Cultural Competence in Health Care: A Client-Based Perspective

Karon L. Phillips

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Cultural Competence in Health Care: A Client-Based Perspective

by

Karon L. Phillips

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
School of Aging Studies
College of Behavioral and Community Sciences
University of South Florida

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Keywords: Culture, Competency, Health Disparities, Interpersonal Sensitivity, Client-Provider Racial/Ethnic Concordance, Satisfaction with Care Received

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DEDICATION

I dedicate this dissertation to my grandmothers, Grammy (Gwen F. Halls), Bubbie (Helen Phillips), and my late grandfather Lee Halls. Their love and endless support throughout my life motivated me to pursue a career working with older adults, the segment of the population that I love the most. All three of them have been professors to me in the discipline of life and I am blessed to have been taught by them.
ACKNOWLEDGEMENTS

This data was funded and collected by the Commonwealth Fund and I would like to thank them for providing me with the opportunity to use these data.

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In addition, I must send out a very special acknowledgment and thank my parents and younger brother Austin for everything that they have done for me throughout my life and for constantly being my greatest source of support and strength throughout my undergraduate and graduate matriculation. I love you three with all my heart.

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ABSTRACT

In response to the presence of health disparities among a diverse population of older adults, creating culturally competent health care services has emerged as a possible method to help reduce and eventually eliminate inequalities in health care. However, little information exists concerning the effectiveness of cultural competence, and even less is known about how culturally competent clients perceive their providers to be. This dissertation examined a number of indicators related to cultural competence, including the predictors of client-provider racial/ethnic concordance, client perceptions of the interpersonal sensitivity of their health care providers, and the overall satisfaction with care reported by older Non-Hispanic White, African American/Black, Hispanic/Latino, and Asian American adults. In order to accomplish these aims, three related studies were conducted, all drawing on data from the Commonwealth Fund 2001 Health Care Quality Survey. The first study focused on the factors that predicted racial/ethnic concordance between clients and their health care providers. The second study examined several factors that can affect the clients’ perception of their providers’ interpersonal sensitivity,
including client-provider racial/ethnic concordance. The third and final analysis utilized
the outcome variables from the two previous studies, in addition to the client-level
variables, to determine which factors predicted satisfaction with care received. The
results show that the factors that predicted client-provider racial/ethnic concordance and
perceived interpersonal sensitivity varied across the four groups. In addition, perceived
interpersonal sensitivity was a significant predictor of satisfaction with care for all four of
the groups. The findings from this dissertation contribute to a broader understanding of
racial/ethnic differences in client-provider racial/ethnic concordance, perceptions of
interpersonal sensitivity, and overall satisfaction with care among older adults from
racially and ethnically diverse backgrounds.
CHAPTER ONE: INTRODUCTION

Introduction and Statement of the Research Problem

Preparing for an aging population requires an understanding of how to better serve older adults from all racial/ethnic backgrounds in health care settings. It has been predicted that 25 percent of the older adult population will be part of an ethnic minority group by 2025 (U.S. Census Bureau, 2000). Numerous studies have also noted that ethnic minority groups suffer from illnesses at rates higher than those of Non-Hispanic Whites (Ferris, 2000). African Americans/Blacks, for example, have higher rates of several diseases including HIV/AIDS and diabetes. The Institute of Medicine (2002) report, Unequal Treatment: Confronting Racial/Ethnic Disparities in Health Care, concluded that racism exists in the health care system and identified the existing gaps between the health of racial/ethnic minorities and non-minorities.

The national health objectives indicated in Healthy People 2000 and subsequently Healthy People 2010 recognized the need to improve the health of racial/ethnic minorities and set forth specific goals for reducing disparities in disease, disability, and death among minority populations (U.S. Department of Health and Human Services [DHHS], 2000; 1991). Similar to many other national organizations, these two national reports emphasize the need for health care professionals to acknowledge the importance of understanding the diverse health care needs of their clients. Despite the previous initiatives within the health care system to improve the overall quality of and access to care, the inequalities in health status and access to health care among ethnic minorities still exist.
A priority of the Department of Health and Human Services and various other federal, state, and community organizations is to eliminate behavioral and physical health disparities. One of the primary methods suggested to help eliminate health disparities is to enhance the cultural competence of providers and provider organizations. According to Cross, Bazron, Dennis and Isaacs (1989, p. iv), cultural competence is defined as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals to work effectively in cross-cultural situations.” It is widely believed that cultural competence leads to an overall improvement in the quality of health care services. More specifically, cultural competence has been associated, in several preliminary studies, with increased client satisfaction, decreased rates of non-compliance, and increased effectiveness of services (Campinha-Bacote, 1991). The Institute of Medicine has acknowledged the importance of enhancing cultural competence in health care in order to eliminate health disparities among racial/ethnic minorities in several reports (Bentacourt, Green, Carrillo, & Park, 2005). One of the suggestions made by the President’s New Freedom Commission on Mental Health includes promoting cultural sensitivity by providing training and education to health care providers (Bartels, 2003).

While little research on its effectiveness actually exists, there are many proposed advantages to adopting a culturally competent approach to healthcare. The general acceptance of such an approach has been emphasized by both the American Medical Association (AMA) and the Association of American Medical Colleges (AAMC), both of which suggest that physicians should receive education on how to provide culturally competent health care (AMA, 2004; AAMC, 2002). One of the main benefits of incorporating cultural competence techniques into the health care system is that it can
lead to a change in the behaviors of both the health care providers and the clients. This is accomplished by improving communication, increasing trust, and creating an understanding of the differences among racial/ethnic groups (e.g. Ngo-Metzger et al., 2006). The Office of Minority Health (OMH) reports that cultural competence in health care can lead to better communication between providers and clients, better adherence to medication and positive lifestyle changes because of improved health status. It has also been found to lower the use of emergency healthcare services (Department of Health and Human Services OMH, 2002).

While anecdotal evidence does suggest that there are multiple benefits associated with cultural competence, there is currently a lack of empirical evidence to support this proposed relationship (Brach & Fraser, 2000). For example, research has recognized that racial/ethnic concordance between clients and providers is an important cultural competence technique (Brach & Fraser, 2000; LaViest & Nuru-Jeter, 2002; Schnittker & Liang, 2006), but there is a need for more research to support this claim. There is also insufficient evidence concerning how cultural competence affects satisfaction with care (e.g., Anderson, Scrimshaw, Fullilove, Fielding, & Normand, 2003; Fortier & Bishop, 2003). Most importantly, there is very little research that examines the client’s perspective of cultural competence (e.g., Geron 2002; Ngo-Metzger et al., 2006). Understanding the client’s perspective is critical not only because it can lead to higher quality health care services (Creel, Sass, & Yinger, 2002), but because it can also prompt improvements in health outcomes (Bertrand et al. 1995; Creel et al., 2002; Kols & Sherman, 1998; Vera, 1993). In order for researchers to continue to support implementation of cultural competence in the health care system, more evidence-based
research is needed to show the potential benefits on the clients receiving the care (Brach & Fraser, 2000).

Purpose of the Study

Based on the need for research to support incorporating cultural competence into the health care system, the purpose of this dissertation was to examine the factors that affect client-provider racial/ethnic concordance, interpersonal sensitivity, and satisfaction with care across four different racial/ethnic groups. The four racial/ethnic groups that were compared in this study are Non-Hispanic White, African American/Black, Hispanics/Latino, and Asian American. The specific aims for this study were to: (1) determine client-level factors (socio-demographic, language of the interview, and health-related variables) that predict racial/ethnic concordance between clients and providers, (2) explore which factors predict the perceived interpersonal sensitivity of health care providers, (3) determine which factors serve as predictors of overall satisfaction with care received.

The aims for this study were accomplished utilizing data from the Commonwealth Fund 2001 Health Care Quality Survey. The data were collected using random-digit-dialing and the focus of the survey was on factors influencing the health care experiences of adults age 18 and older from diverse racial/ethnic backgrounds. Using data for those participants who were aged 50 and over, the following secondary analyses were conducted: (1) cross-tabs; (2) t-tests; and (3) hierarchical linear regression analysis or logistic regression analysis.

There were three research questions addressed in this dissertation: (1) Which client-level factors predict whether or not there was racial/ethnic concordance between
(2) Which client-level factors predict the perceived interpersonal sensitivity of health care providers, including racial/ethnic concordance between clients and providers?; (3) Which client-level factors predict satisfaction with care among the four racial/ethnic groups, including both racial/ethnic concordance between clients and providers and the perceived interpersonal sensitivity of the provider as measures of cultural competence? Each of these research questions was examined in a separate study (Chapters 2, 3, and 4).

The following three hypotheses were examined: (1) the variables that predict racial/ethnic concordance between clients and providers varied across the four racial/ethnic groups; (2) clients who reported being treated by a provider of the same race/ethnicity and perceived their providers to have higher levels of interpersonal sensitivity; and (3) clients that had higher levels of satisfaction with care received care from a provider of the same race/ethnicity and perceived their provider to have high levels of interpersonal sensitivity.

In the following three chapters each one of the aforementioned research questions is examined separately. The first research question is examined in Chapter 2, entitled *Predictors of Client-Provider Racial/Ethnic Concordance*. Racial/ethnic concordance between clients and providers is closely related to cultural competence (e.g. Pope-Davis et al., 2002). Racial/ethnic concordance has also been noted to be effective in the reduction of health disparities (Komaromy et al., 1996; Saha, Arbelaez, & Cooper, 2003). This study examined the factors that affect whether or not there was racial/ethnic concordance, a match, between clients and their health care providers. The focus of the analyses was on determining whether or not any of the four racial/ethnic groups were
more likely to be in a match and if there was any variation by the socio-demographic variables (age, gender, marital status, education, and income), the language of the interview, and health-related variables (health insurance status, self-rated health, and total number of health conditions) included in the analysis.

The second research question is examined in Chapter 3, which is entitled *Client Perceptions of the Interpersonal Sensitivity of Their Health Care Providers: The Potential Role of Racial/Ethnic Concordance*. The focus of this analysis was on identifying client-level factors that predict the client’s perception of their provider’s interpersonal sensitivity. Interpersonal sensitivity is considered to be a key component of cultural competence (e.g., Hollander, 1985; Riggo, 1996). The particular factors of interest for this analysis were the socio-demographic variables, the language of the interview, and health-related variables. Racial/ethnic concordance between clients and providers was a key covariate in this analysis.

The third research question was addressed in Chapter 4, *Overall Satisfaction with Care Received: The Potential Role of Racial/Ethnic Concordance and Interpersonal Sensitivity*. This final set of analyses explored the factors that affected satisfaction with care received. Previous research has used satisfaction as a means to understanding how effective cultural competence is in the health care system (Fortier & Bishop, 2003). Using satisfaction as the outcome variable, the socio-demographic variables, language of interview, health-related variables, client-provider racial/ethnic concordance, and the client’s perception of their provider’s interpersonal sensitivity were included in this analysis as potential predictors. All three of these studies are outlined in Figure 1.
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*Figure 1. Outline of the Dissertation*
Study Framework

There were no well-articulated theoretical models available that could provide specific guidance for the proposed multi-racial/ethnic study of racial/ethnic concordance, interpersonal sensitivity and satisfaction with care. At the same time, several conceptual frameworks did provide a means of identifying key variables and basic relationships. There is substantial agreement across these frameworks concerning those factors that can influence an individual’s interactions with the health care system and ultimately the effectiveness and efficiency of the care they receive (e.g. Andersen, Harada, Chiu, & Makinodan, 1995; Brach & Fraser, 2000; Creel et al., 2002; Institute of Medicine, 2002). The identified factors include the language, beliefs, values, ethnicity, and language of the individual care recipient. Given its compatibility with existing research and theoretical formulations, the decision was made to employ a conceptual framework based on the Institute of Medicine’s Model of Access to Personal Health Care Services (Institute of Medicine, 1993) (Figure 2) for this dissertation (See Appendix A for the complete conceptual framework).

The basic premise of this conceptual model is that the participation of a client in the health care system is affected by several barriers and intervening conditions. For this study, the potential barriers to care included financial barriers and personal barriers. The intervening variables selected include those that have been suggested to lead to higher perceived interpersonal sensitivity (Chapter 3) and to higher overall satisfaction with care (Chapter 4). Racial/ethnic concordance served as a potential intervening variable for interpersonal sensitivity (Chapter 3). Both racial/ethnic concordance and interpersonal sensitivity were viewed as potential intervening variables for satisfaction (Chapter 4).
Significance of the Study

The client perspective is generally missing from research on cultural competence (Pope-Davis et al., 2002), which generally focuses on characteristics of the providers and the institutional context. It is critically important to consider the views of the client because one cannot truly understand cultural competence until the care recipient’s perspective is considered. One way of validating the efficacy of cultural competence is to find out if clients from diverse cultures are satisfied with the quality of health care received (Ngo-Metzger et al., 2006). Even though there are several positive outcomes that have been associated with cultural competence, there are still many unaddressed issues and concepts. More empirical evidence is needed to support this proposed
relationship (Brach & Fraser, 2000; Fortier & Bishop, 2003) and to address the clinical application of cultural competence to patient care (Engebretson, Mahoney, & Carlson, 2008).

This dissertation also incorporated a multi-racial/ethnic perspective. While research on cultural competence has generally focused on the comparisons of Non-Hispanic Whites to a single racial/ethnic group, racial/ethnic minorities have different experiences with the health care system and it is important to determine the sources of these differences. There is a lack of research that has addressed questions related to cultural competence and racial/ethnic concordance. In order to support efforts that advocate for incorporating culturally competent practices into health care settings, more empirical research is needed. Previous research is primarily anecdotal or based on very small samples. While some studies have illustrated the potential for positive outcomes with cultural competence, more research is needed in order to support incorporating cultural competence into the health care system.

Overall, this study examined the perceptions that Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans have of their providers and the health care system. This dissertation focused on the factors that predict racial/ethnic concordance with health care providers and the effects of this concordance on interpersonal sensitivity. In addition, this study examined the direct and interactive effect of cultural competence, measured by racial/ethnic concordance and interpersonal sensitivity, on client satisfaction.
Background

The following background section for this dissertation begins with an overview of health disparities and the factors that influence these disparities. Next, information about cultural competence as a means to eliminate health disparities is presented. The third component of this section includes the overall benefits of cultural competence. Lastly, the issues that need more research in cultural competence are discussed.

Behavioral and Physical Health Disparities

The 1985 Department of Health and Human Services Secretary’s Task Force on Black and Minority Health report has served as one of the landmark documents for addressing disparities in health care. This report noted the excess in mortality rates among many racial/ethnic minority groups (DHHS, 1985). Subsequently, additional studies examined racial/ethnic differences in the quality health care and service utilization. According to the Institute of Medicine, over 175 research studies have indicated that there are health care disparities in diagnosis and treatment of a wide range of medical issues (Betancourt et al., 2005). Several reports and studies have highlighted the presence of health disparities in the health care system and a large portion of the research on racial/ethnic minorities has focused on the difficulties associated with accessing care as the main reason for the existence of health disparities (Institute of Medicine, 2002).

Health disparities exist in both the behavioral and physical health domains. According to the Surgeon General’s Report on Mental Health, racial/ethnic minorities are less likely than Non-Hispanic Whites to receive mental health care and when they receive care it is of poorer quality (DHHS, 1999). African Americans/Blacks are more likely
than Non-Hispanic Whites to be diagnosed with certain mental illness, including schizophrenia. Hispanics/Latinos generally have mental illness at rates similar to Non-Hispanic Whites, but they have substantially higher rates of affective disorders. Asian Americans are more likely to be misdiagnosed and under-diagnosed (Centers for Disease Control and Prevention, 2006). There is also evidence that despite the higher prevalence rates of illnesses compared to Non-Hispanic Whites, ethnic minorities are less likely to receive the best treatments available for depression and anxiety (Young, Klap, Shebourne, & Wells, 2001).

In addition to behavioral health disparities, there are some distinct differences in the prevalence of physical health illnesses among older ethnic minorities. For example, older African Americans/Blacks, when compared to Non-Hispanic Whites, have higher rates of hypertension, heart disease, stroke, and renal disease. Hispanics/Latinos and African Americans/Blacks have significantly higher rates of Type 2 diabetes than Non-Hispanic Whites (Jackson & George, 1998). Similar to disparities in behavioral health, older ethnic minorities tend to have a lack of knowledge about the various diseases that can affect them, stemming from the underutilization health care. The underutilization of services by older ethnic minorities is associated with their cultural norms, discrimination, and barriers with accessing health care services due to language difficulty and lower socioeconomic status (Wallace, Levy-Storms, Kington, & Anderson, 1998).

In addition to utilization issues that have received considerable attention from researchers, results from the Commonwealth Fund 2001 Health Care Quality Survey revealed that one in three Hispanics and one in four Asian Americans have difficulty communicating effectively with their physicians. Moreover, 15 percent of African
Americans/Blacks, 13 percent of Hispanics/Latinos, and 11 percent of Asian Americans reported that they believed that the care they received would have been better if they were a different race or ethnicity (Davis et al., 2006).

Older ethnic minorities, in particular, are less likely to receive regular medical care and are disproportionately affected by differences in access to care (Byrd, 2007). Studies have indicated that some health care providers do not offer options for certain tests and procedures to their older ethnic minority clients because they cannot financially afford these options (Byrd, 2007). Many older ethnic minorities may enter later life with a cumulative disadvantage, leading to a greater number of health problems. The Cumulative Disadvantage Theory, also referred to as the Disadvantage Theory in Gerontology, supports the idea that inequality is the result of having amassed years of poor health care utilization and declining health (Quadagno & Reid, 1999). This concept is based on collective groups, such as cohorts, and it leads researchers and health professionals to question the fairness in the distribution of health care services, resources, and opportunities among older populations (Dannefer, 2003).

Health Care Barriers

It is generally agreed that health disparities arise from multiple pathways. Many of the disparities in health care stem from social and cultural issues. Some of the more specific reasons for the prevalence of both behavioral and physical health disparities on the client-level include socio-economic status, access to resources and health care, lack of research, lack of cultural competency in health care practices, lack of health insurance, stigmas about illness, and various cultural factors (Smedley, Stith, & Nelson, 2003; Snowden, 2002). Health care barriers can be classified into three broad non-mutually
exclusive categories: clinical, structural, and organizational. These categories provide a framework for understanding barriers to accessing and receiving care.

Barriers that are associated with the interactions between the client, or the client’s family and the provider, are clinical barriers. These barriers occur when there are socio-cultural differences that cause the client to not be fully understood by their provider.

Some of these differences include the client’s own health beliefs, use of home remedies, and negative attitudes toward medical care and the health care system (Berger, 1998). The negative effects of cultural and linguistic barriers on clients within the clinical setting include client dissatisfaction, poor adherence to treatment, and poorer health outcomes (Brach & Fraser, 2000; Morales, Cunningham, Brown, Liu, & Hays, 1999). It is very important for the provider to carefully consider the social and cultural background of their clients. Failure to do so can cause the provider to base their decisions and behaviors on stereotypes (van Ryn & Burke, 2000).

Structural barriers may cause the client to have difficulty receiving services due to the complex, bureaucratic and archaic designs of some health care systems (Betancourt et al., 2005). These barriers in particular affect all clients that may be utilizing the services, but minority populations are particularly vulnerable due to socio-cultural and health-related disadvantages. One major issue that falls under this set of barriers is the lack of interpreters and unavailability of culturally and linguistically appropriate health education material. These two factors are associated with overall client dissatisfaction, poor comprehension and compliance, and ineffective or lower quality care (Betancourt et al., 2005).
Organizational barriers largely revolve around the lack of diversity in the leadership and in the workforce of an organization (Betancourt et al., 2005). Some specific examples include limited hours of access to services and an intimidating initial intake processes that can cause an undocumented individual to become fearful of deportation. Research suggests that there is a link between having a lack of diversity in the leadership, policies, and procedures of an organization and being unable to properly serve minority communities (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). Several studies have noted that one of the factors associated with poorer health among African American/Black and Hispanic/Latino populations is the lack of African American/Black and Hispanic/Latino health care professionals (DHHS, 1991).

**Eliminating Health Disparities**

The national health objectives indicated in Healthy People 2000 and subsequently Healthy People 2010 have established the need to improve the health of ethnic minorities (DHHS, 2000; DHHS, 1991). Health care professionals must acknowledge the importance of understanding the diverse health care needs of their clients. Despite the previous efforts that have been made, inequalities in health status and access to health care among ethnic minorities still exists. It has become a priority of the DHHS and various other federal, state, and community organizations to eliminate behavioral and physical health disparities. One of the primary methods being used to help eliminate health disparities is incorporating cultural competence techniques into the health care system. These techniques include providing cultural competence trainings to health care professionals, recruiting diverse employees, and employing policies that are respectful of the beliefs and values of the clients.
Cultural competence, generally speaking, has been reported to be associated with an overall improvement in the quality of health care services. More specifically, it has been associated with increased client satisfaction, decreased rates of non-compliance, and increased effectiveness of services (Campinha-Bacote, 1991). The Institute of Medicine has acknowledged the importance of cultural competence in health care in order to eliminate health disparities among ethnic minorities in several reports (Betancourt et al., 2005). In addition, one of the suggestions made by the President’s New Freedom Commission on Mental Health includes promoting cultural sensitivity among providers (Bartels, 2002).

**Cultural Competence**

Cultural competence is defined differently by various people and organizations, although there is substantial overlap in definitions (Brach & Fraser, 2000). A working definition of cultural competence was developed in 1988 by Terry Cross and colleagues and is frequently cited as a central definition. It states that cultural competence is “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals to work effectively in cross-cultural situations” (Cross et al., 1989, p. iv). Most of the other definitions of cultural competence that exist are variations of this one developed by Cross. Both the National Center for Cultural Competence (NCCC) and the OMH utilize this definition.

Leininger (1978) posited that there are two main factors that promote cultural development: maintaining a broad, objective, and open attitude towards individuals and their culture and seeing all individual differences. These two concepts provide an initial guide to beginning to conceptualize cultural competence and its utility as a mechanism to
eliminate health disparities in the health care system. The NCCC has identified the following six reasons why it is important to support implementing cultural competence in the health care system: 1) the perception of illness and disease and their causes varies by culture; 2) diverse belief systems exist related to health, mental health, healing and well-being; 3) culture influences help-seeking behaviors and attitudes toward primary care providers; 4) individual preferences affect traditional and other approaches to primary care; 5) patients must overcome personal experiences of biases within primary care systems; and 6) primary care providers from culturally and linguistically diverse groups are under-represented in current service-delivery systems.

Cultural competence must address more than race and ethnicity. The concept of cultural competence is multidimensional and multifaceted (e.g. Ngo-Metzger et al., 2006; Suzuki, McRae, & Short, 2001; Sue, 2001). It does not mean to merely possess knowledge of different cultures and respect for different cultural perspectives. It requires obtaining and utilizing skills effectively in cross-cultural situations (Cross et al. 1989; Tirado, 1996). Lastly, integral to the efforts that focus on enhancing cultural competence is an ongoing commitment to practice and policies that are appropriate for diverse populations (Andrulis, Delbanco, & Shaw-Taylor, 1999; Cross et al., 1989).

As a means of promoting the application of cultural competence, a set of culturally and linguistically appropriate service (CLAS) standards were developed by the DHHS Office of Minority Health (DHHS OMH, 2001) (Appendix B). These standards were originally conceived by Guadalupe Pacheco and the purpose of these standards is to “systematically advance the provision of health and social services to minority populations who encounter barriers to accessing and receiving effective health and social
services and to be inclusive of all cultures” (Putsch, SenGupta, Sampson, & Tervalon, 2003, p. 5). The standards are organized by the following themes: culturally competent care (Standards 1 through 3); language access services (Standards 4 through 7); and organizational supports for cultural competence (Standards 8 through 14). Standards 1 through 7 address interventions that have the most direct impact on clinical care. Standards 8 through 14 address organizational structures, policies and processes that support the implementation of standards 1 through 7. Standards 4 through 7 are federal mandates for recipients of federal funds, which include Medicare and Medicaid. Although these are only guidelines, they serve as a framework for creating culturally competent programs.

_Lack of Diversity among Health Care Professionals_

There is a significant lack of ethnic minority individuals serving as health care professionals and consequently the current health care workforce does not reflect the diverse American population. According to the Minority Affairs Consortium of the AMA, 3.5 percent and five percent of the total physicians in the country are African American/Black and Hispanic/Latino, respectively, compared to the 55.8 percent that are Non-Hispanic White (AMA, 2008). In 2000, African Americans/Blacks comprised less than nine percent of nurses and five percent of dentists (Sullivan Commission, 2004). The lack of health care providers from diverse backgrounds limits the number of clients that can be matched with a provider of the same race/ethnicity. Minority physicians have been found to be more likely to provide care to minority, poor, and sicker patients (e.g. Lloyd & Johnson, 1982; Moy & Bartman, 1995; Xu et al., 1997). In addition, African American/Black and Hispanic/Latino physicians are more likely to provide care to
African American/Black, Hispanic/Latino, and low income patients than Non-Hispanic White physicians (Komaromy et al., 1996). Previous research has noted that minority employees tend to provide health care services that are more congruent with the needs of minority populations (Brach & Fraser, 2000). Health care facilities with diverse health staffs provide patients with more opportunities to be matched providers of the same race/ethnicity.

**Racial/Ethnic Concordance**

Racial/ethnic concordance, also referred to as matching, occurs when a client is matched, deliberately or by chance, with a provider of the same race or ethnicity. Previous research has highlighted racial/ethnic concordance as an effective cultural competence technique (e.g. Pope-Davis et al., 2002) that aids in the reduction of health disparities (Komaromy et al. 1996; Saha, et al., 2003). Previous research has found that African American/Black, Asian American, and Mexican American clients that utilized programs that were ethnic specific had a higher return rate and stayed in the treatment program longer than those that used the mainstream services (Leong, 2007). Previous research has also found that many clients have a preference to be matched with a provider of the same race (Pope-Davis et al., 2002; Schnitker & Liang, 2006).

There are some caveats that are associated with racial/ethnic concordance that should be addressed in research. Some studies have noted that being in a match only matters to patients who prefer to be matched (Schnittker & Liang, 2006). Howard and colleagues (2001) found little evidence that racial/ethnic concordance had an effect on care, use of services, and patient satisfaction. There is also some concern about the
effectiveness of racial/ethnic concordance for all patients, regardless of race/ethnicity (Stepanikova, 2006).

Additional factors that can affect a client’s preference to be in a match, such as culture and previous experiences with the medical system, should also be considered. Historically, many older African Americans/Blacks have displayed a mistrust of the health care system. The research literature has noted that this mistrust may stem from several historical events and circumstances. Some researchers, for example, have speculated that this distrust of doctors may have its origins in the Tuskegee Syphilis Experiment, where African American/Black men did not receive proper treatment for syphilis; however the history of this mistrust may date back to slavery (Corbie-Smith, Thomas, & St. George, 2002). There is evidence that physicians used enslaved African Americans/Blacks to perform experimental, and often painful, medical procedures (Gamble, 1997).

In addition to having a distrust of the medical system, many African Americans/Blacks perceive African American/Black physicians to be inferior to Non-Hispanic White physicians (Charatz-Litt, 1992). The reasons for this perception vary, but may in part result from the historical disadvantages in obtaining quality education. This brings into question how effective being in a racial/ethnic match with a health care provider would be among older African Americans/Blacks. Based on the history of African Americans/Blacks with the medical system, more research is needed to determine if racial/ethnic concordance is effective for all racial/ethnic groups.
Advantages of Cultural Competence

Health care programs that have implemented cultural competence strategies have found that there is an increase in “the interest and participation of both providers and patients in their health plans among racial and ethnic minority populations” (Center on an Aging Society, 2004, p. 6). It has been emphasized by both the AMA and the AAMC that physicians should received education on how to deliver culturally competent health care (AMA, 2004; AAMC, 2002). The benefits of incorporating cultural competence techniques into the health care system are that it can lead to changes the behaviors of both health care providers and clients by improving communication, increase patient trust of their providers, and create an understanding of the differences among racial/ethnic groups (Brach & Fraser, 2000). These changes could in turn lead to more culturally appropriate services such as improved prevention and screening activities, better informed diagnoses, and culturally specific client-centered education on treatment regimens (Brach & Fraser, 2000).

One of the potential negative effects of not providing culturally competent care is the potential conflict between clients and providers that could lead to overall poorer quality of care (Remus, 2004). In addition, it is possible for financial risks to arise, depending on the number and size of the minority population in the community that is utilizing the services provided (Remus, 2004). If an organization chooses to not make improvements in the cultural and linguistic appropriateness of the services being provided, ethnic minorities will be less inclined to utilize these services, leading to a decrease in revenue. Experts feel that cultural competence can improve health outcomes
and improve the costs of care by making it more effective and efficient (Betancourt et al., 2005).

**Need for More Cultural Competence Research**

Despite the positive outcomes associated with cultural competence, there are some issues that must be considered. While some research has shown the potential benefits associated with cultural competence, more studies are needed to prove the true effectiveness of it in the health care system (Brach & Fraser, 2000). Although previous research has established an agenda for creating and implementing cultural competence interventions, significant research is needed to order to thoroughly examine the effectiveness of these interventions, particularly from the perspective of the clients (Anderson et al., 2003; Geron, 2002; Perloff, Bonder, Ray, Ray, & Siminoff, 2006). There is a lack of research examining the client’s perspective of cross-cultural encounters in the clinic (Pope-Davis et al., 2002). By asking questions about client satisfaction with services, information can be gathered about the strengths and weaknesses of various providers and organizations. The present dissertation seeks to address these issues and provide information from the client’s perspective as part of an effort to improve the overall quality of the health care services being provided.
CHAPTER TWO: PREDICTORS OF CLIENT-PROVIDER RACIAL/ETHNIC CONCORDANCE

Introduction

Previous research has noted that throughout the most of the twentieth century ethnic minorities received substandard health care, and this trend continues in the twenty-first century (LaVeist & Nuru-Jeter, 2002; Smedley, Stith, & Nelson, 2003). Experiences with substandard care, in turn, have been suggested to lead to disparities in both access to and utilization of health care services and a general mistrust of the medical system by racial/ethnic minorities (LaVeist, Nickerson, & Bowie, 2000b; LaViest & Nuru-Jeter, 2002). This climate of distrust created additional barriers to the provision of quality care, and brought attention to the need for efforts to improve health care for racial/ethnic minorities. One of the main efforts to improve the level of trust and to enhance the overall cultural sensitivity of services consists of programs and initiatives designed to increase the number of ethnic minority physicians in the health care system (Carlisle, Gardner, & Liu, 1998; LaVeist & Nuru-Jeter, 2002; Libby, Zhou, & Kindig, 1997). Evaluations of these efforts have found that minority physicians were more likely to provide care to minority, poor, and sicker patients (e.g. Lloyd & Johnson, 1982; Moy and Bartman, 1995; Xu et al., 1997). Komaromy and colleagues (1996), for example, found that African American/Black and Hispanic/Latino physicians were more likely than their Non-Hispanic White counterparts to care for African American/Black, Hispanic/Latino, and low income patients.
There is some evidence that health care facilities with more minority employees are more likely to organize the delivery of health care services in ways that are more congruent with the needs of minority populations (Brach & Fraser, 2000). Having a higher proportion of minority employees also allows providers to connect with more patients from diverse backgrounds. Research suggests that by having a diverse health care staff more patients can be matched with, and receive care from, providers of the same race/ethnicity. Previous research has found that client-provider racial/ethnic concordance may result in an increase in access to services (Nickens, 1992). Studies have also found that many clients prefer to be matched with a provider of the same race/ethnicity (Pope-Davis et al., 2002; Schnittker & Liang, 2006) and that racial/ethnic concordance significantly aids in the reduction of health disparities (Komaromy et al. 1996; Saha, Arbelaez, & Cooper, 2003).

While there is research that supports the need for client-provider racial/ethnic concordance, there are also studies reporting that racial/ethnic concordance may not be effective. Schnittker and Liang (2006) found that racial/ethnic concordance only matters to patients who have a preference to be in a match with a health care provider of the same race/ethnicity. Similarly, little evidence was found by Howard and colleagues (2001) to support a relationship between racial/ethnic concordance and the effectiveness of care, use of services, or patient satisfaction. Stepanikova (2006) found that the importance of racial/ethnic concordance varies by the racial/ethnic background of the patient. This suggests that racial/ethnic concordance may not be universally effective for clients of all racial/ethnic backgrounds. These mixed results suggest that more research is needed in
order to fully understand the effects of racial/ethnic concordance on client-provider interactions and its application in the health care system (Schnittker & Liang, 2006).

Given the need for more research, the purpose of the present study was to gain a better understanding of the factors associated with whether or not there was a racial/ethnic match between the client and their health care provider. We hypothesized that the client-level factors, both socio-demographic and health-related, that predict whether or not a client was in a match will vary across the four racial/ethnic groups. The analyses were conducted by controlling for potential variables that might be linked to being in a match with a provider of the same race/ethnicity, such as the language the interview was conducted in and health-related variables.

Methods

The data used in this study came from the Commonwealth Fund 2001 Health Care Quality Survey conducted by Princeton Survey Research Associates (PSRA) in 2001. The survey consisted of a 25-minute telephone interview and the participant could choose to be interviewed in English, Spanish, Cantonese, Mandarin, Korean, or Vietnamese. The sample was drawn by using a standard list-assisted random digit dialing (RDD) methodology. The complete sample obtained as a result of this was then divided into sub-samples, based on the densities of African Americans, Hispanics, and African American households.

The interviews were conducted from April 30th through November 5, 2001. Up to 20 attempts were made to contact people to invite them to participate in the survey. There were a total of 6,722 respondents, representing a 54.3 percent survey response rate. This survey was designed with the intent of being able to generalize to the U.S. adult
population age 18 and older, and to allow separate analyses of responses by racial/ethnic group. Additional information about the methodology employed to collect this data is available elsewhere (see Princeton Survey Research Associates, 2002).

**Sample**

For the purpose of the present study, we selected only those individuals aged 50 and older that reported that they had utilized health care services within the past two years. The final sample included 2,075 respondents, representing the following four racial/ethnic groups: Non-Hispanic White (n= 1,417), African American/Black (n= 330), Hispanic/Latino (n= 204), and Asian American (n=124).

**Measures**

*Outcome Variable*

*Client-Provider Racial/Ethnic Concordance.* If the race/ethnicity of the provider was the same as the race/ethnicity of the respondent, a match was coded (0=no,1=yes).

*Independent variables*

*Socio-Demographic Variables.* The following socio-demographic variables were included in the analysis: age, gender, marital status, education, and income. The language of interview was used as a proxy for English language fluency (0=interview not conducted in English, 1=interview conducted in English).

*Health-Related Variables.* The health-related variables included were health insurance status, self-rated health, and the total number of health conditions. For insurance, respondents were asked if they had any form of health insurance or a health plan, including any private health insurance plan or a government program such as Medicare or Medicaid (0=no health insurance coverage, 1=have health insurance)
coverage). For health status, a five point Likert scale was provided for respondents to rate their self-rated health (1=poor, 2=only fair, 3=good, 4=very good, 5=excellent). For health conditions, respondents were asked to indicate if they had ever been told by their health care provider that they had high blood pressure, heart attack or any other heart disease, cancer, diabetes or sugar diabetes, anxiety or depression, obesity, or asthma. The number of conditions was summated to represent the total number of health conditions.

**Analysis**

Bivariate correlations were used to examine the relationships among study variables and to detect potential multicollinearity. A series of logistic regressions were conducted in order to identify factors related to the presence or absence of being in a match. The regressions were performed separately on each of the four racial/ethnic groups. The variables were entered in successive models in an order that reflected the immediacy and stability of the variables, with more stable or temporally distant variables in the earlier sets. The order of the models was: socio-demographic variables (age, gender, marital status, education, and income), language of the interview, and health-related variables (health insurance, self-rated health, and health conditions).

**Results**

**Characteristics of the Sample**

Descriptive information on the total sample and four racial/ethnic groups is summarized in Table 1. The results highlight the differences as well as the similarities across the four groups. The ages for the total sample ranged from 50 to 99. Over half the total sample was female, over 80 percent of the sample had received a high school diploma or higher and 48.6 percent had incomes of $50,000 or less. The African
Table 1. Sample Characteristics and Group Comparisons

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Variable</th>
<th>Total sample (N=2075)</th>
<th>Non-Hispanic Whites (N=1417)</th>
<th>African Americans/Blacks (N=330)</th>
<th>Hispanics/Latinos (N=204)</th>
<th>Asian Americans (N=124)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
</tr>
<tr>
<td>Demographic variables</td>
<td>Age</td>
<td>64.9/12.16</td>
<td>65.7/12.06</td>
<td>63.9/12.09*</td>
<td>61.8/10.58***</td>
<td>63.9/14.68</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>(67.1)</td>
<td>(66.6)</td>
<td>(69.1)</td>
<td>(74.0)*</td>
<td>(56.5)*</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>(51.7)</td>
<td>(53.6)</td>
<td>(34.2)***</td>
<td>(53.4)</td>
<td>(73.4)***</td>
</tr>
<tr>
<td></td>
<td>High school and beyond</td>
<td>(81.8)</td>
<td>(87.3)</td>
<td>(70.6)***</td>
<td>(56.8)***</td>
<td>(90.3)***</td>
</tr>
<tr>
<td></td>
<td>Income (≤50K)</td>
<td>(48.6)</td>
<td>(45.7)</td>
<td>(62.0)***</td>
<td>(54.3)***</td>
<td>(35.5)**</td>
</tr>
<tr>
<td></td>
<td>Language of the interview (English)</td>
<td>(95.0)</td>
<td>(99.9)</td>
<td>(99.7)</td>
<td>(62.3)***</td>
<td>(80.6)***</td>
</tr>
<tr>
<td>Health-related Variables</td>
<td>Insured</td>
<td>(93.1)</td>
<td>(95.7)</td>
<td>(86.4)***</td>
<td>(84.3)***</td>
<td>(95.2)</td>
</tr>
<tr>
<td>Outcome</td>
<td>Self-rated health (Very good or higher)</td>
<td>3.26/1.14</td>
<td>3.36/1.13</td>
<td>2.97/1.08***</td>
<td>2.89/1.19***</td>
<td>3.26/1.14</td>
</tr>
<tr>
<td></td>
<td>Health conditions</td>
<td>1.20/1.90</td>
<td>1.18/1.17</td>
<td>1.39/1.21**</td>
<td>1.25/1.24</td>
<td>.81/1.14**</td>
</tr>
<tr>
<td></td>
<td>Client-provider racial/ethnic concordance</td>
<td>(54.9)</td>
<td>(68.4)</td>
<td>(23.0)***</td>
<td>(20.1)***</td>
<td>(43.5)***</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001

Comparative analyses (t or χ² test) were conducted by comparing each racial/ethnic group with Non-Hispanic Whites.
Americans/Blacks and Hispanics/Latinos appear to be less advantaged than the Non-Hispanic Whites. Compared to the Non-Hispanic Whites, African Americans/Blacks and Hispanics/Latinos were significantly younger, had lower levels of education, lower incomes, more health conditions, had lower self-rated health, and were less likely to have health insurance. African Americans/Blacks were the least likely to be married. Hispanics/Latinos were significantly more likely than Non-Hispanic Whites to be female. Asian Americans were significantly less likely to be female, more likely to be married, more educated, more likely to have incomes higher than $50,000, and less likely to have health conditions when compared to Non-Hispanic Whites.

Patterns of Client-Provider Racial/Ethnic Concordance

The patterns of racial/ethnic concordance between clients and their health care providers are presented in Table 2. A total of 54.9 percent of the respondents were in matches with a provider of the same race/ethnicity. Probably due to the high proportion of Non-Hispanic White providers in the United States, there was close to 70 percent client-provider matches for Non-Hispanics Whites and one third or more of the clients in the other three groups had Non-Hispanic White providers. Asian Americans were the second most likely group to be in a match (43.5 percent) with a provider of the same race/ethnicity. Client-provider racial/ethnic concordance was observed in only 23 percent of African Americans/Blacks and 20.1 percent of Hispanic/Latinos. Non-Hispanic Whites and Asian Americans were the least likely to have an African American/Black provider. These findings show that racial/ethnic concordance is more likely to occur among Non-Hispanic Whites and Asian Americans than African Americans/Blacks and Hispanics/Latinos.
<table>
<thead>
<tr>
<th>Race/Ethnicity of Client</th>
<th>Non-Hispanic White</th>
<th>African American/Black</th>
<th>Hispanic/ Latino</th>
<th>Asian American</th>
<th>Other$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>969 (68.4%)</td>
<td>20 (1.4%)</td>
<td>27 (1.9%)</td>
<td>95 (6.7%)</td>
<td>85 (6.0%)</td>
</tr>
<tr>
<td>African American/Black</td>
<td>132 (40%)</td>
<td>76 (23%)</td>
<td>9 (2.7%)</td>
<td>21 (6.4%)</td>
<td>17 (5.1%)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>69 (33.8%)</td>
<td>3 (1.5%)</td>
<td>41 (20.1%)</td>
<td>19 (9.3%)</td>
<td>18 (8.8%)</td>
</tr>
<tr>
<td>Asian American</td>
<td>41 (33%)</td>
<td>0</td>
<td>3 (2.4%)</td>
<td>54 (43.5%)</td>
<td>4 (3.2%)</td>
</tr>
</tbody>
</table>

$^a$ The grouping of Other includes Native Hawaiian, other Pacific Islander, American Indian, Alaskan Native, and other. This category was only included for health care providers.
Results from the Logistic Regression on Client-Provider Racial/Ethnic Concordance

Prior to conducting multivariate analyses, bivariate correlations were assessed in order to assess potentially problematic interrelationships among the explanatory variables. The highest correlation coefficient was observed between education and income, for the Asian American group (r = 0.55, p < .001), but it was not a concern for multicollinearity (Tabachnick & Fidell, 2001).

The results of the logistic regression are presented in Table 3. The primary purpose of these analyses was to identify which variables predicted whether or not a client was in a match with a provider of the same race/ethnicity. The first set of variables addressed the socio-demographic characteristics of the clients. Gender was a significant predictor for Non-Hispanic Whites: female Non-Hispanic Whites were significantly more likely to be in a match. Younger African Americans/Blacks were significantly less likely to be in a match. In addition, both education and income were significant predictors for African Americans/Blacks: the higher educated African Americans/Blacks were significantly more likely to be in a match and lower income was associated with a lower likelihood of being in a match. None of the socio-demographic variables were significant for Hispanics/Latinos. Marital status was a significant predictor for Asian Americans: Asian Americans who were married were close to four times more likely to be in a match.

The second model set included only one variable, whether or not the language of the interview was conducted in English. A variable that would seem relevant to both the Hispanic/Latino and Asian American groups, this variable was only significant for
Table 3. *Logistic Regression Models for Client-Provider Racial/Ethnic Concordance*<sup>a</sup>

<table>
<thead>
<tr>
<th>Step/ Variable</th>
<th>Non-Hispanic White</th>
<th>African American/Black</th>
<th>Hispanic/Latino</th>
<th>Asian American</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated Probability (95% CI)</td>
<td>Estimated Probability (95% CI)</td>
<td>Estimated Probability (95% CI)</td>
<td>Estimated Probability (95% CI)</td>
</tr>
<tr>
<td>1 Age</td>
<td>0.71 (0.99, 1.02)</td>
<td>0.96(0.93, 1.00)*</td>
<td>1.02(0.97, 1.08)</td>
<td>0.95(0.90, 1.01)</td>
</tr>
<tr>
<td>Gender</td>
<td>1.45(1.02, 2.06)*</td>
<td>0.53(0.26, 1.09)</td>
<td>1.30(0.48, 3.53)</td>
<td>2.20(0.75, 6.38)</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.76(0.51, 1.12)</td>
<td>0.85(0.42, 1.72)</td>
<td>1.62(0.55, 4.76)</td>
<td>3.95(1.06, 14.70)*</td>
</tr>
<tr>
<td>Education</td>
<td>1.13(0.93, 1.37)</td>
<td>1.56(1.09, 2.25)*</td>
<td>1.12(0.70, 1.80)</td>
<td>0.56(0.28, 1.12)</td>
</tr>
<tr>
<td>Income</td>
<td>1.02(0.94, 1.10)</td>
<td>0.80(0.69, .92)**</td>
<td>0.91(0.76, 1.10)</td>
<td>0.81(0.64, 1.03)</td>
</tr>
<tr>
<td>2 Language of the interview&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>0.25(0.09, .71)**</td>
<td>0.13(0.01, 1.25)</td>
</tr>
<tr>
<td>3 Health insurance</td>
<td>2.53(1.19, 5.41)*</td>
<td>3.00(0.88, 10.30)</td>
<td>0.32(0.07, 1.50)</td>
<td>0</td>
</tr>
<tr>
<td>Self-reported health</td>
<td>1.05(0.88, 1.26)</td>
<td>0.90(0.65, 1.26)</td>
<td>1.01(0.66, 1.53)</td>
<td>0.70(0.36, 1.36)</td>
</tr>
<tr>
<td>Health conditions</td>
<td>0.89(0.76, 1.05)</td>
<td>0.94(0.70, 1.26)</td>
<td>0.87(0.56, 1.34)</td>
<td>0.82(0.51, 1.31)</td>
</tr>
</tbody>
</table>

<sup>* p < .05, ** p < .01, *** p < .001</sup>

<sup>a</sup> Comparative analyses (t or χ² test) were conducted by comparing each racial/ethnic group with Non-Hispanic Whites.

<sup>b</sup> English fluency was not included in the logistic regression models for Non-Hispanic Whites and African Americans/Blacks.
Hispanics/Latinos: those that were interviewed in Spanish were less likely to be in a match.

The last model set was related to the health of the patient. Having health insurance was a significant predictor only for Non-Hispanic Whites. These results indicate that Non-Hispanic Whites with health insurance were more than twice as likely to be in a match with a Non-Hispanic White provider. The number of health conditions and self-rated health were not significant for any of the four groups.

Discussion

The overall purpose of this study was to identify factors related to client-provider racial/ethnic concordance among Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans that participated in the 2001 Health Care Quality Survey. While a number of reports have indicated that client-provider racial/ethnic concordance is associated with better health outcomes, there have been very few studies that have examined factors that predict when racial/ethnic concordance occurs.

Differences by race/ethnicity indicated that these groups all had distinct socio-demographic backgrounds. Compared to the Non-Hispanic Whites, the African Americans/Blacks and Hispanic/Latinos were more likely to have lower incomes and less likely to have health insurance. African Americans/Blacks and Hispanics/Latinos were significantly less educated than their Non-Hispanic White counterparts. Asian Americans had the highest percentage of people receiving an education of high school and beyond. Although these findings are not unique to this study (e.g. Johnson, Saha,
Arbelaez, Beach, & Cooper 2004), they do emphasize the fact that the samples varied in terms of their potential risk and vulnerabilities.

The logistic regression models showed that the factors that predict racial/ethnic concordance between clients and providers differed across the four racial/ethnic groups. For Non-Hispanic Whites, racial/ethnic concordance was more likely to occur among women than men. Female patients are more likely than male patients to ask questions and build a partnership with their providers (Cooper-Patrick et al., 1999). For women in general it may be more important to have an open and trusting relationship with their providers, and for this reason racial/ethnic concordance may be more important to them.

Having health insurance also increased the likelihood of racial/ethnic concordance for Non-Hispanic Whites. A higher percentage of Non-Hispanic White clients in this study had health insurance when compared to African Americans/Blacks and Hispanics/Latinos, and this may have influenced this finding. This result does raise the following question: if more of the African Americans/Blacks and Hispanics/Latinos had health insurance would they be more likely to have a provider of the same race/ethnicity? Having health insurance allows clients to have more choices about the providers they are able to access, thereby increasing the possibility of racial/ethnic concordance.

Being younger and having a lower income decreased the odds of the African Americans/Blacks being in racial/ethnic matches with their provider. Those with higher levels of education, however, were 1.6 times more likely to be in a match with a provider of the same race/ethnicity. Previous research has found that people that obtain more formal education are more likely to have access to and use preventive health care (Dewar,
Higher educated African Americans/Blacks may have a preference to interact with providers of the same race due to their similar cultural backgrounds and higher educational attainment. Since these results are independent of the effects of income and health insurance, they do suggest that culture and attitudes play a role in preference and choice. These results support the notion that when people have more choices about their health care they are more likely to be in a racial/ethnic match with their provider.

The language of the interview was significant only for Hispanics/Latinos. People who were interviewed in Spanish were less likely to be in a match with a provider of the same race/ethnicity. Previous studies have found that language barriers can have a negative impact on experiences with health care for Spanish-speaking patients (e.g. Fernandez et al., 2004; Pérez-Stable, Napoles-Springer, & Miramontes, 1997; Todd, Samaroo, & Hoffman, 1993). Based on these findings, language is an important aspect of racial/ethnic concordance for Hispanics/Latinos, but paradoxically they were the least likely of the four groups in the study to be in a racial/ethnic match with their providers, despite being a disadvantaged group in terms of socio-demographic and health-related characteristics. Somewhat mitigating this result is the possibility that there may be a greater availability of Spanish-speaking providers that are not Hispanic/Latino, as well as a greater availability of translators.

Asian Americans who were married were almost four times more likely to be in a match with a provider of the same race/ethnicity. This finding should be considered in the context that Asian Americans, despite the small sample size, were more likely to be in a match than African Americans/Blacks and Hispanics/Latinos. Marriage appears to have put the Asian Americans in a particularly advantaged position with respect to
racial/ethnic concordance. This may arise, in part, from spousal involvement in health care and health care decision-making. A qualitative study by Andresen (2001) found that family members are often involved with the health care of Asian American patients. Married couples may request to receive care from an Asian American provider more often than single patients.

There are several limitations to the generalizability of this study. Only people with a regular health care provider were included in this analysis, since those who did not have a regular health care provider were not asked questions about the race/ethnicity of their provider. Another limitation was the use of the language that the interview was conducted in as a proxy for English language fluency. There were only four possible racial/ethnic categories that a respondent and the provider could be classified into, thereby limiting information available about subgroups. Although this study explored factors that predicted when racial/ethnic concordance occurs, we were not able to control for the availability of providers. Data on whether or not a client specifically asked for a provider of a certain race/ethnicity was not available in this dataset. Finally, the questionnaire was administered over the telephone and this presents a potential response bias since only people with home telephones were included. This is a noted negative aspect of conducting a telephone survey (e.g. Groves et al., 2004).

The findings from this study contribute to a growing body of literature about racial/ethnic concordance between clients and providers. According to LaViest and Nuru-Jeter (2002), very few studies have examined predictors of client-provider racial/ethnic concordance. More studies have focused on the impact of racial/ethnic concordance on various health outcomes, instead of the factors that predict when client-
provider racial/ethnic concordance occurs. Previous research has established that the literature on racial/ethnic concordance is mixed regarding the utility of it in the health care system. Knowing the differences in these factors is one of the first steps to understanding the racial/ethnic differences in racial/ethnic concordance. These finding also support the utility of pipeline programs that encourage underrepresented minorities to pursue careers in the health professions. Having a diverse work force can aid in the elimination of health disparities by allowing more racial/ethnic minority clients to have providers from similar racial/ethnic backgrounds.

Future research directions should focus on examining additional variables that can impact a client’s ability and willingness to be in a racial/ethnic match with their health care provider, such as preference. Previous studies have found evidence suggesting that having a preference for a provider of the same race/ethnicity can have an impact on satisfaction with care received (LaVeist & Nuru-Jeter, 2002). The decision-making process involved with whether or not racial/ethnic concordance occurs is an area that needs to be explored. Clients in certain geographic areas may have limited access to health care facilities and subsequently may not have a choice about the race/ethnicity of their providers. The availability of providers by geographic region should be considered. Future studies should also examine whether clients, particularly Hispanics/Latinos and Asian Americans, have a stronger preference for a provider of the same race/ethnicity or do they prefer providers that speak the same language. Including interactions between client-level variables and racial/ethnic concordance in future analyses will provide useful information about subgroups. Lastly, additional research should focus on the impact that racial/ethnic concordance can have on cultural competence. Several studies have
suggested that racial/ethnic concordance is an important cultural competence technique, but few have explored the relationship between this concordance and the perceived cultural competence of health care providers.
CHAPTER THREE: CLIENT PERCEPTIONS OF THE INTERPERSONAL SENSITIVITY OF THEIR HEALTH CARE PROVIDERS: THE POTENTIAL ROLE OF CLIENT-PROVIDER RACIAL/ETHNIC CONCORDANCE

Introduction

Over the past few decades increasing attention has been paid to racial/ethnic disparities in health, and developing methods to eliminate both behavioral and physical health disparities has become a national priority (U.S. Department of Health and Human Services [DHHS], 2000; 1991). One of the primary methods suggested to help eliminate health disparities is to enhance the cultural competence of health care providers (e.g., Carrillo, Green, & Betancourt, 1999; Like, Steiner & Rubel, 1996). Cultural competence is defined as “a set of provider-related behaviors, attitudes, and policies that come together in system in order to work effectively in cross-cultural situations” (e.g., Brach & Fraser, 2000; Cross, Bazron, Dennis, & Isaacs, 1989, p. iv). A number of studies have found that cultural competence is linked to positive outcomes such as increased client satisfaction (e.g., Fortier & Bishop, 2003), increased effectiveness of services (e.g., Campinha-Bacote, 1991), and the optimization of health care for clients (e.g., Betancourt Green, Carrillo, & Ananeh-Firempong; Giger et al., 2007; DHHS Office of Minority Health [OMH], 2001).

While most of the attention has been directed at enhancing and assessing the cultural competence of providers, several researchers have noted the importance of measuring competence from the perspective of patients and clients (e.g., Andresen, 2001;
Blanchard & Lurie, 2004; Geron 2002; Ngo-Metzger et al., 2006). Such a perspective is aligned with the “patient-centered” model of care, in which the quality of care is assessed through the eyes of the patient (Institute of Medicine, 2001; McWhinney, 1989; Ngo-Metzger et al., 2006). In this model, the underlying theme is that providers must understand care from the perspective of their clients in order to provide high-quality health care services (Creel, Sass, & Yinger, 2002). Among the proposed benefits of obtaining the client’s perspective are that it can lead to increased client satisfaction, continuous use of services, and an improvement in health outcomes (Bertrand, Hardee, Magnani, Angle, 1995; Creel, et al., 2002; Kols & Sherman 1998; Vera 1993).

The dimensions of cultural competence that have been suggested to represent the client’s perspective include communication, linguistic competence, discrimination, respect and trust (Ngo-Metzger et al., 2006). The first two dimensions are generally related to communication and have received a great deal of attention, especially with respect to the ability to communicate effectively with the client. Discrimination has generally been studied outside the area of cultural competence. The last two dimensions focus on feelings of being disrespected and having a lack of trust, which represents interpersonal sensitivity. Interpersonal sensitivity has been recognized as an important aspect of cultural competence (e.g., Hollander, 1985; Riggo, 1996) and having a lack of it has been noted as one of main sources of health disparities (e.g., Starr, 2008).

The critical role of interpersonal sensitivity in health care utilization and quality of care has been highlighted in several empirical articles and commentaries (e.g. Fox & Stein, 1991; Murray-Garcia, Schmittdiel, Grumbach, Quesenbeny, 2000; Ngo-Metzger et al., 2006; Stewart et al., 1995; Wright, Holcombe, & Salmon, 2004). For example,
Blanchard and Lurie (2004) found that perceptions of disrespect are more common among racial/ethnic minority groups than Non-Hispanic Whites, and that respondents who felt as if they were being disrespected by their providers were also more likely to delay getting medical treatment and less likely to follow the advice of their provider. In a study by Boulware and colleagues (2003), African American/Blacks were shown to have a lower level of trust with their physicians than their Non-Hispanic White counterparts. Researchers have suggested that negatively appraised interpersonal sensitivity, such as feelings of disrespect and lack of trust, may lead to various negative consequences including clients’ lack of compliance, provider ineffectiveness, limited engagement between clients and providers, and reduced quality of care (e.g., Bell at al., 2002; Ngo-Metzger et al., 2006). Despite its importance, there is a lack of empirical research on predictors of interpersonal sensitivity across diverse racial/ethnic groups, which is the major focus of the present study.

One potential predictor of perceived interpersonal sensitivity is whether a client is in a match with a health care provider of the same race/ethnicity (Pope-Davis et al., 2002). Previous research has found that racial/ethnic concordance is often associated with improvements in both subjective and self-assessed measures of provider knowledge and patient satisfaction (DHHS, 2004). Racial/ethnic concordance has been noted to increase access to services because of the “user friendliness” that may result (Nickens, 1992). Staffs with minority employees have a strong tendency to organize the delivery of health care services in ways that are more congruent with the needs of minority populations (Brach & Fraser, 2000). Some studies have found that clients prefer to be matched with a provider of the same race/ethnicity over a provider that of a different
racial/ethnic background (Pope-Davis et al., 2002; Schnittker & Liang, 2006) and that racial/ethnic concordance significantly aids in the reduction of health disparities (Komaromy et al. 1996; Saha, Arbelaez, & Cooper, 2003). Previous research has shown that patients who were matched with a provider of the same race/ethnicity were more satisfied with the services they received and tended to rate their physicians as excellent (LaVeist, Nuru-Jeter, & Jones, 2003; Saha et. al, 1999).

While some research supports the need for client-provider racial/ethnic concordance, other studies that have found contradictory results. Schnittker and Liang (2006) found that racial/ethnic concordance only matters to patients that had a preference to be in a match. Little evidence was found by Howard and colleagues (2001) to support a relationship between ethnic concordance and the effectiveness of care, use of services, or patient satisfaction (Schnittker & Liang, 2006). These mixed results suggest that more research is needed to explore the effects of racial/ethnic concordance on client-provider interactions and its application in the health care system (Schnittker & Liang, 2006).

Based on the above review as well as the general paucity of studies related to the interpersonal sensitivity component of cultural competence, the goal of the present study was (1) to explore the clients’ perceptions of their health care providers’ interpersonal sensitivity and (2) to examine the effect of racial/ethnic concordance on the perceived interpersonal sensitivity of the providers among older adults from diverse racial/ethnic backgrounds (Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans). We hypothesized that a greater level of interpersonal sensitivity would be reported when the client was in a match with a provider of the same race. Analyses were conducted with a control for potential variables that might be linked to
racial/ethnic concordance and interpersonal sensitivity such as the language of the interview and health-related variables.

Methods

The data used in this study came from the Commonwealth Fund 2001 Health Care Quality Survey conducted by Princeton Survey Research Associates (PSRA) in 2001. The survey was a 25-minute telephone interview and the participant could choose to be interviewed in English, Spanish, Cantonese, Mandarin, Korean, or Vietnamese. The sample was drawn by using a standard list-assisted random digit dialing (RDD) methodology. The sample obtained as a result of this was then divided into sub-samples, based on the densities of African Americans, Hispanics, and Asian American households.

The interviews were conducted from April 30th through November 5, 2001. Up to 20 attempts were made to contact people to invite them to participate in the survey. There were a total of 6,722 respondents, representing a 54.3 percent survey response rate. This survey was designed with the intent of being able to generalize to the U.S. adult population age 18 and older, and to allow separate analyses of responses by racial/ethnic group. Additional information about the methodology employed to collect this data is available elsewhere (see Princeton Survey Research Associates, 2002).

Sample

For the purpose of the present study, we selected only those individuals aged 50 and older that reported that they had utilized health care services within the past two years. The final sample included 2,075 respondents, representing the following four racial/ethnic groups: Non-Hispanic White (n= 1,417), African American/Black (n= 330), Hispanic/Latino (n= 204), and Asian American (n=124).
**Measures**

**Outcome Variable**

*Perceived Interpersonal Sensitivity.* After a thorough review, the following three questions from the survey were selected to represent interpersonal sensitivity: How much confidence and trust did you have in the doctor treated you? (1=none at all, 2=not too much, 3=fair amount, 4=great deal); Did the doctor treat you with respect and dignity (1=none at all, 2=not too much, 3=fair amount 4=great deal); I feel that my doctor understands my background and values. (1=strongly disagree, 2=Somewhat disagree, 3=Somewhat agree, 4=strongly agree). Internal consistency for these three items was 0.70, 0.62, 0.62, and 0.56, respectively, for the Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans. These alpha levels indicate minimal but acceptable reliability. An exploratory factor analysis conducted on the three items extracted a single solution for all racial/ethnic groups. These variables were then combined into a composite variable representing the client’s perceived interpersonal sensitivity of their provider.

**Independent Variables**

*Client-Provider Racial/Ethnic Concordance.* If the race/ethnicity of the provider was the same as the race/ethnicity of the respondent then it was coded in a binary format as a match (0=no, 1=yes).

*Socio-Demographic Variables.* The following socio-demographic variables were included in the analysis: age, gender, marital status, education, and income. The language of interview was used as a proxy for English language fluency (0=interview not conducted in English, 1=interview conducted in English).
**Health-Related Variables.** The health-related variables included in the analyses were health insurance status, self-rated health, and the total number of health conditions. Respondents were asked if they had any form of health insurance or a health plan, including any private health insurance plan or a government program such as Medicare or Medicaid (0=no health insurance coverage, 1=have health insurance coverage). A five-point Likert scale was provided for respondents to indicate their self-rated health (1=poor, 2=only fair, 3=good, 4=very good, 5=excellent). Respondents were asked to indicate if they had ever been told by their health care provider that they had any of the following conditions: high blood pressure, heart attack or any other heart disease, cancer, diabetes or sugar diabetes, anxiety or depression, obesity, or asthma. Each condition that a respondent indicated that they had was summated to represent the total number of health conditions.

**Analysis**

Bivariate correlations were used to examine the relationships among study variables and to detect potential multicollinearity. A series of hierarchical linear regressions were conducted in order to determine significant predictors of interpersonal sensitivity. The regressions were performed separately on each of the four racial/ethnic groups. The variables were entered into the model in an order that reflects differences in the immediacy and stability of the variables, with variables that are more stable in the earlier sets and the variables that can change over time in the subsequent steps: demographic variables (age, gender, marital status, education, and income), language of the interview, health-related variables (health insurance, self-rated health, and health conditions), and client-provider racial/ethnic concordance.
Results

Characteristics of the Sample

Descriptive information on the total sample and four racial/ethnic groups is summarized in Table 4, as well as results from the comparative analysis between Non-Hispanic Whites and each of the racial/ethnic groups. The ages for the total sample ranged from 50 to 99. More than half the total sample was female. Over 80 percent of the sample had received a high school diploma or higher and 48.6 percent had incomes of $50,000 or less. Africans Americans/Blacks were the least likely to be married. Compared to the Non-Hispanic Whites, African Americans/Blacks and Hispanics/Latinos were significantly younger, had lower levels of education, had lower incomes, had more health conditions, were less likely to rate their health as very good or higher, and were less likely to have health insurance. Hispanics/Latinos were significantly more likely than the Non-Hispanic Whites to be female. Asian Americans, compared to Non-Hispanic Whites, were significantly less likely to be female, more likely to be married, more educated, more likely to have incomes higher than $50,000, and less likely to have health conditions. All three groups were significantly less likely than their Non-Hispanic White counterparts to be in a match with a provider of the same race/ethnicity. Hispanics/Latinos and Asian Americans were both less likely than Non-Hispanic Whites to perceive their providers as having high levels of interpersonal sensitivity. African Americans’/Blacks’ perception of their providers’ interpersonal sensitivity, on the other hand, was not significantly different from the Non-Hispanic Whites.
Table 4. Sample Characteristics and Group Comparisons

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Variable</th>
<th>Total sample (N=2075)</th>
<th>Non-Hispanic Whites (N=1417)</th>
<th>African Americans/Blacks (N=330)</th>
<th>Hispanics/Latinos (N=204)</th>
<th>Asian Americans (N=124)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
<td>Mean/SD (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64.9/12.16</td>
<td>65.7/12.06*</td>
<td>63.9/12.09**</td>
<td>61.8/10.58***</td>
<td>63.9/14.68</td>
</tr>
<tr>
<td>**Demographic</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>(67.1)</td>
<td>(66.6)</td>
<td>(69.1)</td>
<td>(74.0)*</td>
<td>(56.5)*</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>(51.7)</td>
<td>(53.6)</td>
<td>(34.2)**</td>
<td>(53.4)</td>
<td>(73.4)**</td>
</tr>
<tr>
<td></td>
<td>Beyond high school</td>
<td>(81.8)</td>
<td>(87.3)</td>
<td>(70.6)**</td>
<td>(56.8)**</td>
<td>(90.3)**</td>
</tr>
<tr>
<td></td>
<td>Income (≤50K)</td>
<td>(48.6)</td>
<td>(45.7)</td>
<td>(62.0)**</td>
<td>(54.3)**</td>
<td>(35.5)**</td>
</tr>
<tr>
<td></td>
<td>Language of the interview</td>
<td>(95.0)</td>
<td>(99.9)</td>
<td>(99.7)</td>
<td>(62.3)**</td>
<td>(80.6)**</td>
</tr>
<tr>
<td></td>
<td>Insured</td>
<td>(93.1)</td>
<td>(95.7)</td>
<td>(86.4)**</td>
<td>(84.3)**</td>
<td>(95.2)</td>
</tr>
<tr>
<td>**Health-related</td>
<td>Self-rated health (Very good</td>
<td>3.26/1.14</td>
<td>3.36/1.13</td>
<td>2.97/1.08***</td>
<td>2.89/1.19***</td>
<td>3.26/1.14</td>
</tr>
<tr>
<td>variables</td>
<td>or higher)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health conditions</td>
<td>1.20/1.90</td>
<td>1.18/1.17</td>
<td>1.39/1.21**</td>
<td>1.25/1.24</td>
<td>0.81/1.14**</td>
</tr>
<tr>
<td></td>
<td>Client-provider racial/ethnic</td>
<td>(54.9)</td>
<td>(68.4)</td>
<td>(23.0)**</td>
<td>(20.1)**</td>
<td>(43.5)**</td>
</tr>
<tr>
<td></td>
<td>concordance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Major Independent</td>
<td>Interpersonal sensitivity</td>
<td>11.09/1.35</td>
<td>11.14/1.33</td>
<td>11.21/1.24</td>
<td>10.86/1.53**</td>
<td>10.59/1.38**</td>
</tr>
<tr>
<td>variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

*Comparative analyses (t or χ² test) were conducted by comparing each racial/ethnic group with Non-Hispanic Whites.
**Bivariate Correlations**

Prior to conducting the multivariate analyses, bivariate correlations were assessed for each of the four subgroups. Table 5 highlights the correlations between all of the predictive variables and interpersonal sensitivity for each of the four racial/ethnic groups.

Table 5. *The Correlation of Independent Variables with Perceived Interpersonal Sensitivity*

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Variable</th>
<th>Non-Hispanic Whites</th>
<th>African Americans/Blacks</th>
<th>Hispanics/Latinos</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-Demographic</td>
<td>Age</td>
<td>0.10***</td>
<td>0.02</td>
<td>-0.06</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-0.03</td>
<td>0.05</td>
<td>0.05</td>
<td>-0.60</td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.11</td>
<td>-0.22*</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td>0.02</td>
<td>-0.05</td>
<td>0.07</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Language of the interview</td>
<td>-0.02</td>
<td>-0.04</td>
<td>-0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>Health-related</td>
<td>Health insurance</td>
<td>0.09**</td>
<td>-0.03</td>
<td>0.02</td>
<td>0.19*</td>
</tr>
<tr>
<td></td>
<td>Self-rated health</td>
<td>0.03</td>
<td>0.06</td>
<td>0.20**</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>Health conditions</td>
<td>0.04</td>
<td>0.09</td>
<td>0.06</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>Client-provider racial/ethnic concordance</td>
<td>0</td>
<td>0.01</td>
<td>0.19*</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001

Age was associated with interpersonal sensitivity for Non-Hispanic Whites. None of the variables included in the study were associated with interpersonal sensitivity for African Americans/Blacks. For Hispanics/Latinos, higher self-rated health and being in a client-
provider match were both associated with interpersonal sensitivity. Lastly, having health insurance was associated with interpersonal sensitivity for Asian Americans. The highest correlation coefficients between all the variables included in the study was observed between education and income ($r = 0.55, p < .001$) in the Asian American group, but these correlations were not at levels that raised concerns about multicollinearity (Tabachnick & Fidell, 2001).

**Results from the Hierarchical Regression Models of Perceived Interpersonal Sensitivity**

The results of the hierarchical regression analyses are presented in Table 6. Model 1 included variables related to the socio-demographic characteristics of the client. For Non-Hispanic Whites, advanced age was associated with a greater perceived interpersonal sensitivity. For Asian Americans, those who were less educated reported a greater level of perceived interpersonal sensitivity of their provider. For African Americans/Blacks and Hispanics/Latinos, none of the socio-demographic indicators were found to be significant.

The second model included only one new variable, whether or not the language of the interview was conducted in English or not. The variable was not included in the models for Non-Hispanic Whites and African Americans due to a lack of variance. Significance was only observed in Hispanics/Latinos: those who were interviewed in Spanish were more likely to report greater levels of perceived interpersonal sensitivity.

For the third model, the variables included were related to the health of the respondent. Self-rated health was a significant predictor for Non-Hispanic Whites and Hispanics/Latinos. The number of health conditions was significant only for Hispanics/Latinos, indicating that Hispanics/Latinos with more health problems felt that
Table 6. *Regression Models of Perceived Interpersonal Sensitivity*\textsuperscript{a}

<table>
<thead>
<tr>
<th>Step/ Variable</th>
<th>Non-Hispanic Whites</th>
<th>African Americans/Blacks</th>
<th>Hispanics/Latinos</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B ( \Delta R^2 )</td>
<td>( \beta ) ( \Delta R^2 )</td>
<td>( \beta ) ( \Delta R^2 )</td>
<td>( \beta ) ( \Delta R^2 )</td>
</tr>
<tr>
<td>1 Age</td>
<td>0.10(^{**}) 0.02(^{*}) 0.05 0.01</td>
<td>-0.16 0.06 0.13</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.02                0.03</td>
<td>0.12</td>
<td>-0.23</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>0.06                 -0.01</td>
<td>-0.13</td>
<td>-0.10</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-0.06                0.03</td>
<td>-0.22</td>
<td>-0.28(^{*})</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>0.03                 -0.04</td>
<td>0.16</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>2 Language of the interview(^{b})</td>
<td>- - - -</td>
<td>-0.22(^{<em>}) 0.04(^{</em>})</td>
<td>-0.13 0.01</td>
<td></td>
</tr>
<tr>
<td>3 Health insurance</td>
<td>0.03 0.01 0.02 0.02</td>
<td>0.08 0.10(^{**}) -0.06</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Self-rated health</td>
<td>0.07 0.15 0.28(^{**})</td>
<td>0.30(^{**})</td>
<td>-0.11</td>
<td></td>
</tr>
<tr>
<td>Health conditions</td>
<td>0.05 0.10 0.30(^{**})</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Client-provider racial/ethnic concordance</td>
<td>-0.03 0 0 0</td>
<td>0.19(^{<em>}) 0.03(^{</em>})</td>
<td>-0.04 0</td>
<td></td>
</tr>
<tr>
<td>Total ( R^2 )</td>
<td>0.03                 0.03</td>
<td>0.23(^{*})</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

\( ^{*} p < .05, \text{ **} p < .01, \text{ ***} p < .001 \)

\( ^{a}\) The \( \beta \) values represent the values when they were entered into the hierarchical regression model.

\( ^{b}\) Language of the interview was not included in the hierarchical linear regression models for Non-Hispanic Whites and African Americans/Blacks.
their providers had higher levels of interpersonal sensitivity. Health insurance status was not significant for any of the four groups.

The last variable entered examined the effect of being in a match with a provider of the same race/ethnicity. This variable was significant only for Hispanics/Latinos, indicating that Hispanics/Latinos that were in a match with a health care provider of the same race/ethnicity felt their providers had more interpersonal sensitivity.

In addition to these five steps, several interaction terms were created that contrasted all of the predictive variables with whether or not a client had a provider of the same race/ethnicity. These interaction terms were entered one at a time into the models. No significant interactions were found and therefore are not reported.

Discussion

The focus of this study was on the perception that clients had of how much interpersonal sensitivity their health providers displayed. Interpersonal sensitivity has been cast as an important component of cultural competence, but to date has received relatively little empirical attention. This study examined interpersonal sensitivity of health care providers and its correlated factors among older Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans that participated in the 2001 Health Care Quality Survey.

Comparisons of characteristics of each of the groups revealed interesting, but largely expected differences. Compared to the Non-Hispanic Whites, the African Americans/Blacks and Hispanic/Latinos were more likely to have lower incomes, less likely to have health insurance, and less likely to be in a match with a provider of the same race/ethnicity. African Americans/Blacks and Hispanics/Latinos were significantly
less educated than their Non-Hispanic White counterparts. Asian Americans had the highest percentage of people receiving an education of high school and beyond. Both Hispanics/Latinos and Asian Americans, when compared to Non-Hispanic Whites, viewed their providers as having significantly lower levels of interpersonal sensitivity.

The hierarchical regression models for interpersonal sensitivity indicated that the factors that predict client opinions about their health care providers vary by race/ethnicity. These results are in accordance with past findings suggesting that differences in health care preferences and values may vary by race/ethnicity (e.g., Ngo-Metzger et al., 2006; Sciegaj, Capitman, & Kyriacou, 2004; Weech-Maldonado, Dagga & Hays, 2004). Self-rated health was a common predictor for Non-Hispanic Whites, African Americans/Blacks, and Hispanics/Latinos. None of the factors were significant across all four groups. And, despite the fact that previous studies have indicated that health insurance status has an impact on the quality of health care received (e.g. Institute of Medicine, 2002), insurance status was not a significant predictor in this study.

This study also sought to examine the effect of racial/ethnic concordance on interpersonal sensitivity and whether or there were variations by race/ethnicity. The results indicate that being in a match with a provider of the same race/ethnicity is very important for Hispanics/Latinos, but not for the other three groups. As previous research has suggested, this finding could be based on the ability of the provider to communicate effectively with their clients (Schnittker & Liang, 2006). Racial/ethnic concordance did not explain significant portions of the variance for the African American/Black and Asian American samples. It is also plausible that some additional factors not included in this study, such as acculturation, may account for this difference.
The results from this analysis also indicate that language proficiency is a concept independent from that of racial/ethnic concordance. Language was analyzed separately from racial/ethnic concordance in the regression analysis and racial/ethnic concordance was still significant.

The study had several limitations that must be addressed. First, a universal measure of cultural competence does not exist and therefore measures vary by research study. Secondly, there was no accurate way to assess English fluency in the study. The language of the interview served as a proxy because the there was very little variation with the English fluency variable, indicating that most of the sample was fluent in English, despite significant proportion of the respondents being interviewed in other languages. Lastly, the questionnaire was administered over the telephone and this presents a potential response bias since only people with home telephones were included.

Overall, the findings from this study contribute to a growing body of literature about cultural competence. Cultural competence is an emerging concept and this study provides empirical information about the factors that affect how much interpersonal sensitivity - a potentially important domain of cultural competence - clients perceive their providers to have. It is also one of a very few studies that seeks to examine the effects of client-provider racial/ethnic concordance on interpersonal sensitivity. The racial/ethnic differences presented by the regression models support the current understanding that health care beliefs and preferences varies by race/ethnicity. Finally, this study shows that cultural competence is a complex and multi-domain concept. The affect of cultural competence on clients may vary by racial/ethnic group and should be understood in this complexity before it is implemented in the health care system.
Future research directions should focus on examining additional variables that can impact a client’s perception of their provider’s interpersonal sensitivity, such as service utilization patterns. Perceptions of interpersonal sensitivity could also vary by the type of provider and future studies should account for this. In addition, studies should compare perceptions of interpersonal sensitivity among providers that have undergone some cultural competence training to those that have not. Lastly, future research directions should examine the effects of interpersonal sensitivity on other health outcomes, such as satisfaction with care received.
CHAPTER FOUR: OVERALL SATISFACTION WITH CARE RECEIVED: THE POTENTIAL ROLE OF CLIENT-PROVIDER RACIAL/ETHNIC CONCORDANCE AND INTERPERSONAL SENSITIVITY

Introduction

Satisfaction with care has been cited as an important outcome for assessing the quality of care received (Donabedian, 2003; Marcinowicz, Chlabicz, & Grebowski, 2009). Patient satisfaction has been used by researchers to help identify and develop strategies to improve the delivery of care (Coulter, 2003; Donabedian, 2003; Marcinowicz et al., 2009). Satisfaction is also associated with critical patient behaviors, including health services utilization (e.g. LaViest & Nuru-Jeter, 2002; Roghmann, Hengst, & Zastowny, 1979; Zastowny, Roghmann, & Cafferata, 1989) and compliance with a medical regimen (e.g. LaViest & Nuru-Jeter, 2002, Smith, Ley, Seale, & Shaw, 1987).

Among the several factors that have been found to predict satisfaction with care received is cultural competence. Satisfaction has been viewed as a particularly important means to understanding the effectiveness of cultural competence in health care (Fortier & Bishop, 2003). Cultural competence has received considerable attention in its own right, since it has been suggested as a primary method to eliminate health disparities (e.g. Carrillo, Green, Betancourt, & 1999; Like, Steiner & Rubel, 1996). Efforts to promote cultural competence as a means of improving patient outcomes, including satisfaction, have become relatively common (e.g. Ahmed, Bates, & Romina, 2008; Betancourt, 2004;
Goode, Dunne, & Bronheim, 2006; Nishimi, 2006; Wu & Martinez, 2006). Previous studies have noted that cultural competence is linked to positive outcomes such as increased client satisfaction (e.g., Fortier & Bishop, 2003), increased effectiveness of services (e.g., Campinha-Bacote, 1991), and optimized health care for clients (e.g., Betancourt, Green, Carrillo, & Ananeh-Firemoing, 2003; Giger et al., 2007; U.S. Department of Health and Human Services [DHHS] Office of Minority Health [OMH], 2001).

A few studies report empirical evidence that cultural competence is linked to increased client satisfaction (e.g., Fortier & Bishop, 2003; Ngo-Metzger et al., 2006), but there remains a need for more research to support this claim (e.g., Anderson, Scrimshaw, Fullilove, Fielding, & Normand, 2003; Fortier & Bishop, 2003). In a review by Anderson and colleagues, for example, five cultural competence intervention studies were assessed in order to determine how effective they were in improving client satisfaction with care received. The interventions reviewed included recruiting and retaining diverse staff members, interpreter services or bilingual providers, cultural competency training for providers, use of culturally and linguistically appropriate education materials, and culturally specific healthcare settings. The results indicated that these interventions did not have a significant effect on satisfaction. Anderson and colleagues (2003) concluded that there are only a few studies that carefully examine the effect of cultural competence on satisfaction with care received. Future studies should focus on understanding the relationship between cultural competence, patient-provider interactions, and satisfaction (Perloff et al., 2006).
Part of the problem with studying the role of cultural competence in satisfaction is the lack of a universally agreed-upon operational definition of cultural competence. Racial/ethnic concordance between the client and provider has been conceptualized as an indicator of cultural competence in health care (e.g. Pope-Davis et al., 2002). Previous research has found evidence that racial/ethnic concordance is associated with a greater awareness of the culture and beliefs of the patient, resulting in improvements in the client’s assessment of provider knowledge and patient satisfaction (DHHS, 2002). Several studies have found that racial/ethnic concordance has an impact on satisfaction with care (e.g. Cooper & Powe, 2004; LaVeist & Nuru-Jeter, 2002). Clients that have received care from a provider of the same race/ethnicity generally indicated that they were more satisfied with the services they received (LaVeist, Nuru-Jeter, & Jones, 2003; Saha, Komaromy, Koespell, & Bindman, 1999).

Despite these positive associations with satisfaction, there is still some debate about the effectiveness of racial/ethnic concordance on satisfaction with care. Howard and colleagues (2001), for example, report little evidence to support a relationship between racial/ethnic concordance and satisfaction. The mixed message regarding the role of racial/ethnic concordance may stem from the lack of in-depth studies. Most of the research has focused on the role of specific correlations rather than multivariate and interactive factors.

In addition to racial/ethnic concordance, other studies have used definitions that focus on trying to identify the components of cultural competence. After conducting a thorough search of the literature, Ngo-Metzger and colleagues (2006) identified five domains that have been used to address cultural competence from the client’s
perspective: communication, linguistic competence, discrimination, respect and trust. The latter of these dimensions focus on feelings of being disrespected and having a lack of trust in one’s health care provider. These two dimensions represent interpersonal sensitivity, which has been shown to constitute an important aspect of cultural competence (e.g., Hollander, 1985; Riggo, 1996). Researchers have suggested that negatively appraised interpersonal sensitivity, including feelings of disrespect and lack of trust, may lead to negative consequences including a client’s lack of compliance, provider ineffectiveness, limited engagement between clients and providers, and reduced quality of care (e.g., Bell et al., 2002; Ngo-Metzger et al., 2006). Despite the reported importance of this construct in cultural competence, there is a lack of empirical research on the impact of interpersonal sensitivity on overall satisfaction with care received.

Another unexplored area of cultural competence and patient satisfaction lies in the level of analyses. Racial/ethnic concordance and interpersonal sensitivity may be associated with satisfaction, but little attention has been given to more complex relationships. Interactions between demographic variables, client-provider racial/ethnic concordance, and interpersonal sensitivity on satisfaction with care received are currently unexplored. There is some evidence, however, that suggests a client’s satisfaction with care can be influenced by socio-demographic variables, racial/ethnic concordance and interpersonal sensitivity. Previous research has found that socio-demographic variables such as education and income can affect a client’s perception of the quality of their medical encounters (e.g. Nápoles-Springer, Santoyo, Houston, Pérez-Stable, & Stewart, 2005). Lower income and minority populations are more likely to feel as if their providers had a lack of respect for their health care preferences (Ngo-Metzger et al.
Collins and colleagues (2002) found that populations with lower education and lower incomes experienced more difficulties interacting with their health care providers. By examining the interactions between education and income, racial/ethnic concordance, and interpersonal sensitivity, more information can be obtained about subgroups of Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans and their opinions about the health care they received.

Based on the literature reviewed above, the goal of the present study was to examine the effect of cultural competence, measured by racial/ethnic concordance and interpersonal sensitivity of providers, on overall satisfaction with care received among older adults from diverse racial/ethnic backgrounds (Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans). The direct and interactive roles of the predictive variables were examined in order to explore between-group differences and within-group variability. We hypothesized that the presence of cultural competence, being in a match with a provider of the same race/ethnicity and perceiving a provider to have a greater level of interpersonal sensitivity, would be associated with higher levels of satisfaction with care. Analyses were conducted with a control for potential variables that might be linked to satisfaction, such as the language of the interview and health-related variables.

Methods

The data used in this study came from the Commonwealth Fund 2001 Health Care Quality Survey conducted by Princeton Survey Research Associates (PSRA) in 2001. The survey was a 25-minute telephone interview and the participant could choose to be interviewed in English, Spanish, Cantonese, Mandarin, Korean, or Vietnamese. The
sample was drawn by using a standard list-assisted random digit dialing (RDD) methodology. The sample obtained as a result of this was then divided into sub-samples, based on the densities of African Americans, Hispanics, and African American households.

The telephone interviews were conducted from April 30th through November 5, 2001. Up to 20 callbacks per person were made, in order to increase the acceptance rate. A total of 6,722 respondents were ultimately recruited into the study, representing a 54.3 percent survey response rate. This survey was designed with the intent of being able to generalize to the U.S. adult population age 18 and older, and to allow separate analyses of responses by racial/ethnic group. Additional information about the methodology employed to collect this data is available elsewhere (see Princeton Survey Research Associates, 2002).

Sample

For the purpose of the present study, we selected only those individuals aged 50 and older that reported that they had utilized health care services within the past two years. The final sample included 2,075 respondents, representing the following four racial/ethnic groups: Non-Hispanic White (n= 1,417), African American/Black (n= 330), Hispanic/Latino (n= 204), and Asian American (n=124).

Measures

Outcome Variable

Satisfaction with Care Received. The survey included a single question concerning satisfaction. Respondents were asked how satisfied or dissatisfied they were
with quality of health care they had received during the last two years (1=very dissatisfied, 2=somewhat dissatisfied, 3=somewhat satisfied, 4=very satisfied).

**Cultural Competence Variables**

**Client-Provider Racial/Ethnic Concordance.** A match was coded (0=no, 1=yes) if the race/ethnicity of the provider was the same as the race/ethnicity of the respondent.

**Perceived Interpersonal Sensitivity.** After a thorough review, the following three questions from the survey were selected to represent interpersonal sensitivity: How much confidence and trust did you have in the doctor treated you? (1=none at all, 2=not too much, 3=fair amount, 4=great deal); Did the doctor treat you with respect and dignity (1=none at all, 2=not too much, 3=fair amount 4=great deal); I feel that my doctor understands my background and values. (1=strongly disagree, 2=somewhat disagree, 3=somewhat agree, 4=strongly agree). Internal consistency for these three items was 0.70, 0.62, 0.62, and 0.56, respectively, for the Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans. These alpha levels indicate minimal but acceptable reliability. An exploratory factor analysis conducted on the three items extracted a single solution for all racial/ethnic groups. These variables were then combined into a composite variable representing the client’s perceived interpersonal sensitivity of their provider.

**Control Variables**

**Socio-Demographic Variables.** The following socio-demographic variables were included in the analysis: age, gender, marital status, education, and income. The language of interview was used as a proxy for English language fluency (0=interview not conducted in English, 1=interview conducted in English).
Health-Related Variables. The health-related variables included in the analyses were health insurance status, self-rated health, and the total number of health conditions. Respondents were asked if they had any form of health insurance or a health plan, including any private health insurance plan or a government program such as Medicare or Medicaid (0=no health insurance coverage, 1=have health insurance coverage). A five-point Likert scale was provided for respondents to indicate their self-rated health (1=poor, 2=only fair, 3=good, 4=very good, 5=excellent). Respondents were asked to indicate if they had ever been told by their health care provider that they had any of the following conditions: high blood pressure, heart attack or any other heart disease, cancer, diabetes or sugar diabetes, anxiety or depression, obesity, or asthma. Each condition that a respondent indicated that they had was summated to represent the total number of health conditions.

Analysis

Bivariate correlations were used to examine the relationships among study variables and satisfaction. These correlations were also used to detect potential multicollinearity. A series of hierarchical linear regressions were conducted in order to determine significant predictors of satisfaction with care received. The regressions were performed separately on each of the four racial/ethnic groups. The variables were entered into the model in an order that reflects differences in the immediacy and stability of the variables, with variables that are more stable or antecedent in the earlier sets and the variables that can change over time in the subsequent steps: demographic variables (age, gender, marital status, education, and income), language of the interview, health-related
variables (health insurance, self-rated health, and number of health conditions), client-provider ethnic concordance, and interpersonal sensitivity.

Results

Characteristics of the Sample

Descriptive information on the total sample and four racial/ethnic groups is summarized in Table 7. The results highlight the differences as well as the similarities across the four groups. The ages for the total sample ranged from 50 to 99. Over half the total sample was female, over 80 percent of the sample had received a high school diploma or higher and 48.6 percent had incomes of $50,000 or less. Analyses were also conducted to identify areas in which the racial/ethnic groups being studied appeared to be more or less disadvantaged when compared with Non-Hispanic Whites. In these analyses, the African Americans/Blacks and Hispanics/Latinos appear to be less advantaged than the Non-Hispanic Whites.

Compared to the Non-Hispanic Whites, African Americans/Blacks and Hispanics/Latinos were significantly younger, had lower levels of education, lower incomes, more health conditions, had lower self-rated health, and were less likely to have health insurance. African Americans/Blacks were the least likely to be married. Hispanics/Latinos were significantly more likely than Non-Hispanic Whites to be female. Asian Americans were significantly less likely to be female, more likely to be married, more educated, more likely to have incomes higher than $50,000, and less likely to have health conditions when compared to Non-Hispanic Whites.

As expected, all three racial/ethnic minority groups were significantly less likely than their Non-Hispanic White counterparts to be in a match with a provider of the same
Table 7. *Sample Characteristics and Group Comparisons*\(^a\)

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Variable</th>
<th>Total sample (N=2075)</th>
<th>Non-Hispanic Whites (N=1417)</th>
<th>African Americans/Blacks (N=330)</th>
<th>Hispanics/Latinos (N=204)</th>
<th>Asian Americans (N=124)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean/SD (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic variables</td>
<td>Age</td>
<td>64.9/12.16</td>
<td>65.7/12.06</td>
<td>63.9/12.09*</td>
<td>61.8/10.58***</td>
<td>63.9/14.68</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>(67.1)</td>
<td>(66.6)</td>
<td>(69.1)</td>
<td>(74.0)*</td>
<td>(56.5)*</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>(52.0)</td>
<td>(53.8)</td>
<td>(34.5)**</td>
<td>(54.2)</td>
<td>(73.4)***</td>
</tr>
<tr>
<td></td>
<td>High school and beyond</td>
<td>(82.4)</td>
<td>(87.8)</td>
<td>(71.0)***</td>
<td>(57.4)***</td>
<td>(91.8)***</td>
</tr>
<tr>
<td></td>
<td>Income (≤50K)</td>
<td>(65.1)</td>
<td>(61.4)</td>
<td>(83.3)***</td>
<td>(74.5)***</td>
<td>(45.4)**</td>
</tr>
<tr>
<td></td>
<td>Language of the interview (English) Insured</td>
<td>(95.0)</td>
<td>(99.9)</td>
<td>(99.7)</td>
<td>(62.3)***</td>
<td>(80.6)***</td>
</tr>
<tr>
<td>Health-related variables</td>
<td>Self-rated health</td>
<td>3.26/1.14</td>
<td>3.36/1.13</td>
<td>2.97/1.08***</td>
<td>2.89/1.19***</td>
<td>3.41/1.09</td>
</tr>
<tr>
<td></td>
<td>Health conditions</td>
<td>1.20/1.90</td>
<td>1.18/1.17</td>
<td>1.39/1.21**</td>
<td>1.25/1.24</td>
<td>0.81/1.14**</td>
</tr>
<tr>
<td></td>
<td>Major independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client-provider racial/ethnic concordance</td>
<td>(54.9)</td>
<td>(68.4)</td>
<td>(23.0)***</td>
<td>(20.1)***</td>
<td>(43.5)***</td>
</tr>
<tr>
<td></td>
<td>Perceived interpersonal sensitivity</td>
<td>11.09/1.35</td>
<td>11.14/1.33</td>
<td>11.21/1.24</td>
<td>10.86/1.53*</td>
<td>10.59/1.38***</td>
</tr>
<tr>
<td>Outcome</td>
<td>Satisfaction with care received</td>
<td>3.61/0.66</td>
<td>3.63/0.64</td>
<td>3.58/0.71</td>
<td>3.58/0.72</td>
<td>3.46/0.62**</td>
</tr>
</tbody>
</table>

\* \( p < .05, \) ** \( p < .01, \) *** \( p < .001 \)

\(^a\) Comparative analyses (t or \( \chi^2 \) test) were conducted by comparing each racial/ethnic group with Non-Hispanic Whites.
race/ethnicity. Hispanics/Latinos and Asian Americans were both less likely than Non-Hispanic Whites to perceive their providers as having high levels of interpersonal sensitivity. African Americans’/Blacks’ perception of their providers’ interpersonal sensitivity, on the other hand, was not significantly different from Non-Hispanic Whites. Lastly, Asian Americans had significantly lower levels of satisfaction with the care they received when compared to Non-Hispanic Whites. African Americans/Blacks and Hispanics/Latinos had satisfaction levels similar to Non-Hispanic Whites.

Bivariate Correlations

Prior to conducting the multivariate analyses, bivariate correlations were assessed for each of the four subgroups. Table 8 highlights the correlations between all of the predictive variables and satisfaction for each of the four racial/ethnic groups. For Non-Hispanic Whites, higher income, having health insurance, higher self-rated health, and higher perceived interpersonal sensitivity were associated with satisfaction. Higher income and higher perceived interpersonal sensitivity were associated with satisfaction for African Americans/Blacks. Not being married, higher self-rated health, and higher perceived interpersonal sensitivity were associated with satisfaction for Hispanics/Latinos. Lastly, not being married and higher interpersonal sensitivity were associated with satisfaction for Asian Americans. The highest correlation coefficients between all the variables included in the study was observed between education and income ($r = 0.55, p < .001$) and interpersonal sensitivity and satisfaction ($r = 0.55, p < .001$) in the Asian American group, but these correlations were not at levels that raised concerns about multicollinearity (Tabachnick & Fidell, 2001).
Table 8. Correlation Coefficients of Independent Variables with Satisfaction with Care Received

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-Hispanic Whites</th>
<th>African Americans/Blacks</th>
<th>Hispanics/Latinos</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.04</td>
<td>-0.02</td>
<td>0.11</td>
<td>0.03</td>
</tr>
<tr>
<td>Female</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.04</td>
<td>0.03</td>
<td>-0.17*</td>
<td>-0.26**</td>
</tr>
<tr>
<td>Education</td>
<td>0.03</td>
<td>-0.05</td>
<td>-0.14</td>
<td>-0.09</td>
</tr>
<tr>
<td>Income</td>
<td>0.07*</td>
<td>0.13*</td>
<td>-0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Language of the interview</td>
<td>-0.02</td>
<td>-0.03</td>
<td>.0</td>
<td>0.17</td>
</tr>
<tr>
<td>Health insurance</td>
<td>0.08**</td>
<td>0.03</td>
<td>-0.08</td>
<td>0.05</td>
</tr>
<tr>
<td>Self-rated health</td>
<td>0.12***</td>
<td>0.08</td>
<td>0.16*</td>
<td>0.15</td>
</tr>
<tr>
<td>Health conditions</td>
<td>-0.04</td>
<td>-0.04</td>
<td>0.13</td>
<td>0.03</td>
</tr>
<tr>
<td>Client-provider racial/ethnic concordance</td>
<td>0.03</td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.14</td>
</tr>
<tr>
<td>Interpersonal sensitivity</td>
<td>0.50***</td>
<td>0.43***</td>
<td>0.53***</td>
<td>0.55***</td>
</tr>
</tbody>
</table>

* *p < .05, **p < .01, ***p < .001

Interpersonal sensitivity was a significant predictor of satisfaction for all four of the racial/ethnic groups. This correlation was highest for the Asian American group (r = .55, p < .001).

The variance inflation factor (VIF) was tested to check for potential multicollinearity between interpersonal sensitivity and satisfaction due to the strong correlations between the two variables. For Non-Hispanic Whites (1.02), African Americans/Blacks (1.03), Hispanics/Latinos (1.31), and Asian Americans (1.20), the VIF values were less than 10 indicating that there is no concern for multicollinearity between interpersonal sensitivity and satisfaction (Hair, Black, Babin, Anderson, & Tatham, 2013).
This also supports the fact that interpersonal sensitivity, as a measure of cultural competence, is a separate construct from satisfaction.

Results from the Hierarchical Regression Models of Satisfaction with Care

The results of the hierarchical regression analyses are presented in Table 9. Model 1 included variables related to the socio-demographic characteristics of the client. The four groups differed in terms of the significant correlates. For Non-Hispanic Whites, advanced age was associated with satisfaction. For African Americans/Blacks, lower education and higher income were significant predictors of satisfaction with care. Not being married and lower education were significant predictors for Hispanics/Latinos. For Asian Americans, not being married was a significant predictor of satisfaction.

The second model included only one new variable, whether or not the language of the interview was conducted in English. The variable was not included in the models for Non-Hispanic Whites and African Americans due to a lack of variance. Nearly all of the respondents in those two groups were interviewed in English. This variable was not significant for Hispanics/Latinos or Asian Americans.

The third model introduced variables related to the health of the respondent. Health insurance status was not a significant predictor for any of the four groups. Higher self-rated health was a significant predictor of satisfaction with care received for Non-Hispanic Whites and Hispanics/Latinos. The number of health conditions was significant only for Hispanics/Latinos, indicating that Hispanics/Latinos with more health problems were satisfied with the care they received.
Table 9. Hierarchical Regression Models of Satisfaction with Care Received

<table>
<thead>
<tr>
<th>Step/ Variable</th>
<th>Non-Hispanics Whites</th>
<th>African Americans/Blacks</th>
<th>Hispanics/Latinos</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>ΔR²</td>
<td>B</td>
<td>ΔR²</td>
</tr>
<tr>
<td>1 Age</td>
<td>.09*</td>
<td>.01</td>
<td>-.03</td>
<td>.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>.06</td>
<td>-.07</td>
<td>.02</td>
</tr>
<tr>
<td>Marital status</td>
<td>.03</td>
<td>-.02</td>
<td>-.33**</td>
<td>-.33**</td>
</tr>
<tr>
<td>Education</td>
<td>.01</td>
<td>-.20*</td>
<td>-.30**</td>
<td>-.30**</td>
</tr>
<tr>
<td>Income</td>
<td>.03</td>
<td>.26**</td>
<td>.06</td>
<td>.19</td>
</tr>
<tr>
<td>2 Language of the interview b</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3 Health insurance</td>
<td>.05</td>
<td>.03***</td>
<td>.02</td>
<td>.31**</td>
</tr>
<tr>
<td>Self-rated health</td>
<td>.17***</td>
<td>.03***</td>
<td>.02</td>
<td>.31**</td>
</tr>
<tr>
<td>Health conditions</td>
<td>.01</td>
<td>-.04</td>
<td>.33**</td>
<td>.33**</td>
</tr>
<tr>
<td>4 Client-provider racial/ethnic concordance</td>
<td>-.01</td>
<td>.00</td>
<td>-.01</td>
<td>.00</td>
</tr>
<tr>
<td>5 Interpersonal sensitivity</td>
<td>.47***</td>
<td>.21***</td>
<td>.50***</td>
<td>.25***</td>
</tr>
<tr>
<td>6a Education × Interpersonal sensitivity</td>
<td>.14***</td>
<td>.02***</td>
<td>.50***</td>
<td>.25***</td>
</tr>
<tr>
<td>6b Education × Racial/ethnic concordance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6c Income × Interpersonal sensitivity</td>
<td>.07*</td>
<td>.01*</td>
<td>-.14*</td>
<td>.02*</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001

a The β values represent the values when they were entered into the hierarchical regression model.

b Language of the interview was not included in the hierarchical linear regression models for Non-Hispanic Whites and African Americans/Blacks.
The variable added in the fourth model examined the effect of being in a match with a provider of the same race/ethnicity. It was included as one of the two components of cultural competence. This variable was not a significant predictor of satisfaction for any of the four racial/ethnic groups.

The last model included the perceived interpersonal sensitivity of the provider. This variable, the second component of cultural competence, was significantly associated with satisfaction for all four racial/ethnic groups. This result indicates that a client’s satisfaction with the care that they received is predicted by higher perceived interpersonal sensitivity of their health care providers.

In addition to these five steps, several interaction terms were created that contrasted two socio-demographic variables, education and income, with whether or not a client was in a match with a provider of the same race/ethnicity and with the interpersonal sensitivity measure. These interaction terms were entered one at a time into the analyses as a separate last model. Only the statistically significant interactions are presented in Table 9. Each of these significant terms contributed from 1 percent to 2 percent of the variance. Significance was found in education × interpersonal sensitivity and income × interpersonal sensitivity in the Non-Hispanic White sample; income × interpersonal sensitivity in the African American/Black sample; education × interpersonal sensitivity and income × interpersonal sensitivity in the Hispanic/Latino sample; and education × racial/ethnic concordance in the Asian American sample.

Interpretation of Interactions within Each Racial/Ethnic Group

Further analyses were conducted for each of the significant interaction terms. Each racial/ethnic group was stratified into subgroups based on the interaction factors.
Next, the correlations between the predictive variables and satisfaction were compared. Table 10 summarizes the subgroup analyses. In selecting an approach to categorizing subjects, only the extreme categories were included. For education, subjects that had not received a high school diploma were considered to be the low education group. The high education group was defined as having a college degree or higher. The lower income group was defined as having an income of $19,999 or less and the higher income group had an income of $40,000 or greater. For the Non-Hispanic White sample, the correlation between interpersonal sensitivity and satisfaction was significantly stronger in the higher educated group compared to the lower educated group. The correlation between interpersonal sensitivity and satisfaction was also stronger in the higher income group compared to the lower income group. In contrast, the correlation between interpersonal sensitivity and satisfaction in the African American/Black sample was stronger among the lower income group. For the Hispanic/Latino sample, the correlations for interpersonal sensitivity and satisfaction were stronger among the higher educated and the higher income groups, compared to the lower educated and lower income groups. Lastly, the correlations between racial/ethnic concordance and satisfaction were not significant for either of the education groups in the Asian American sample.

Discussion

The main focus of this study was on the influence of cultural competence on satisfaction with care. Cultural competence has been noted to have an impact on satisfaction with care, but there has been a lack of empirical research on this topic. The
<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Variable</th>
<th>Lower&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Higher</th>
<th>(Z_{\text{obs}})</th>
<th>Lower&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Higher</th>
<th>(Z_{\text{obs}})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic Whites</td>
<td>Interpersonal sensitivity</td>
<td>.295*** (N=159)</td>
<td>.552*** (N=421)</td>
<td>3.38**</td>
<td>.507*** (N=215)</td>
<td>.525*** (N=493)</td>
<td>.290</td>
</tr>
<tr>
<td>African Americans/Blacks</td>
<td>Interpersonal sensitivity</td>
<td></td>
<td>.481*** (N=84)</td>
<td>.329* (N=55)</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanics/Latinos</td>
<td>Interpersonal sensitivity</td>
<td>.558*** (N=79)</td>
<td>.775*** (N=32)</td>
<td>1.85</td>
<td>.393** (N=51)</td>
<td>.655*** (N=45)</td>
<td>1.75</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>Client-provider racial/ethnic concordance</td>
<td>-.258 (N=7)</td>
<td>-.210 (N=70)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \(p < .05\), ** \(p < .01\), *** \(p < .001\)

<sup>a</sup> Lower education was defined as not having completed high school or lower. Higher education was defined as having received a college degree or better.

<sup>b</sup> Lower income was defined as having an income of $19,999 or less. Higher income was defined as having an income of $40,000 or greater.
sample consisted of older Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans who reported having received health care over the past two years. Racial/ethnic concordance and interpersonal sensitivity were used to measure cultural competence. Several socio-demographic and health-related variables were also included as potential predictors of satisfaction with care. The comparison of the sample characteristics of each of the four groups helped explicate the linkages between race/ethnicity, cultural competence, and client satisfaction. In general, the differences indicated the existence of social disadvantages for minorities, especially for the African American/Black and Hispanic/Latino groups. When compared to Non-Hispanic Whites, the African Americans/Blacks and Hispanic/Latinos were more likely to have lower incomes and less likely to have health insurance. African Americans/Blacks and Hispanics/Latinos were significantly less educated than their Non-Hispanic White counterparts. On the other hand, compared to all the groups, Asian Americans had the highest percentage of people in the sample receiving an education at the high school level and beyond.

With respect to indicators of the cultural competence of their providers, African American/Blacks, Hispanics/Latinos, and Asian Americans were less likely to be in a match with a provider of the same race/ethnicity compared to Non-Hispanic Whites. This is largely due to the presence and availability of more Non-Hispanic White providers in the United States. Hispanics/Latinos and Asian Americans, when compared to Non-Hispanic Whites, viewed their providers as having significantly lower levels of interpersonal sensitivity. This finding is consistent with previous studies that have examined perceptions of providers by race/ethnicity (e.g. Johnson, Saha, Arbelaez,
Beach, & Cooper, 2004). African Americans/Blacks, on the other hand, did not differ significantly from Non-Hispanic Whites in their perception of their providers’ interpersonal sensitivity. It is plausible that the African Americans/Blacks and the Non-Hispanic Whites in this study are more likely to share a similar set of expectations and opinions about the care they expect to receive from their providers. A previous study by Collins, Tenney and Hughes (2002) using data from the 2001 Health Care Quality Survey found that African Americans/Blacks were similar to Non-Hispanic Whites in agreeing that their providers understood their background and values.

For the outcome variable, satisfaction with care, the results were mixed. Asian Americans were significantly less satisfied with the overall care they received, when compared to Non-Hispanic Whites. This finding is consistent with one previous study (Ngo-Metzger, Legedza, & Phillips, 2004), but the researchers in that study, as well as the present one, were not able to discern the source of this difference. Additional variables not included in the database, such as the acculturation level of these clients, may help in explaining this finding. In contrast, there were no significant differences in satisfaction when African Americans/Blacks and Hispanics/Latinos were compared to Non-Hispanic Whites.

The differences by race/ethnicity set the stage for the multivariate analyses, and indicated that these groups all had distinct characteristics that could be expected to be associated with differences in health care and satisfaction with care. The hierarchical regression models for satisfaction with care received indicated that there are some similarities across the four racial/ethnic groups on the socio-demographic and health-related variables that predicted satisfaction. Better self-rated health was a common
predictor of higher satisfaction for Non-Hispanic Whites and Hispanics/Latinos. Previous research has shown the connection between having better self-rated health and higher satisfaction with care (Mayo Clinic, 2009), although the causal links remain to be explored. Lower education was a significant predictor of satisfaction for African Americans/Blacks and Hispanics/Latinos. Although the connection between lower education and satisfaction is not unique to this study (e.g. Hall & Dornan, 1990), it does bring to question how differences in educational attainment can affect perceptions of care received.

In addition to these predictors, there were some predictors that differed for each racial/ethnic group. Age was a significant predictor for Non-Hispanic Whites, with older people in this group tending to be more satisfied with the care they received. Higher income was a significant predictor of higher satisfaction for African Americans/Blacks. Having more health conditions was a significant predictor for Hispanics/Latinos. People with more health conditions were more likely to seek care and in consequence had more interactions with their health care providers (e.g. Nichols et al., 2007). For Asian Americans, not being married was a significant predictor of greater satisfaction with care. Despite the fact that previous studies have indicated that health insurance status has an impact on the perceived quality of health care received (e.g. Institute of Medicine, 2002), the presence of insurance was not a significant predictor for any of the four groups in this study.

The results of this study suggest that, overall, racial/ethnic concordance between clients and their providers does not impact satisfaction with care received. This lack of an association contrasts with several previous studies (e.g., LaVeist & Nuru-Jeter, 2002)
that have found a connection between racial/ethnic concordance and satisfaction, but it does support the idea that it is not the client-provider match alone that leads to higher satisfaction with care (e.g. Schnittker & Liang, 2006). Studies have noted, for example, that having a preference for racial/ethnic concordance has an impact on satisfaction (e.g. LaVeist & Nuru-Jeter, 2002).

Interpersonal sensitivity, however, was significant across all four groups, with results indicating that the clients’ satisfaction with the care that they received is directly predicted by the perception of their providers’ interpersonal sensitivity. This finding is in accordance with previous findings that cultural competence has an impact on overall satisfaction with care (e.g., Ngo-Metzger et al., 2006). Of particular interest is that this finding also suggests that interpersonal sensitivity is important to everyone, not just racial/ethnic minorities. Feeling that you can trust your provider and that they respect your beliefs and values are the two components of interpersonal sensitivity that were assessed. These two components appear to be important to people of all races and ethnicities. Providers that exhibit these traits embody the true essence of cultural competence.

In addition to the direct effect model, interactive effects among socio-demographic variables (education and income), racial/ethnic concordance and interpersonal sensitivity were examined. Non-Hispanic Whites with more education were found to have stronger associations between interpersonal sensitivity and satisfaction when compared to lower educated Non-Hispanic Whites. In addition, Non-Hispanic Whites with higher incomes had stronger associations between interpersonal sensitivity and satisfaction than their lower income counterparts. Both of these findings
are consistent with previous studies that have examined differences in satisfaction by race and found that Non-Hispanic Whites and people with higher socio-economic statuses are more satisfied with the care they receive (e.g. Myburgh, Solanki, Smith, & Laloo, 2005).

In direct contrast to the results for Non-Hispanic Whites, the association between interpersonal sensitivity and satisfaction was higher among lower income African Americans/Blacks. One of the potential reasons for this difference between Non-Hispanic Whites and African Americans/Blacks may lie in the different preferences that clients have and how a client expects to be treated by their health care provider (e.g. Myburgh et al., 2005). Higher income African Americans/Blacks may have higher standards of care and may expect more from their health care providers when compared to lower income African Americans/Blacks.

There was a stronger association between greater interpersonal sensitivity and greater satisfaction among higher educated Hispanics/Latinos compared to the lower educated group. In addition, Hispanics/Latinos with higher incomes had stronger associations with interpersonal sensitivity and satisfaction, compared to lower income Hispanics/Latinos. Similar Non-Hispanic Whites, these findings are consistent with previous studies. Higher educated Hispanics/Latinos give better evaluations of the quality of their medical care compared to those with lower education (e.g. Livingston, Minushkin, & Cohn, 2008). Hispanics/Latinos with higher incomes are more likely than lower and medium income patients to rate their medical care as excellent (e.g. Borders, Xu, Rohrer, & Warner, 2002).

There are several limitations in this study that must be addressed. While satisfaction is a widely employed measure that is often used to gain an understanding of
the quality of health care, it remains a subjective measure that could be affected by a host of factors not captured in this study. In addition, satisfaction with care was only represented by a single item in the survey. Another limitation of the study is that there was no way to accurately assess English fluency in the study. The language of the interview served as a proxy because there was very little variation with the English fluency variable. Most of the participants were reported as being fluent in English, despite a significant proportion of the respondents who were interviewed in other languages. Lastly, there were only four possible racial/ethnic categories that a respondent and the provider could be classified into, thereby limiting information available about subgroups.

The findings from this study contribute to a growing body of literature about how cultural competence can impact satisfaction with care. Research has begun to find evidence to support incorporating cultural competence into the health care system and this study provides some empirical information about the factors that affect overall satisfaction with care. In addition, this is one of a very few studies that examines the effects of client-provider racial/ethnic concordance on overall satisfaction with care. Although this study found that race/ethnic concordance did not have an impact on satisfaction, information was obtained about how racial/ethnic concordance interacts with other variables. The racial/ethnic differences presented by the regression models support the current understanding that different racial/ethnic group have different opinions about their health care beliefs and preferences. Finally, this study shows that components of cultural competence are associated with overall satisfaction with care received and this
should be considered when developing and implementing cultural competence
techniques.
CHAPTER FIVE: DISCUSSION

Summary of the Study

Cultural competence among health care professionals has emerged as a key method to improving access to and utilization of health care services by racial and ethnic minorities. Cultural competence is generally defined as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals to work effectively in cross-cultural situations” (Cross, Bazron, Dennis, & Isaacs, 1989, p. iv). Culture embodies integrated patterns of human behavior, including language, thoughts, communications, actions, customs, beliefs, values (DHHS OMH, 2005). Competence involves being able to function effectively within the context of the cultural beliefs, behaviors, and needs (DHHS OMH, 2005). A key aspect of cultural competence is that the health care provider be conversant with how culture and beliefs can affect how the client presents symptoms and responds to treatment. Currently, the major caveats associated with the field of cultural competence are the lack of research in general and an even greater lack of research that examines cultural competence from the perspective of the client. The client perspective is important because it provides opinions and feedback about health care from the direct care recipients.

Research is sorely needed in order to guide the efforts to increase the cultural competence of health care providers. In line with this need, there were three overall goals of this dissertation: (1) determine client-level factors (socio-demographic, language of the interview, and health related variables) that predict when client-provider
racial/ethnic concordance occurs, (2) explore which factors predict the perceived interpersonal sensitivity of health care providers, (3) determine which factors serve as predictors of overall satisfaction with care received.

The data used in this study came from the Commonwealth Fund 2001 Health Care Quality Survey conducted by Princeton Survey Research Associates (PSRA) in 2001. The sample used in pursuit of all three goals, presented in the three sub-studies, was comprised of Non-Hispanic Whites, African Americans/Blacks, Hispanics/Latinos, and Asian Americans ages 50 and older. This age range was selected in order to capture the full range of responses present in older populations.

Overview of Findings

The focus of the three sub-studies was on factors that affected racial/ethnic concordance, interpersonal sensitivity, and satisfaction with care. The first of these studies focused on the socio-demographic and health-related factors that predict whether or not clients were in a match with a provider of the same race/ethnicity. The focus of the second study was on the factors that predict how much interpersonal sensitivity clients perceive their providers to have. Interpersonal sensitivity was selected since it has emerged as a key component of cultural competence. In addition to socio-demographic and health-related variables, client-provider racial/ethnic concordance also examined as a predictor. The third and final sub-study focused on the factors that predict overall satisfaction with care received. All of the outcome variables from the previous papers were entered as potential factors that impact satisfaction, in addition to the socio-demographic and health-related variables.
The results have implications for how we should develop efforts to promote
cultural competence among health care providers and the health care system in general.
The first study found that the factors that predict racial/ethnic concordance varied across
the four racial/ethnic groups. The majority of Non-Hispanic Whites, and well over 40
percent of Asian Americans in the study had providers of the same race/ethnicity.
Hispanics/Latinos were the least likely to be in match and less than a fourth of African
Americans/Blacks were in matches. The following variables increased the likelihood that
racial/ethnic concordance would occur: being female and having health insurance for
Non-Hispanic Whites; higher education for African Americans/Blacks; and being
married for Asian Americans. There were no factors that increased the likelihood of
client-provider racial/ethnic concordance among Hispanics/Latinos.

The study in Chapter 3 focused on client perceptions of the interpersonal
sensitivity of their providers. Compared to Non-Hispanic Whites, Hispanics/Latinos and
Asian Americans had significantly lower perceptions of their provider’s interpersonal
sensitivity. The African Americans’/Blacks’ perceptions of their providers’ interpersonal
sensitivity, on the other hand, were similar to that of the Non-Hispanic Whites. Self-
rated health was a significant predictor for Non-Hispanic Whites, African
Americans/Blacks, and Hispanics/Latinos; having better self-rated health was associated
with higher perceived interpersonal sensitivity of health care providers. Racial/ethnic
concordance was found to be a significant predictor of higher interpersonal sensitivity
only for Hispanics/Latinos. In addition, being older for Non-Hispanic Whites, having
more health conditions for Hispanics/Latinos, and being unmarried for Asian Americans
were all significant predictors of perceived interpersonal sensitivity.
The main focus of the study in Chapter 4 was to determine if cultural competence had an impact on satisfaction with care received. There were no differences between Non-Hispanic Whites, African Americans/Blacks, and Hispanics/Latinos in their levels of satisfaction with care received. Asian Americans, however, had significantly lower levels of satisfaction with care when compared to Non-Hispanic Whites. Cultural competence was measured using two constructs that were the focus of Chapters 2 and 3: client-provider racial/ethnic concordance and interpersonal sensitivity. Racial/ethnic concordance was not a significant predictor of satisfaction. Perceived interpersonal sensitivity of the provider, on the other hand, was a significant predictor of higher satisfaction for all four groups. This was the only variable that was significant across all four groups. Higher self-rated health was a significant predictor for Non-Hispanic Whites and Hispanics/Latinos. Lower education and higher income were significant predictors for African Americans/Blacks. Lower education and having more health conditions were significant predictors for Hispanics/Latinos. For Asian Americans, not being married was a significant predictor of satisfaction.

The results from the interaction effects and subsequent analyses found that Non-Hispanic Whites with more education and higher incomes had strong associations between the perceived interpersonal sensitivity of their provider and satisfaction with care when compared to lower educated and lower income groups. Lower income African Americans/Blacks had a strong association between interpersonal sensitivity and satisfaction, compared to higher income African Americans/Blacks. Lastly, higher educated and higher income Hispanics/Latinos, similar to the Non-Hispanic Whites, had
strong associations between interpersonal sensitivity and satisfaction, compared to lower educated and lower income Hispanics/Latinos.

The overall findings from this dissertation provided information about differences about racial/ethnic concordance, interpersonal sensitivity, and satisfaction with care among four race/ethnic groups. Different populations have different needs and it is important to understand the various cultural influences on these three areas. These findings make a significant contribution to the existing body of literature that addresses the importance of cultural competence in health care. This study provides concrete examples of factors that affect racial/ethnic concordance and interpersonal sensitivity; and how both of those factors impact satisfaction.

Adequacy of the Modified Model of Access to Personal Health Care Services

The Institute of Medicine’s Model of Access to Personal Health Care Services (Institute of Medicine, 1993) served as the basic framework for the research in this dissertation. This conceptual model purports the idea that a client’s participation in the health care system is affected by several barriers and intervening conditions. Overall, the results from this study show that interpersonal sensitivity, as an intervening variable, is a major factor that affects satisfaction with care across all four racial/ethnic groups. The results also support the links between health care barriers (personal and financial), interpersonal sensitivity, and health outcomes. The results found in this dissertation, however, do not support the links between barriers to care, racial/ethnic concordance, and health outcomes, specifically satisfaction with care. It is possible that there are some additional variables, such as service utilization patterns, that should be included in future modified version of the model of access to support these relationships. The notion that
racial/ethnic concordance is an intermediate step between the barriers to care and interpersonal sensitivity for Hispanics/Latinos was supported by the results of this study. Lastly, the findings from this dissertation suggest that the application of this model varies by race/ethnicity, a possibility that should be recognized by those who seek to adopt the model for future research.

Key Findings by Race/Ethnicity

*Non-Hispanic Whites*

Non-Hispanic Whites with health insurance were more likely to have providers of the same race/ethnicity. They were able access more health care options and therefore had a greater choice in the selection of their provider. Moreover, there are many more opportunities to have providers that share cultural values and beliefs with clients from this race/ethnic group.

Generally speaking, cultural competence is often not considered to be applicable to Non-Hispanic White populations since they are not regarded as a disadvantaged group. This dissertation found that cultural competence, more specifically perceived interpersonal sensitivity, is important for Non-Hispanic Whites, not just racial/ethnic minorities. Health care professional should strive to respectful of the values and backgrounds of all their patients. The Non-Hispanic Whites who were better educated and had higher incomes had stronger associations between interpersonal sensitivity and satisfaction. Consistent with previous research (e.g. Myburgh et al., 2005), these finding support the notion that clients with a higher socio-economic statuses have more positive experiences with health care.
African Americans/Blacks

Racial/ethnic concordance was more likely to occur among African Americans/Blacks with higher education. Independent of the effects of income and health insurance, this finding suggests that for higher educated African Americans/Blacks, compared to their lower educated counterparts, having a provider with whom one shares cultural values and ideas is important. Racial/ethnic concordance, on the other hand, was not a significant predictor of perceived interpersonal sensitivity for African Americans/Blacks. While previous research (e.g. LaViest & Nuru-Jeter, 2002) has supported the notion that racial/ethnic concordance is important for African Americans/Blacks and other racial/ethnic minorities, this was not found to be true in this dissertation. This discrepancy is interesting, since in the present case it suggests that in actual practice, having a provider of the same race/ethnicity does not affect client perceptions of interpersonal sensitivity. An additional point that should be considered is African Americans/Blacks may not seek care from providers of the same race/ethnicity because these providers may be in their social network. In smaller communities, for example, providers may attend the same church as many of their clients, and it may be uncomfortable for them to interact with their provider socially and in a health care setting. Even though racial/ethnic concordance was not important for this group, greater interpersonal sensitivity was a significant predictor of higher satisfaction with care. The lower income sub-group of African Americans/Blacks had a stronger association between interpersonal sensitivity and satisfaction, compared to the higher income group. Since one can assume that those with lower incomes had less control and choice, these results
suggest that having a provider that displays more interpersonal sensitivity may be particularly appreciated by this group.

Hispanics/Latinos

The results of this study support the literature that highlights the importance of language for Hispanic/Latino populations. These results also provide an interesting paradox; Hispanics/Latinos who were interviewed in Spanish - and who for this reason could be expected to have more problems with communication - were less likely to have a provider of the same race/ethnicity. In Chapter 3, Hispanics/Latinos that were in matches with a health care provider of the same race/ethnicity felt their providers had higher levels interpersonal sensitivity. Both of these findings bring question whether Hispanic/Latino clients prefer matches based on language or race/ethnicity. The findings emphasize the fact that language barriers can have a negative impact on the health care experiences of Spanish-speaking Hispanics/Latinos (e.g. Fernandez et al., 2004; Perez-Stable, Napoles-Springer, & Miramontes, 1997; Todd, Samaroo, & Hoffman, 1993) and that it is important for patients to interact with providers that they can communicate with effectively. The assimilation level of this group, not a subject that could be studied in this investigation, may also impact how well they are able to comprehend information related to their health (Livingston, Minushkin, & Cohn, 2008).

As with the Non-Hispanic Whites and African Americans/Blacks, interpersonal sensitivity was a significant predictor of higher satisfaction. Higher associations between interpersonal sensitivity and satisfaction with care received were found in the higher educated and higher income sub-groups. These results were similar to the Non-Hispanic White sub-groups and consistent with previous research (e.g. Borders, Xu, Rohrer, &
These findings, however, were the opposite of what was found among the African Americans/Blacks. This difference between African Americans/Blacks and Hispanics/Latinos highlights the importance of not making generalizations about all racial/ethnic minority groups. Individuals within each racial/ethnic group have different preferences and values that should be respected.

Asian Americans

This study provided some support for the cultural stereotype of Asian Americans as being, on the whole, an advantaged racial/ethnic minority group. The results from the analyses indicated that the Asian American respondents were higher educated, had higher incomes, and were more likely than the African Americans/Blacks and Hispanics/Latinos groups to have health insurance. Perhaps because of these socio-demographic and health-related advantages, there were more client-provider racial/ethnic concordance among the Asian Americans when compared to African Americans/Blacks and Hispanics/Latinos. Married Asian Americans clients were more likely to be in a match, indicating that spouses are part of the health care decision-making process. Lower education was a significant predictor of higher perceived interpersonal sensitivity. These lower educated clients may place a lot of trust their providers and chose not become involved in decisions about their health care. Analogous with the other three racial/ethnic groups, interpersonal sensitivity is a key predictor of satisfaction with care for Asian Americans.

Study Limitations

Despite many of the positive aspects of this study, there are several limitations that must be addressed. Only participants with telephones were able to participate in the
study. Since those without telephones were not included, this does bring to question the generalizability of the data collected. In addition, this study does not examine all of the potential barriers that could have an impact on access to and utilization of health care. The selected variables for the three sub-studies can impact the health care experiences of the four racial groups. However, these experiences could also be impacted by life experiences that were not captured by the survey. The language fluency variable was not able to be utilized because it was measured based on the interviewer’s initial contact with the respondent and not necessarily on their ability. This, in turn, inflated the number of respondents that were reported as being fluent English speakers. The language of the interview variable was used as proxy for this variable, but it may be an underestimate of the true effect of language in this study.

Some of the information collected was self-reported and may not be accurate. For example, some of the respondents may have diabetes or high blood pressure. They, however, may not be aware that they do and did not indicate that they had either of these conditions when asked. The list of possible conditions and health problems is not very exhaustive. There could potentially be other conditions not included in the questionnaire that have an impact on the results found in this dissertation. It is also very important to consider where these respondents live and the amount of access that they had to health care services. Clients in rural areas, compared to clients in suburban and urban areas, may have limited access to providers from diverse backgrounds. Lastly, the racial/ethnic concordance variable used in the study is a crude determination. Client-provider racial/ethnic concordance was determined using only four racial/ethnic categories, thus
preventing the possibility of discerning if matches were race/ethnic specific beyond the four categories.

Future Research

Future research efforts should focus on examining the effects of racial/ethnic concordance and interpersonal sensitivity on utilization of health care. This dissertation has shown, in the third study, the connections between racial/ethnic concordance, interpersonal sensitivity, and satisfaction. The next step in understanding how cultural competence can be implemented into the health system is whether or not it can improve the access and utilization of health care services among older adults. Overall satisfaction with care received is often associated with health services utilization (e.g. LaViest & Nuru-Jeter, 2002; Roghmann, Hengst, & Zastowny, 1979; Zastowny, Roghmann, & Cafferata, 1989) and compliance with a medical regimen (e.g. LaViest & Nuru-Jeter, 2002, Smith et al., 1987). The findings from this dissertation can be used to support research that examines the effects of cultural competence on additional health outcomes.

In addition to determining how cultural competence affects health outcomes, more research is needed to examine racial/ethnic differences with client-provider racial/ethnic concordance. Chapter 2 established that the factors that predict racial/ethnic concordance vary across the four groups. Racial/ethnic concordance was a significant predictor only for Hispanics/Latinos in Chapter 3. Previous research has supported the notion that being in a match with a health care provider of the same race/ethnicity can aid in the reduction of health disparities (Komaromy et al. 1996; Saha, Arbelaez, & Cooper, 2003). The findings from this study, however, indicate that racial/ethnic concordance may only be important for Hispanics/Latinos. An additional variable that should be
included in future analyses is personal preference for being in a match with a provider of the same race/ethnicity. LaVeist and Nuru-Jeter (2002) showed that the preference for a match varied by race/ethnicity.

Chapter 3 was limited because the language of the interview was used as a proxy for language fluency. Despite this limitation, the language of the interview was a significant predictor in Chapter 3 for Hispanics/Latinos. Yet, there remains a lack of research that has examined the relationship between language and cultural competence. Also, additional research efforts should focus on discerning how the language ability of the health care provider affects the client’s perception of cultural competence. Language can have a significant impact on the interactions that Hispanics/Latinos have with their health care providers (e.g. Fernandez et al., 2004; Pérez-Stable, Napoles-Springer, & Miramontes, 1997; Todd et al., 1993). It is plausible that health literacy is connected to this relationship and should be included in future research efforts.

This dissertation compared the characteristics and dynamics of several racial/ethnic groups with those of a Non-Hispanic White group. Although this type of comparison is considered the norm in comparative research, this is only the beginning. In order to more fully understand the dynamics of each racial/ethnic group, both intensive within group studies and studies that examine how the different groups diverge from each other are necessary.

Final Thoughts

Health policy researchers have recognized the need to study the inter-related issues of health disparities, racial/ethnic differences in access and utilization of health care services, and cultural competence. As summed up by one researcher, there is a
strong need for research in the following three areas within cultural competence: the
perceptions of patients, clients, and care recipients and the relationships that they have
with clinicians and other caregivers; the attitudes and behaviors of practitioners,
clinicians, and other health care professional and whether or not they are culturally
appropriate; and the effectiveness of health care organizations in encouraging more
cultural competence in the health care system (Geron, 2002).

While this investigation represents only an initial exploration of cultural
competence from the client’s perspective, in the long run it is important to continue to
measure and assess cultural competence for several reasons. First, practitioners need to
determine the effectiveness of current cultural competence interventions and the
strategies that are producing positive outcomes. Second, additional research may
facilitate the efforts of agency administrators to monitor how effectively health
professionals are providing culturally appropriate and responsive care (Geron, 2002).
And third, proving the effectiveness of cultural competence may facilitate efforts to
evaluate the effectiveness of cultural competence training and service provision. With
respect to this last point, the National Technical Assistance Center indicates that
conducting an assessment helps to document current realities as opposed to objective
opinions (NTAC, 2007). Assessments can also aid health care organizations in
determining which services and programs are successful and which programs need to be
revised. With the current emphasis on health care reform, research targeting cultural
competence takes on the upmost sense of urgency.
REFERENCES


APPENDICES
Appendix A: Model of Access to Personal Health Care Services
Appendix B: Culturally and Linguistically Appropriate Services (CLAS) Standards

**Standard 1**
Health care organizations should ensure that patients/consumers receive from all staff member's effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.

**Standard 2**
Health care organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.

**Standard 3**
Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

**Standard 4**
Health care organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.

**Standard 5**
Health care organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.

**Standard 6**
Health care organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/consumer).

**Standard 7**
Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.

**Standard 8**
Health care organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.
Standard 9
Health care organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.

Standard 10
Health care organizations should ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.

Standard 11
Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.

Standard 12
Health care organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.

Standard 13
Health care organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.

Standard 14
Health care organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.
ABOUT THE AUTHOR

Karon Phillips is a native of the Metro Atlanta area. She received her Bachelor’s Degree from Cornell University in English and Women’s Studies with a Minor in Africana Studies and a Certificate in Gerontology. She entered the School of Aging Studies at the University of South Florida for her Ph.D. degree in the fall of 2004.

From 2004 until 2008, Ms. Phillips was involved in several projects related to health disparities and cultural competence as a Graduate Research Assistant. She also concurrently completed her Master of Public Health degree from the College of Public Health at the University of South Florida. She received several awards including the AARP Diversity and Aging Student Fellowship, Florida Mental Health Institute Faculty and Staff Scholarship, and the Summer Training on Aging Research Topics-Mental Health Fellowship (START-MH). She was also inducted into Phi Sigma Theta National Honor Society and the Omicron Delta Kappa National Leadership Society.