preventive service utilization in a sample of whites, blacks, Mexicans, and Puerto Ricans. *Medical Care, 50*, 870-876. https://doi.org/10.1097/MLR.0b013e31825a8c63.

Benjamins, M. R. (2013). Comparing measures of race/ethnic discrimination, coping, and associations with health-related outcomes in a diverse sample. *Journal of Urban Health, 90*(5), 882-848. https://doi.org/10.10:1007/s511524-013-9787-x.

Benjamins, M. R, Middleton, M. (2019). Perceived discrimination in medical settings and perceived quality of care: A population-based study in Chicago. *PLOS One, 14(14), 215-976.* https://doi.org/10.1317/journal.pone.02015976

Benjamins, M. R., & Whitman, S. (2014). Relationships between discrimination in healthcare and healthcare outcomes among four race/ethnic groups. *Journal of Behavioral Medicine, 37*(3), 402-413. https://doi.org/10.1007s10865-013-9496-7

Benkert, R., Peters, R., Clark, R., & Keves-Foster, K. (2006). Effects of perceived racism, cultural mistrust, and trust in providers on satisfaction with care. *Journal of the National Medical Association, 98*(9), 1532-1540.

Bhandan, P. (2022). What is quantitative research? Definition uses & methods. https://www.scrbbr.com.

Bird, S. T. & Bogart, L. M. (2001). Perceived race-based and socioeconomic status (SES)-based discrimination in interactions with healthcare providers. *Ethnicity & Disease, 11*, 554-563.

Bird, S. T., Bogart, L. M., & Delahanty, D. L. (2004). Health-related correlates of perceived discrimination in HIV care. *AIDS Patient Care and STDs, 18*, 19-26. https://doi.org/10.1089/108729104322740884

Bleich, S., Jarlenski, M., Bell, C, & and LaVeist, T. (2012). Health inequities: Trends, progress, and policy. *Annual Review of Public Health, 337*(40), 7-40. https://doi.org/10.1146/annurev-publhealth-031811-124658

Bleich, S., Simon, A. & Cooper, L. (2012). Impact of patient-doctor race concordance on rates of Weight-related counseling in visits by black and white obese individuals. *Obesity, 80*(3), 562-570. https://doi.org/10.1038/oby.210.330.

Born, W., Engelman, K., … & Greiner, K., A. (2009). Colorectal cancer screening perceived discrimination, and low-income and trust in doctors: A survey of minority patients. *BMC Public Health, 9*:363PMCID; 2761405. https://doi.org/10.1186/1471-2458-9-363

Bouchard, L., Albertini, M., Batista, R, & Montigny, J. (2015). Research on health inequities: A bibliometric analysis (1966-2014). *Social Science & Medicine, 141*, 100-108. https://doi.org/10.1016/j.socscimed.20145.07.022

Bryc, K., Durand, E.Y., Macphearson, J.M., Reich, D., & Mountain, J. L. (2015). The

genetic ancestry of African Americas, Latinos, and European Americans across the United States. *The American Journal of Human Genetics 96*(1), 37-53. https://doi.org/10.1016/j.ajhg.2014.11.010

Burgess, D. J., Ding, Y., Hargreaves, M., van Ryn, M., & Phelan, S. (2008). The association between perceived discrimination and underutilization of needed medical and mental healthcare in a multi-ethnic community sample. *Journal of Healthcare for the Poor and Underserved, 19*, 894-911. https://doi.org/10.1353/hpu.0.0063

Byrd, W. M., & Clayton, L. A. (2000). *An American Health Dilemma: A Medical History of African Americans and the Problem of Race, Beginnings to 1900*. New York, NY: Routledge.

Byrd, W. M., & Clayton, L. A. (2002). *An American Health Dilemma: Race, Medicine, and Healthcare in The United States 1900-2000*. New York, Ny: Routledge.

Carter, S. E., Walker, R. L. Cutrona, C., Simons, R. & Beach, S. (2016). Anxiety mediates perceived discrimination and health in African-American women. *American Journal Health Behavior, 40*(6), 697-704. https://doi.org/10.5993/AJHB.40.6.2

Chang Ching-Sheng, Chen Su-Yueh, & Lon Yi-Ting, L. (2013). Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Services Research, 13*(1), p.22. https://doi.org/10..1186/1472-6963-13-22

Chapman, E., Kaatz, A., & Carnes, M. (2013). Physicians and implicit bias: How doctors

may unwittingly perpetuate healthcare disparities. *Journal of General Internal Medicine, 28(*11), 1504-1510. https://doi.org/10.1007/s11606-013-2441-1.

Chinn, J. J, Iman, K, M., & Redmond, N. (2022). Health equity among Black women in the United States. *Journal of Women's Health 30*(2): https://doi.org/10.1089/jwh.2020.8868.

Chyu. L. & Upchurch, D.M. (2015). Racial and ethnic patterns of allostatic load among adult women in the United States: Findings from the national health and nutrition examination survey. *Journal Women's Health 1999-2004.*

Clark, R., Anderson, N. B., V. R., & Williams, D. R. (1999). Racism as a Stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*(10), 805-816. https://doi.org/10.1037/0003-066X.5410.805

Cooper, L. A., … & Roler, D. L. (2012). The associations of clinicians' implicit attitudes about Race with medical visit communication and patient ratings of interpersonal care. *American Journal of Public Health, 102*(5), 979-982. https://doi.org/10.2105/AJPH.2011300558

Creswell, J. W. & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.

Creswell, J. W. (2014). *Research Design*. Sage Publications.

Cuevas, A. G., O'Brien, K. L. & Saha, s. (2016). African American experiences in healthcare: "I always feel like I'm getting skipped over.' *Health Psychology, 35*(9), 987-995. https://doi.org/10.1037/hea0000368

Cuevas, A. G. & O'Brien, K. L. (2017). Racial centrality may be linked to mistrust in

healthcare institutions for African Americans. *Journal of Health Psychology, 13*(5), 509-531. https://doi.org/10.1177/1359105317715092

Cuffee, Y. L., Hargraves, J. L., Briesacher, B. A., Person, S., & … Allison, J. (2013). Reported racial discrimination, trust in physicians and medication adherence among inner-city African Americans with hypertension. *American Journal of Public Health, 103*(11), e55-E62. https://doi.org/10.2105/AJPH.2013.301554

Cullen, M.R., Lemeshow, A. R., & Richmond, N. (2021). Equity among Black women in the United States. *Journal of Women's Health 30(2)* https://doi.org/10.1089/jwh.2020.8868.

Dehkordy, S F., Hall, K. S., Dalton, V. K. & Carlos, R. C. (2016). The link between everyday discrimination, healthcare utilization, and health status among a national sample of women. *Journal of Women's Health, 25*(10), 1044-1051. https://doi.org/10.1089/jwh.2015.5522.

Dovidio, J. F., Gaethner, S. L., Kawakami, K. & Hodson, G. (2002). Why can't we just get along? Interpersonal biases and interracial disgust. *Cultural Diversity and Ethnic Minority Psychology, 8*, 88-102. https://doi.org/10.1037//10099-9809.8.2.88.

Dovidio, J. F., Penner, L. A., Albrecht, T. L., Norton, W. E., Gaertner, S. L., & Shelton, J. N. (2008). Disparities and distrust: The implications of psychological processes for understanding racial disparities in health and healthcare. *Social Science & Medicine, 67*, 478-486. https://doi.org/10.10.1016/j.socscimed.2008.03.019

Eliacin, J. Salyers, M. P., Kukla, M. & Matthias, M. S. (2015). The importance of the

patient-provider relationship. *Qualitative Health Research, 25*(5), 668-78. https://doi.org/10.1177/1049732314551060

Feagin, J. & Benefield, Z. (2014). Systemic racism and U.S. health care. *Social Science & Medicine,* 130, 7-14. http://dx.doi.org/10.1016/j.socscimed.2013.09.006.

February, J. (2000). Outcomes influencing the behavioral model. *Health Services Research, 34*(6), 1275-1276.

Fernandez, L. E., & Morales, A. (2007). Language and use of cancer screening services among border and non-border Hispanic Texas women. *Ethnicity and Disease,* 12, 245-263. https://doi.org/10.1080/135578070123510

Fetters, M., Curry, L. & Creswell, J. (2013). Achieving integration in mixed methods designs principles and practices. *Health Service Research, 48*(6), 2134-2156. https://doi.org/10.1111/1475-6773.12117

Ford, C. L., & Airhihenbuwa, C. O. (2010). Critical race theory, race equity and public health: Toward antiracism praxis. *American Journal of Public Health, 100*(SI), S30-S35. https://doi.org/10.2105AJPH.2009.171058

Forsyth, J., Schoenthaler, A., Chaplin, W., Ogedegbe, G.& Ravenell, J. (2014). Perceived discrimination and medication adherence in black hypertensive patients: The role of stress and depression psychosomatic medicine. *Psychiatric Medicine, 76*(3), 229-236. https://doi.org/10.1097/PSY.00000000000043

Frankfort-Nachmias, C., Nachmias, D., & DeWard, J. (2015). *Research methods in the social sciences* (8th ed.). New York: Worth,

Fowler, J. (2009). Survey research methods. *Sage Publications Thousand Oaks*, 69-86.

Gamble, V. N. (1997). Under the shadow of Tuskegee: Black and healthcare. *American Journal of Public Health, 87*, 1773-1778. https://doi.org/10.2105/AJPH.87.11.1773

Garcia-Perez, M. (2012). Statistical conclusion validity: Some common threats and simple remedies. *Frontiers in Psychology, 3*(325), 1-11. https://doi.org/10.3389/fpsyg.2012.00325

Gaston, G. B. (2013). African-Americans' perceptions of healthcare provider cultural competence that promote HIV medical self-care and antiretroviral medication adherence. *AIDS Care, 25*(9), 1159-1165. https://doi.org/10.1080/09540121.2012.752783

Geronimus, A. T., Hicken, M., & Keene D. (2006). Bound J. Weathering and age patterns of allostatic load scones among blacks and whites in the United States American. *Journal of Public Health 96(5), 826-33.* https://doi.org/10.2105/ajph.2004.060749

Gelberg, L (1996). "The homeless." In *Changing the U.S. Healthcare System: Key Issues.* edited by R. M., Andersen, T. H. Rice, & G. F. Kominski *In health services, policy, and management*, pp. 273-301, Jossey-Bass Publishers.

Gelberg, L., Anderson, R. M., & Leake, B. M. (2000). The behavioral model for vulnerable populations: Application to medical care use and outcomes for homeless people. *Health Services Research,* 34, 1273-1302.

Gelberg, L., Browner, C. H., Lejano, E., & Arangua, L. (2004). Access to women's healthcare: A qualitative study of barriers perceived by homeless women. *Women & Health, 40*, 87-100. https://doi.org/10.1300/J013v40n02_06

Gibbons, J. & Yang, T. (2014). Self-rated health and residential segregation: How does race/ethnicity matter? *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 91*(4), 648-661. https://doi.org/10.1007/s11524-013-9863-2

Gill, J., Johnson, P. & Clark, M. (2010). *Research Methods for Managers*; Saga Publications.

Gonzales, K. l., Harding, A. K., Lambert, W. E., Fu, R. & Henderson, W. G. (2013). Perceived experiences of discrimination in healthcare: A barrier for cancer screening among American Indian women with type 2 diabetes. *Women's Health Issues, 23*, e61-67. PMCID:3640290 https://doi.org/10.1016/j.whi.2012.10.004

Grant, C. & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house." http://fileseric.edgov/fulltext/Ed108505.pdf. https://doi.org/10.5929/2014.4.2.9

Green, A., Carney, D., Pallin, D., Ngo, L., Raymond, K, Iezzoni, L., & Banaji, M. (2007). Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine, 22*(9), 1231-1238. https://doi.org/10.1007/s11606-007-0258-5

Greene, L. (2008). Is mixed methods social inquiry a distinctive methodology*? Journal of Mixed Methods Research, 2*(1), 7-22. https://doi.org/10.1177/1558689807309969

Greer, T. M. (2010). Perceived racial discrimination in clinical encounters among African

American hypertensive patients. *Journal of Healthcare for the Poor and Underserved, 21*, 251-263. https://doi.org/10.1353/hpu.0.0265

Greer, T. M., Brondolo, E., & Brown, P. (2014). Systemic racism moderates' effects of provider racial biases on adherence to hypertension treatment for African Americans. *Health Psychology, 33*(1), 35-42. https://doi.org/10.1037/a003277

Hagiware, N., … & Penner, L. (2013). Racial attitudes, physician-patient talk time radio, and Adherence in racially discordant medical interactions. S*ocial Science & medicine, 87*, 123-131. https://doi.org/10.1016/j.socscimed.2013.03.016.

Hain, D. J. & Sandy, D. (2013). Partners in care: Patient empowerment through shared decision-making. *Nephrology Nursing Journal: Journal of the American Nephrology Nurses' Association, 40*(2), 153-157.

Hall, C. J. (2017). No longer invisible: Understanding the psychosocial impact of skin color stratification in the lives of African American women. *National Association of Social Workers, 42*(2), 71-78. https://doi.org/10.1093/hsw/hlx001.

Hall, M. A., Dugan, E., Zheng, B., & Mishra, A. K. (2001). Trust in physicians and medical Institutions: What is it, can it be measured, and does it matter? *Milbank Quarterly, 79*(4), 613-639. https://doi.org/10.1111/1468-0009.00223

Hall, M. A., Zheng, B., Dugan, E., Camacho, F., Kidd, K. E., Mishra, A., & Balakrishnan, R. (2002). Measuring patients' trust in their primary care providers. *Medical Care Research and Review, 59*(3), 293-318. https://doi.org/10.1177/1077558702059003004

Hall, W. J., Chapman, M. V., Le, K. M., Merino, Y. M., Thomas, T. W., …. Coyne-

Beasley, T. (2015). Implicit racial/ethnic bias among healthcare professionals and its influence on healthcare outcomes: A systematic review. *American Journal of Public Health, 105*(12), E60-e76 https://doi-org.ezp.waldenulibary.org/https://doi.org/10.2105/AJPH.2015.302903a

Hamed, T. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management, 5*(2), 18-21. ISSN: 2296-1747.

Hausmann, L. R. M., Jeong, K., Bost, J. E., & Ibrahim, S. A. (2008). Perceived discrimination in healthcare and use of preventative health services. *Journal of General Internal Medicine, 23*, 1679-1684. https://doi.org/10.1007/s11606-008-0730-x

Hausmann, L. R. M., Kressin, N. R., Hanusa, B. H., & Ibrahim, S. A. (2010). Perceived racial discrimination in healthcare and its association with patients' healthcare experiences: Does the measure matter? *Ethnicity & Disease, 20*, 40-47.

Hausmann, L. R., Gao, S., Lee, E. S., & Kwoh, C. K. (2013). Racial disparities in the monitoring of patients on chronic opioid therapy. *Pain, 154*(1), 46-52. https://doi.org/10.1016/j.pain.2012.07.034

Healthy People 2017 {Internet}. Washington, DC. U.S. Department of Health and Human Services, Office of Disease Prevention, and health Promotion. https://www.healthypeople.gov/2017topic-objectives/topic/foundation-health-measures/Disparities.

Healthy People 2020 {Internet}. Washington, DC. U.S. Department of Health and

Human Services, Office of Disease Prevention, and health Promotion. https://www.healthypeople.gov/2020topic-objectives/topic/foundation-health-measures/Disparities.

Hochbaum, G. (1958). Public participation in Medical Screening Programs: A sociopsychological study. *Public Health Service Publication, 572*.

Ihantola, E. & Kihn, L. (2011). Threats to validity and reliability in mixed methods accounting research. *Qualitative Research in Accounting and Management, 8*(1), 39-58. https://doi.org/10.1108/1176609111124694

Institute of Medicine (2002). *Unequal treatment: What healthcare providers need to know about racial and ethnic disparities in healthcare*. National Academic Press.

Jackson, C. S., & Gracia, J. N. (2014). Addressing health and health-care disparities: The role of a diverse workforce and the social determinants of health. *Public Health Reports, 129*, 57-61. https://doi.org/10.1177/00333549141291S211

Jacobs, E. A., Rathouz, P. J., Karavols, K., … & Everson-Rose, S. (2014). Perceived discrimination is associated with reduced breast and cervical cancer screening: The study of women's health across the nation (SWAN). *Journal of Women's Health, 23*(2), 138-145. https://doi.org/10.1089/jwh.2013.4328.

Jennings, T. (1990). Us colored women had to go through aplenty: Sexual exploitation of African-American slave women. *Journal of Women's History, 1*(3), 45-74. https://doi.org/10.1353/jowh.2010.0050

Kaiser, K., Rauscher, G. H., Jacobs, E. A., Strenski, T. A., Estwing Ferrans, C, & Warnecke, R. B. (2010). The import of trust in regular providers to trust in cancer

physicians among White, African American, and Hispanic breast cancer patients. *Journal of General Internal Medicine, 26*, 51-7. https://doi.org/10.10.1009/s11606-010-1489-4

Kaplan, S. (2012). Why we need more minority doctors. http://commonhealth.legacy.wbur.org/2012/02/minority-doctors-diversity

Klonoff, E. A., & Landrine, H. (1999). Cross-validation of the Schedule of Racist Events. *Journal of Black Psychology, 22*, 231-254. Doi: 10.1177/0095798499025002006

Krahn, G., Farrell, N., Gabriel, R., & Deck, D. (2006). Access barriers to substance abuse treatment for persons with disabilities: An exploratory study. *Journal of Substance Abuse Treatment, 31*, 375-384. https://doi.org/10.1016/j.jsat.2006.05.011

Krieger, N. (2012). Methods for the scientific study of discrimination and health: An ecosocial approach. *American Journal of Public Health, 102*(5), 936-945. https://doi.org/10.10.2105/AJPH.2011.300544

Krieger, N. (2001). Theories for social epidemiology in the 21st Century: An Eco social perspective. *Internal Journal 30(4), 668-77.* https://doi.org/10.1093/ije/30.4.668

Landrine, H., & Klonoff, E. A. (1996). The Schedule of Racist Events: A measure of racial discrimination and study of its negative physical and mental health consequences. *Journal of Black Psychology, 22*, 144-168. https://doi.org/10.1177/00957984960222002

Lared Statistics (2022). Person correlation and assumptions guidelines. https//: statistics.lared.com/statistical-quides/person-correlation-coefficient-

statistical-quide.php

Lazarus, L. L., Mendes de Leon, C. F., Lewis, T. T., Bienlas, J. L., Wilson, R. S. & Denis E. (2011). Perceived discrimination and mortality in a population-based study of older adults. *American Journal of Public Health, 98*, 1241-1247. https://doi.org/10.2105/AJPH.2007.114397

Levesque, J., Harris, M. F., & Russell, G. (2013). Patient-centered access to healthcare conceptualizing access at the interface of health systems and populations. *International Journal for Equity in Health, 12*, 18-26. https://doi.org/10.1186/1475-9276-12-18

Levine, D. A., Neidecker, M. V., Kiefe, C. I., Karve, S., Williams, L. S., & Allison, J. J. (2011). Racial/ethnic disparities in access to physician care and medications among US stroke survivors. *Neurology,* 76, 53-61. https://doi.org/10.1212/WNL.0b013e318203e952

Lewis, T., T. & Van Dyle, M. E. (2018). Discrimination and the health of African Americans: The potential importance of intersectionalities. *Current Directions in Psychological Science, 27*(3), 176-182. https://doi.org/10.1177/0963721418770442.

Linton, K. & Shager, M. (2014). Factors associated with the health service utilization of unsheltered, chronically homeless adults. *Social Work in Public Health, 29*, 73-80. https://doi.org/10.1080/19371918.2011.619934

Maina IW, Belton TD, Ginzberg S, Singh A, Johnson TJ. A decade of studying implicit racial/ethnic bias in healthcare providers using the implicit association test. Social

Science & Medicine. 199, 219-229. https://doi.org/10.1016/j.socscimed.2017.05.009.

Martin, K. D., Roter, D. L., Beach, M. C., Carson, K. A. & Cooper, L. A. (2013). Physician communications behaviors and trust among black and white patients with hypertension. *Medical Care, 51*, 151-157. https://doi.org/10.1097/MLR0b013e31827632a2

Mertens, D. M. (2003). Mixed methods and the politics of human research: The transformative-emancipatory perspective. In A.Tashakkori & C.Teddlie (Eds.), *Handbook of Mixed Methods In Social and Behavioral Research* (pp. 135–164). Sage

Mertens, D. M. (2009). *Transformative research and evaluation.* Guilford Press.

Michael, R. (2016). Threats to internal validity. http://www.indiana.edu/~educy520/sec5982/week_9/520in_ex_validity.pdf

Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., Stewart, L. & PRISMA-P Group. (2015). Preferred reposting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *BioMed Central, 4*(1), 1-9. https://doi.org/10.1186/2046-4053-4-1

Moore, A., Hamilton, J., Knafl, G., Godley, P., Carpenter, W., Bensen, J. T., Mohler, J. L. & Mishel, M. (2012). Patient satisfaction influenced by interpersonal treatment and Communication for African American men: The North Carolina-Louisiana Prostate Cancer Project (PCaP). *American Journal of Men's Health, 6*(5), 409-419. https://doi.org/10.1177/1557988312443695

Moore, A., Hamilton, J., Knafl, G., … & Godley, P. A. (2013). The influence of mistrust, racism, religious participation, and access to care on patient satisfaction for African American men: The North Carolina- Louisiana Prostate Cancer Project. *Journal of the National Medical Association, 105*, 59-68. https://doi.org/10.1016/S0027-9684(15)30086-9.

Morgan, E. S. (2003). *American slavery, American freedom: The ordeal of colonial Virginia*. W.W. Norton & Company, Inc.

Mouton, C. P., Carter-Nolan, P. L., Makambi, K. H., Taylor, T. R., Palmer, J. R., Rosenberg, L., & Adams-Campbell, L. L. (2010). Impact of perceived racial discrimination on health screening in black women. *Journal of Healthcare for the Poor and Underserved, 21*, 287-300. https://doi.org/10.1353/hpu.0.0273

Moy, E., & Freeman, W. (2014). Federal investments to eliminate racial/ethnic healthcare Disparities. *Public Health Reports (Washington, D.C.: 1974), 129* Suppl 2 62- 70. Retrieved from https://search.proquest.com/openview/6b2c9fdcfa2263ce0a6269b6129612983f/?pq-origsite=gscholar&cbl=45638 https://doi.org/10. 1177/00333549141291S212

Murphy, S., Xu, J. Q., Kochanek, K., & Arias, E. (2018). *Mortality in the United States, 2017.* NCHS Data Brief, no 328. National Center for Health Statistics; 2018.

Musa, D., Schulz, R., Harris, R., Silverman, M. & Thomas, S. B. (2009). Trust in healthcare system and the use of preventive health services by older black and white adults. *American Journal of Public Health, 99*(7), 1293-1299. https://doi.org/10.2105/AJPH.2007.123927

Myers, J. R., Ball, K., Jeffers, S. L. & Lawson, W. B. (2018). Medical antitrust, HIV-related conspiracy beliefs, and the need for cognitive closure among Urban-residing African American women: An Exploratory Study. *Journal of Health Disparities Research Practice, 11*(4), 138-148. https://doi.org/10.

Nandi, A., Galea, S., Lopez, G., Nandi, V., Strongarone, S., & Ompad, D. C. (2008). Access to and use of health services among undocumented Mexican immigrants in a US urban area. *American Journal of Public Health,* 98, 2011- 2020. https://doi.org/10.2105/AJPH.2006.09622

Napoles-Springer, A. M., Ortiz, C., O'Brien, H., Diaz-Mendez, M., & Perez-Stable, E. J. (2007). Use of cancer support groups among Latina breast cancer survivors. *Journal of Cancer Survivorship,* 1, 193-204. https://doi.org/10.1007s11764-007-0029-7

Nelson, S. (2016). Race, racism, and health disparities: What can I do about it? *Creative Nursing, 22*(3), 161-163. https://doi.org/10.1891/1078-4535.223.161

Nong, P., Williamson, A., Anthony, D, Platt, J., & Kardia, S. (2022). Discrimination, trust and withholding information for providers: Implications for missing data and inequity. *Elsevier: Population Health.* https://doi.org/10.1016/j.ssmph.2022.101092

Nuru-Jeter, A., Thorpe, R. & Fuller-Thomson, E. (2011). Black-white differenced in self-reported disability outcomes in the U.S. early childhood to older adulthood. *Public Health Report, 126*(6), 864-43. https://doi.org/10.1177/003335491112600609

O'Daniel, A. J. (2011). Access to medical care is not the problem low-income status and healthcare needs among HIV-positive African-American women in urban north Carolina. *Human Organization, 70*, 416-426. https://doi.org/10.17730/humo.70.4.8711167jp8j273n7

Ortega, A. N., & Alegria, M. (2002). Self-reliance, mental health need, and the use of healthcare among island Puerto Ricans. *Mental Health Services Research, 4*, 131-140. https://doi.org/10.1023/A:1019707012403

Pager, D. & Shepherd, H. (2008). The sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology, 34*, 181-209. https://doi.org/10.1146/annurev.soc.33.040406.131740

Peek, M. E., Numez-Smith, M., Drum, M., & Lewis, T. T. (2011). Adapting the Everyday Discrimination Scale to medical settings: Reliability and validity testing in a sample of African American patients. *Ethnicity & Disease, 21*(4), 502-509.

Peek, M. E., Wagner, J., Tang, H., Baker, D. C., & Chin, M. H. (2011). Self-reported racial/ethnic discrimination in healthcare and diabetes outcomes. *Medical Care, 49*(7), 618-625. https://doi.org/10.1097/MLR.0b013e318215d925

Penner, L. A. (2014). Behind the curtain Implicit racial attitudes in medical interactions. In A. G. Cuevas (Chair), Discrimination and Health Inequities: Raising and Exploring New Questions. Symposium was conducted at the SPSSI's 10th Biennial Conference: *Social Acton and Change: Opportunities, Resistance, Inertia, and Mobilization*, Portland, OR.

Penner, L. A., Hagwara, N., Eggly, S., Gaertner, S. C., Alberecht, T. L., & Dovidio, J. F.

(2013). Racial healthcare disparities: A social psychological analysis. *European Review of Social Psychology, 24*, 70-122. https://doi.org/10.1080/10463283.2013.84073.

Perez-Stable, E. & El-Toukhy, S. (2018). Communicating with diverse patients: How patient and clinician factors affect disparities. *Patient Education and Counseling*, 1-9. https://doi.org/10.1016/j.pec.2018.08.021

Peters, R. M., Benkert, R., Templin, T. N., & Cassidy-Bushrow, A. E. (2014). Measuring African American women's trust in provider during pregnancy. *Research in Nursing & Health, 37*(2), 144-154. https://doi.org/10.1002/nur.21581

Polit, D. (2010). *Statistics and data analysis for nursing research (2nd ed.)*. Pearson Education.

Purnell, J. Q., Katz, M. L., Andersen, B. L., Palesh, O., Figueria-Moseley, C., Jean-Pierre, P., & Bennett, N. (2010). Social and cultural factors are related to perceived colorectal cancer screening benefits and intentions in African Americans. *Journal of Behavioral Medicine, 33*, 24-34. https://doi.org/10.1007/s10865- 009-9231-6

Rau, J. (2004). Searching the literature and selecting the right reference. *Respiratory Care, 49*, 1242-1245.

Rew, L. (1996). Health risk of homeless adolescents: Implications for holistic nursing. *Journal of Holistic Nursing, 14*(4), 348-359. https://doi.org/10.101177.089801019601400407.

Rickles, N., Dominguez, S., & Amaro, H. (2010). Perceptions of healthcare, health status,

and discrimination among African-American veterans. *Journal of Health Disparities Research and Practice, 4*(2), 50-68.

Rim, S.H., Hall I.J., Fairweather, M.E., Fedorenko, C.R., Ekwueme, D.U., Smith, J.L., Thompson, I.M., Keane, T.E., Penson, D.F., Moinpour, C.M., Zeliadt, S.B., & Ramsey, S.D. (2011). Considering racial and ethnic preferences in communication and interactions among the patient, family member, and physician following diagnosis of localized prostate cancer: Study of a US population. *International Journal of General Medicine, 4*, 481-486. https://doi.org/10.2147/IJGM.S19609

Roberts-Kennedy, B., Mathis, C. C., & Woods, A. K. (2007). African Americans and their distrust of the healthcare system: Healthcare for diverse populations. *Journal of Cultural Diversity*, 14(2), 56-60.

Rosenstock, I. M. (1966). Why people use health services. *Milbank Memorial Fund Quarterly, 44*(94), 127. https://doi.org/10.2307/3348967

Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs, 2*, 328–335. https://doi.org/10.1177/109019817400200403

Rosenstock, I. M., Strecher, V., Becker, J. (1988). Social learning theory and the health belief model. *Health Education Quarterly, 15*, 175–183. https://doi.org/10.1177/109019818801500203.

Schoenthaler, A., Allegrante, J., Chaplin, W. & Ogedegbe, G. (2012). The effect of patient-provider communication on medication adherence in hypertensive black patients: Does race concordance matter? *Annals of Behavioral Medicine,* 43(3),

372-82. https://doi.org/10.1007/521/160-011-9342-5

Schoenthaler, A., Montague, E., Baier Manwell, L., Brown, R., Schwartz, M. D., & Linzer, M. (2014). Patient-physician racial/ethnic concordance and blood pressure control: The role of trust and medication adherence. *Ethnicity & Health, 19*(5), 565-578. https://doi.org/10.1080/13557857.2013.857764

Scharff, D. P., Mathews, K J., Jackson, P., Hoffsuemmer, J., Martin, E., & Edwards, D. (2010). More than Tuskegee: Understanding mistrust about research participation. *Journal of Healthcare for the Poor and Underserved, 21*, 879-897. https://doi.org/10.1353/hpu.0.0323

Setia, M. (2016). Methodology sense models 3: Cross-sectional studies. *Indian Journal of Dermatology*, *61*(3), 261-264. https://doi.org/10.4103/0019-5154.182410

Seeman, T. F., McEven, B. S., Rowe, J. W., & Singer B.H. (2001). Allostatic load as a marker of cumulative biological risk: MacArthur studies of successful aging. *Productive National Academy Sciences U.S. A. 98(8)* 4770-5. https://doi.org/10.1073/pnas.081072698

Shan, L., Li, Y., Ding, D., Wu, Q., Lie, C., Jiao, M., &… Ren, J. (2016). Patient satisfaction with hospital inpatient care: Effects of trust, medical insurance, and perceived quality of care. *Plos One, 11*(10), e0164366. https://doi.org/10.1371/journal.pone.0164366

Shelton, R. C., Winkel, G., Davis, S. N., Roberts, N., Valdimarsdottir, H., Hall, S. J., & Thompson, H. S. (2010). Validation of the group-based medical mistrust scale among urban Black men. *Journal of General Internal Medicine, 25*(6), 549-555.

https://doi.org/10.1007/s11606-010-1288-y

Sheppard, V., Mya, D., Tercyak, K. & LaVeist, T. (2013). Medical mistrust influences black women's level of engagement in *brca1/2* genetic counseling and testing. *Journal of National Medical Association, 105*(1), 17-22 https://doi.org/10.1016/S0027*9684(15)30081-X

Shi, L, (2008). Health services research methods (2nd ed.). Clifton Park, NY: Thomson.

Suite, D. H., LaBril, R., Primm, A., & Harrison-Ross, P. (2007). Beyond misdiagnosis, misunderstanding and mistrust: Relevance of the historical perspective in the medical and mental health treatment of people of color. *Journal of the National Medical Association, 99*(8), 879-883.

Tapp, H., White, L., Steuerwald, M., & Dulin, M. (2013). Use of community-based participatory research in primary care to improve healthcare outcomes and disparities in care. *Journal of Comparative Effectiveness Research, 2*(4), 405-419. https://doi.org/10.2217/cer.13.45

Thomas, B. (2014). Health and healthcare disparities: The effect of social and environmental factors on individual and population health. *International Journal of Environmental Research and Public Health, 11*(7), 7492-7507. https://doi.org/10.10.3390/ijerph110707492

Thomas, M., Michaels, E., Reeves, A., Okoye, U., Price, M., Hasson, R., Chae, D, & Allen, A. (2019). Differential associations between everyday versus institutional-specific racial discrimination, self-reported health, and allostatic load among black women: Implications for clinical assessment and epidemiologic studies.

*Annals of Epidemiology, 35*, 20-28. https://doi.org/10.1016/j.annepidem.2019.05.002

Thompson, H. S., Valdimarsdottir, H. B., Winkel, G., Jandorf, L., & Redd, W. (2004). The group-based medical mistrust scale: Psychometric properties and association with breast cancer screening. *Journal of Preventive Medicine, 38*, 209-218. https://doi.org/10.10.1016/j.ypmed.2003.09.041

Thorpe, R., Fesahazion, R., Parker, L., Wilder, T., Rooks, R., Bowie, J., Bell, C., Szamton, S. & Thomas, L. (2016). Accelerated health declines among African Americans in the USA. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 93*(5), 808-819. https://doi.org/10.1007/s1154-016-0075-4

Unever, J. D. (2014). A theory of African American offending. A test of core propositions. *Race and Justice, 4*(2), 98-123. https://doi.org/10.101177/2153368714531296.

Upchurch, D. M., Stein, J. Greendale, G. A., Cyu, I., Tseng, C. H., & Huang, M. H. (2015): A longitudinal investigation of race, socioeconomic status, and psychosocial mediators of allostatic load in middle women findings from the study of women's health across the nation. *Psychosocial Medicine, 77(4)*, 402-12. https://doi.org/10.1097/PSY.000000000000175

vanRyn, M. & Burke, J. (2000). The effect of patient race and socio-economic status on physicians' perceptions of patients. *Social Science & Medicine,* 50(6). 813-828 https://doi.org/10.1016/SS0277-9536(99)00338-X

Varma, R., Mohanty, S. A., Deneen, J., Wu, J., & Azen, S. P. (2008). Burden and

predictors of undetected eye disease in Mexican-Americans: The Los Angeles Latino eye study. *Medical Care,* 46, 497-506. https://doi.org/10.1097/MLR.0b013e31816080fe

Varga, L. M. & Surratt, H. L. (2013). Predicting healthcare utilization in marginalized Populations: Black, female, street-based sex workers. *Women's Health Issues,* 24(3), 355-343. https://doi.org/10.1016/j.whi.2014.02.001.

Walden university. (n.d.i.). Research ethics & compliance: Guides and FAQs. Retrieved from http://academicguides.waldenu.edu/researchcenter/orec/guides.

Waltzman, R. (2014). Ethical dilemmas in physician-patient relationship in a multi-cultural. Society. *Medicine and Law, 33*(4), 1-10. https://www.ncbi.nlm.nih.gov/pubmed/27351044

Washington, H. A. (2006). *Medical Apartheid: The dark history of medical experimentation on bBack Americans from colonial time to the present.* Doubleday.

Washington, H. A., Baker, R. B., Olakanmi, O., Savitt, T. L., Jacobs, E. A., Hoover, E., & Wynia, M. K. (2009). Segregation, civil rights, and health disparities: The legacy of African American physicians and organized medicine, 1910-1968. *Journal of the National Medical Association, 101*(6), 513-527. https://doi.org/10.1016/S0027-9684(15)30936-6

Washington, A., & Randell. J. (2022). "We're not taken seriously." Describing the experiences of perceived discrimination in medical setting for Black women. *Journal of Racial and Ethnic Health Disparities*: 3, 1-9.

https://doi.org/10.1007/s40615-022-00-01276-9.

Wang, T., Shi, L., Nie, X., & Zhu, J, (2013). Race/Ethnicity, insurance, income, and access to care: The influence of health status. *International Journal for Equity in Health, 12*, 29. https://doi.org/10.1080/10911359.2014.953416

Watkins, D., Hudson, D., Caldwell, C., Siefert, K. & Jackson, J. (2012). Discrimination, mastery, and depressive symptoms among African American men. Research *Social Work Practice, 21*(3), 269-77. https://doi.org/10.1177/1049731510385470.Discrimination

Watson, J. (2014). Young African American males: Barriers to access to healthcare. *Journal of Human Behavior in the Societal Environment, 24(*8), 1004-1009. https://doi.org/10.1080/109111359.2014.953416

Watson, R. (2015). Quantitative research. *Nursing Standard*, 29(31), 44. https://doi.org/10.1080/10911359.2014.953416.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health socio-economic status, stress, and discrimination. *Journal of Health Psychology, 2,* 335-351. https://doi.org/10.1117/135910539700200305

Williams, P. (1997). *Seeing a color-blind future: The paradox of race*. The Noonday Press.

Williams, D. R., Yu, Y., Jackson, J. S. & Anderson, N. B. (1977). Racial differences in physical and mental health: Socio-economic status, stress, and discrimination. *Journal of Health Psychology, 2*, 335-351.

https://doi.org/10.1177-135910539700200305

Williams, D. R., & Mohammed, S. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*, 20- 47. https://doi.org/101007/s10865-008-9185-0

Williamson, L. D. & Bigman, C. A. (2018). A systematic review of medical mistrust measures. *Patient Education and Counseling, 100*, 1786-1794. https://doi.org/10.1016/j.pec.2018.05.007.

Woolf, S. H. (2019). Necessary but not sufficient: Why healthcare alone cannot improve population health and reduce health inequities. *Annals of Family Medicine,* 196-199. https://doi.org/10.1370/afm.2395.

Appendix A: Informed Consent and Confidentiality

Consent and Confidentiality Form

**Informed Consent Form**

You are invited to participate in a research study to determine how medical mistrust and racial discrimination affect physician choice in the African American women population in Selma, Al. The study is conducted by Joy Thomas, a doctoral student in Public Health at Walden University.

**Background Information:**

The purpose of this study is to explore whether African American women living in Selma, Alabama feel their healthcare options have been limited because of racial discrimination while receiving care from White physicians.

**Procedures:**

The study involves completing five questionnaires and a demographic questionnaire. Note, only fully completed questionnaires can be used. At any time, if you feel uncomfortable answering any question, you may stop and throw away all the materials.

**Study Participation is Voluntary:**

The study participation is voluntary, and you may stop participating at any time. Please note that you do not have to participate in the study. It will take 45 minutes to complete the questionnaires for the study. I am inviting African American women between the age of 30 and 55 to participate in the study.

**Risks and Benefits of the Study**

Some of the questions may make you uncomfortable. The study's risk is not greater than what you might experience in your everyday life. If you feel stressed during and after completing the survey, you may contact the following mental health agencies: Span Program, 334-874-3899, and Cahaba Mental Health Center, 334-875-2100. The hope is that the study will benefit the African American community by providing insight into and awareness of White physicians' impact on African Americans' health views.

**Compensation:**

Unfortunately, there is no compensation for study participants.

**Privacy:**

The information you provide for the research study will be kept confidential and anonymous and will not be used for any other purpose than the research project. Data collected during the research will be retained for five years in a secure area, as required by Walden University.

**Contact Information for Questions**

You may phone me at [redacted]. Please be aware that my caller ID is off, so I will be unable to return calls. Please call again. Doing this will keep your name and identity confidential and anonymous. Walden's approval number for the study is 10-01-20-0395782. You may contact a Walden Representative for any questions about participant rights at the following number [redacted].

**Consent Statement:**

If you feel you understand the study well enough to participate, please return the completed surveys to me using the self-addressed stamped envelope. Please keep this consent form for future reference.

Appendix B: Demographic Questionnaire

Please answer ALL questions by circling one response for each question

Your age_____

**Occupation**

What is your employment status?

Employed
Employed part-time
Employed full-time
Retired
Disabled
Unemployed

Write your occupation below:

_____ AND

Please circle all that applies to the category that describes your job Below:

Science
Technology
Engineering
Math
Healthcare
Social Services
Media
Finance
Sales
Arts
Design
Education
Office and Admin Support
Unskilled labor
Skilled manual labor
Manager
Business owner
Operator
Executive
Technician
Clerical

**Education:**
What is the highest level of education completed by you?

Less than 7 years of school
Junior high school
Some high school
High school graduate
Some college
Associate degree
Bachelor's degree
Master's degree
Doctoral degree
Graduate/professional training

**Income:**
What is your yearly household income?

$0- 14,999
$15,000-29,999
$30,000-49,999
$50,000-69,999
$70,000-99,999
$100,000 or more

**Nationality & Ethnicity**
Please write your country of origin (USA, Jamaica, Nigeria).

---

Please write the last time you sought medical care from a non-minority (White) physician (such as 3 months ago or two years ago or last week)

_____

Appendix C: Group-Based Medical Mistrust Scale

**Group-Based Medical Mistrust Scale (GMMBS)**

**Please read the following statements, indicating how strongly you agree or disagree with each statement (Strongly disagree = 1; Disagree = 2; Neither agree nor disagree =3; Agree = 4; and Strongly agree = 5).**
**PLEASE CIRCLE THE CORRECT RESPONSE**

1. Doctors and healthcare workers who are White sometimes hide information from African American people.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

2. Doctors (White) have the best interests of African American people in mind.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

3. African American people should not confide in doctors and healthcare workers who are White because it can be used against them.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

4. African American people should be suspicious of information from doctors and healthcare workers who are White.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

5. African American people cannot trust doctors and healthcare workers who are White.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

6. African American people should be suspicious of modern medicine.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

7. Doctors and health workers who are White treat African American people like guinea pigs.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

8. African American people receive the same medical care from White doctors and healthcare workers as people from other groups.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

9. White doctors and healthcare workers do not take the medical complaints of African American people seriously.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

10. African American people are treated the same as people of other groups by White doctors and healthcare workers

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**

**Agree**
**Strongly agree**

11. In most hospitals, people of different racial or ethnic groups receive the same kind of care.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

12. I have personally been treated poorly or unfairly by White doctors or healthcare workers because of my race or ethnicity.

**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

Appendix D: Trust the Physician Scale

**Trust the Physician Scale (TPS)**

**Please read the following statements, indicating how strongly you agree or disagree with each statement (Strongly disagree = 1; Disagree = 2; Neither agree nor disagree =3; Agree = 4; and Strongly agree = 5). PLEASE CIRCLE THE CORRECT RESPONSE (For White Physicians Only)**

1. I doubt that my doctor really cares about me as a person.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

2. My doctor is usually considerate of my needs and puts them first.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

3. I trust my doctor so much I always try to follow his/her advice
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

4. If my doctor tells me something is so, then it must be true.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

5. I sometimes distrust my doctor's opinion and would like a second one.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

6. I trust my doctor's judgment about my medical care.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

7. I feel my doctor does not do everything he/she should about my medical care.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

8. I trust my doctor to put my medical needs above all other considerations when treating my medical problems.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

9. My doctor is well qualified to manage (diagnose and treat or make an appropriate referral) medical problems like mine.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

10. I trust my doctor to tell me if a mistake was made in my treatment.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

11. I sometimes worry that my doctor may not keep the information we discuss totally private.
**Strongly disagree**
**Disagree**
**Neither agree nor disagree**
**Agree**
**Strongly agree**

Appendix E: Schedule of Racist Events

**Schedule Racist Events (SRE)**

**Please circle the number that best captures the things that have happened to you for each of the following questions.**

Circle 1 = If this has **NEVER** happened to you
Circle 2 = If this has happened **ONCE IN AWHILE** (less than 10% of the time)
Circle 3 = If this has happened **SOMETIMES** (10% -25% of the time)
Circle 4 = If this has happened **A LOT** (26%-49& of the time)
Circle 5 = If this has happened **MOST OF THE TIME** (50%-70% of the time)
Circle 6 = If this has happened **ALMOST ALL THE TIME** (more than 70% of the time)

1. How many times have you been treated unfairly by *teachers and professors* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

2. How many times have you been treated unfairly by your *employers, bosses, and supervisors* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

3. How many times have you been treated unfairly by *your coworkers, fellow students, and colleagues* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

4. How many times have you been treated unfairly by *people in service jobs* (store clerks, waiters, bartenders, bank tellers, and others) because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

5. How many times have you been treated unfairly by *strangers* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

6. How many times have you been treated unfairly by *people in helping jobs* (doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, social workers, and others) because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

7. How many times have you been treated unfairly by *neighbors* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

8. How many times have you been treated unfairly by *institutions* (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office, and others) because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

9. How many times have you been treated unfairly by *people whom you thought were your friends* because you are African American?
   **In the past year 1 2 3 4 5 6**
   **In your entire life 1 2 3 4 5 6**

10. How many times have you been *accused or suspected of doing something wrong* (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are African American?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

11. How many times have people *misunderstood your intentions and motives* because you are African American?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

12. How many times did you *want to tell someone off for being racist but didn't say anything*?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

13. How many times have you been *really angry about something racist that was done to you*?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

14. How many times were you *forced to take drastic steps* (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some racist thing that was done to you?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

15. How many times have you been called *a racist name like nigger, coon, jungle bunny, or other names*?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

16. How many times have you *gotten into an argument or a fight about something racist that was done to you or somebody else*?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

17. How many times have you been *made fun of, picked on, shoved, hit, or threatened with harm* because you are African American?
    **In the past year 1 2 3 4 5 6**
    **In your entire life 1 2 3 4 5 6**

18. How different would your life be now if you *HAD NOT BEEN* treated in a racist and unfair way?
    **In the past year 1 2 3 4**
    **In your entire life 1 2 3 4**
    **Better 1**
    **Somewhat Better 2**
    **A little Better 3**
    **The Same 4**

Appendix F: Everyday Discrimination Scale

**Everyday Discrimination Scale (EDS)**

In your day-to-day life, how often do any of the following things happen to you?

1. You are treated with less courtesy than other people are_____
2. You are treated with less respect than other people are_____
3. You receive poorer service than other people at restaurants or stores_____
4. People act as if they think you are not smart_____
5. People act as if they are afraid of you_____
6. People act as if they think you are dishonest_____
7. People act as if they're better than you are_____
8. You are called names or insulted_____
9. You are threatened or harassed_____

Please use the following responses for your answers
**Almost every day = 1**
**At least once a week = 2**
**A few times a month =3**
**A few times a year =4**
**Less than once a year =5**
**Never =0**

Appendix G: Healthcare-Specific Racial Discrimination

**Healthcare Specific Discrimination (HCSD)**

**Please read the following statements and indicate how often you have experienced these events because of your race or color by checking the box that corresponds to your answer (1=Never; 2=Rarely; 3=Sometimes; 4=Most of the Time; 5=All the Time).**
**When *GETTING HEALTHCARE* have you *ever* had any of the following things happen to you because of your race or color? PLEASE CIRCLE THE CORRECT RESPONSE**

1. Been treated with less courtesy than other people.
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

2. Been treated with less respect than other people.
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

3. Received poorer service than others.
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

4. Had a doctor or nurse acted as if he or she thinks you are not smart?
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

5. Had a doctor or nurse acted as if he or she is afraid of you?
   **Never**
   **Rarely**
   **Sometimes**

**Most of the Time**
**All the Time**

6. Had a doctor or nurse acted as if he or she is better than you?
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

7. Felt like a doctor or nurse was not listening to what you were saying.
   **Never**
   **Rarely**
   **Sometimes**
   **Most of the Time**
   **All the Time**

**Please read the following questions and respond by circling the answer that best corresponds to your feelings.**

8. How would you rate your overall level of health?
   **Poor**
   **Fair**
   **Good**
   **Very Good**
   **Excellent**

9. What is the likelihood of visiting a healthcare provider for a check-up in the next year?
   **Poor**
   **Fair**
   **Good**
   **Very Good**
   **Excellent**

10. How likely would you be to seek medical treatment or see a medical provider if you were having physical health or emotional problems interfering with your social life?
    **Poor**
    **Fair**
    **Good**
    **Very Good**
    **Excellent**

11. How likely would you be to seek medical treatment or see a medical provider if you were having physical health or emotional problems interfering with your regular daily activities?
    **Not Likely**
    **Somewhat Likely**
    **Likely**
    **Very Likely**
    **Not at all Likely**

12. How likely would you be to seek medical treatment or see a medical provider if you were having physical health or emotional problems interfering with your normal work?
    **Poor**
    **Fair**
    **Good**
    **Very Good**
    **Excellent**

13. Before today, approximately how long has it been since you last saw or talked to a doctor or other care professional about your health? (Include doctors seen while a patient is in a hospital.)
    **Never**
    **6 months ago, or less**
    **More than 6 months ago, but not more than 1 year**
    **More than 1 year, but not more than 2 years ago**
    **More than 2 years, but not more than 5 years ago**
    **More than 5 years ago**

14. In the past 12 months, was there a time when you needed medical care?
    **Yes**
    **No**

15. Did you delay or not get the treatment you thought you needed because of your feelings about your physician?
    **Yes**
    **No**

# Appendix H: Sample Size Table

TABLE I: SAMPLE SIZE BASED ON DESIRED ACCURACY

SOURCE: (GILL ET AL., 2010)

| | **Variance of the population P=50%** | | | | | |
|---|---|---|---|---|---|---|
| | *Confidence level=95% Margin of error* | | | *Confidence level=99% Margin of error* | | |
| **Population Size** | 5 | 3 | 1 | 5 | 3 | 1 |
| 50 | 44 | 48 | 50 | 46 | 49 | 50 |
| 75 | 63 | 70 | 74 | 67 | 72 | 75 |
| 100 | 79 | 91 | 99 | 87 | 95 | 99 |
| 150 | 108 | 132 | 148 | 122 | 139 | 149 |
| 200 | 132 | 168 | 196 | 154 | 180 | 198 |
| 250 | 151 | 203 | 244 | 181 | 220 | 246 |
| 300 | 168 | 234 | 291 | 206 | 258 | 295 |
| 400 | 196 | 291 | 384 | 249 | 328 | 391 |
| 500 | 217 | 340 | 475 | 285 | 393 | 485 |
| 600 | 234 | 384 | 565 | 314 | 452 | 579 |
| 700 | 248 | 423 | 652 | 340 | 507 | 672 |
| 800 | 260 | 457 | 738 | 362 | 557 | 763 |
| 1000 | 278 | 516 | 906 | 398 | 647 | 943 |
| 1500 | 306 | 624 | 1297 | 459 | 825 | 1375 |
| 2000 | 322 | 696 | 1655 | 497 | 957 | 1784 |
| 3000 | 341 | 787 | 2286 | 541 | 1138 | 2539 |
| 5000 | 357 | 879 | 3288 | 583 | 1342 | 3838 |
| 10000 | 370 | 964 | 4899 | 620 | 1550 | 6228 |
| 25000 | 378 | 1023 | 6939 | 643 | 1709 | 9944 |
| 50000 | 381 | 1045 | 8057 | 652 | 1770 | 12413 |
| 100000 | 383 | 1056 | 8762 | 656 | 1802 | 14172 |
| 250000 | 384 | 1063 | 9249 | 659 | 1821 | 15489 |
| 500000 | 384 | 1065 | 9423 | 660 | 1828 | 15984 |
| 1000000 | 384 | 1066 | 9513 | 660 | 1831 | 16244 |

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**Approval Letters for Questionnaires**

Chang, Mei Y [redacted]
Thu 3/12/2020 8:54 AM

Dear Joy,

Thank you for your email. There is no need for permission actually. The scale is publicly available at https://scholar.harvard.edu/davidrwilliams/node/32777

All the best,
Mei

**Mei Chang**
Executive Assistant to Dr. David Williams, Department Chair
Department of Social and Behavioral Sciences
Harvard T.H. Chan School of Public Health
677 Huntington Avenue, Kresge 712
Boston, MA 02115
(617) 432 - 4794
mchang@hsph.harvard.edu

Dear Dr. David R. Williams

I am a Walden University PhD student in Public Health, and I am emailing you to ask permission to utilize your Everyday Discrimination Scale for my dissertation project. I am planning to utilize your instrument to determine the effects of everyday discrimination scale among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas
Doctorate Candidate
Walden University
joy.thomas2@waldenu.edu
jothron@msn.com

Elizabeth Klonoff [redacted]
Thu 3/12/2020 8:57 AM
As it says in the article itself the scale can be used for any legitimate purpose, so you have permission

Sent from my iPhone

On Mar 11, 2020, at 3:15 PM, PEYTON REESE [redacted] wrote:

Dear Dr. Elizabeth Klonoff
I am a Walden University PhD student in Public Health, and I am emailing you to ask permission to utilize your Schedule of Racist Events Scale Instrument for my dissertation project. I am planning to utilize your instrument to determine the effects of racist events among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas
Doctorate Candidate
Walden University
[redacted]

Thompson, Hayley [redacted]
Mon 6/22/2020 8:19 PM
To: PEYTON REESE
Hello Joy,

There is no permission needed to use the scale. Thanks for including it in your work.

Best,
Hayley

~~~~~~~~~~~~~~~~~~~~~~~~~~~~

***Hayley S. Thompson, Ph.D.***
Professor, Department of Oncology
Wayne State University School of Medicine:
Associate Center Director,
Community Outreach & Engagement
Faculty Director, Office of Cancer Health Equity &
Community Engagement (OCHECE)
Karmanos Cancer Institute
4100 John R – MM03CB
Detroit, MI 48201
Phone: (313) 576-9734

Pronouns: she/her/hers
www.karmanoscancerhealthequity.org
www.hayleythompson.com

Wed 3/11/2020 2:08 PM
To: thompsoh@karmanos.org

Dear Hayley S. Thompson, PH.D.
I am a Walden University PhD student in Public Health, and I am emailing you to ask permission to utilize your Group-Based Medical Mistrust Scale Instrument for my dissertation project. I am planning to utilize your instrument to determine the effects of Medical Mistrust among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas
Doctorate Candidate
Walden University
[redacted]
Joy Thomas
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Tue 6/16/2020 7:17 PM
[redacted]
Dear Thomas Laveist,
I am a Walden University PhD student in Public Health. I am emailing you to ask you permission to utilize your Medical Mistrust Index to determine the effects of Medical Mistrust among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas
Doctorate Candidate
Walden University
joy.thomas2@waldenu.edu
Jothron@msn.com

LaVeist, Thomas A [redacted]
Sun 8/2/2020 9:19 AM
Reply
More actions
Joy Thomas
To: Sorry for the delayed response. I missed this email and am only now seeing it. I am granting you permission to use the MMI scale. Once you have results, please share them with me. All the best with your study.

_____
Thomas A. LaVeist, PhD
Dean & Weatherhead Presidential Chair
School of Public Health & Tropical Medicine
Tulane University
1440 Canal Street, Suite 2400
New Orleans, Louisiana, USA 70112
504-988-5397
TAL@Tulane.edu
www.SPH.Tulane.edu
**From:** PEYTON REESE [redacted]
**Sent:** Tuesday, June 16, 2020 7:17 PM
**To:** LaVeist, Thomas A [redacted]
**Subject:** Medical Mistrust Index
PEYTON REESE
Sun 8/2/2020 10:04 AM
T0
LaVeist, Thomas A
Thank you so much, I will let you know my study results.
Joy Thomas

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

Dedrick, Robert [redacted]
Sun 9/6/2020 3:09 PM

To:
Hi Joy,
You have our permission to use the Trust in Physician Scale. Good luck with your research. Looks very interesting and timely.

Best,
Robert D.
Pronouns: *he/him/his* https://www.mypronouns.org/he-him

Robert F. Dedrick, PhD
dedrick@usf.edu
Program Coordinator, Measurement and Research
Department of Educational and Psychological Studies, EDU 105
http://www.coedu.usf.edu/main/departments/me/me.html
University of South Florida
Tampa, FL 33620
(813) 974-5722

PEYTON REESE
Sun 9/6/2020 2:42 PM
To: [redacted]
Dear Dr, Robert Dedrick,
I am a Walden University PhD student in Public Health, and I am emailing you to ask permission to utilize your Trust in Physician Scale Instrument for my dissertation project. I am planning to utilize your instrument to determine the effects of Physician Trust among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas

Bogart, Laura [redacted]
Sun 9/6/2020 3:07 PM
To: You
Dear Joy,

You have my permission to use the instrument.

Good luck with your dissertation.

Best wishes,
Laura

Laura M. Bogart, PhD
Senior Behavioral Scientist
RAND Corporation
1776 Main Street, P.O. Box 2138
Santa Monica, CA 90407-2138
Phone: (310) 393-0411 x7281

PEYTON REESE
Sun 9/6/2020 3:04 PM
To: [redacted]

Dear Laura Bogart, PH.D.
I am a Walden University PhD student in Public Health, and I am emailing you to ask permission to utilize your Healthcare-specific racial Discrimination Instrument for my dissertation project. I am planning to utilize your instrument to determine the effects of Healthcare-specific racial Discrimination among African American females in relation to their choice of physician racial and or ethnicity. My dissertation project is being conducted through Walden University; a confirmatory e-mail would serve as permission for my committee.
Sincerely
Joy Thomas