

IMPACT OF A PILOT PATIENT-CENTERED CULTURALLY SENSITIVE HEALTH CARE
INTERVENTION ON THE HEALTH OUTCOMES OF RACIAL/ETHNIC MINORITY AND
LOW-INCOME PRIMARY CARE PATIENTS WITH HYPERTENSION

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2008

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To my Family and Friends.

ACKNOWLEDGMENTS

This dissertation would not have been possible without the assistance of many people and organizations. First and foremost, I must acknowledge the unwavering love and support of my family and friends. In particular, I would like to thank my parents, my sisters, Mr. Ruan Mitchell, Mrs. Marilyn Mitchell, Mrs. Cynetta Lai Leung, Dr. Anacaona de Lima, Dr. Beverly Brady, Dr. Pam Wright, and Dr. Billy Johnson for listening, editing, praying, and believing.

Second, I am grateful for the guidance and support of my dissertation chairperson, Dr. Carolyn M. Tucker, without whose knowledge, patience, encouragement, and generosity this research would not have been completed. Additionally, I must thank my committee members, Dr. Mary Fukuyama, Dr. Scott Miller, and Dr. Marilyn Thomas-Houston for their continued feedback, support, flexibility and patience throughout my dissertation process.

I must also acknowledge the support of the Agency of Healthcare Research and Quality for providing the funding that supported this research study. I am similarly grateful to the members – past and present – of the Behavior Medicine Research Team at the University of Florida for their dedication, hard work, commitment, and continuous support.

In addition, I am indebted to the faculty and graduate students of the Counseling Psychology program at the University of Florida, the clinical staff at the University of Florida Counseling Center, and the clinical staff at the Georgia State University Counseling Center. As a group you have given me a strong clinical and research foundation and always supported and encouraged my clinical and research endeavors. Moreover, you embraced my personhood and never treated me like “just a student or trainee” – for this I am sincerely thankful.

Finally, I am thankful to God for blessing me with health, a supportive community, and the talents that allowed me to complete this project. I hope to continue multiplying these talents as I forge ahead on the next phase of my professional journey.

TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS	4
LIST OF TABLES	8
LIST OF FIGURES	9
ABSTRACT	10
 CHAPTER	
1 INTRODUCTION	12
2 REVIEW OF THE LITERATURE	19
The Health Disparities Problem Underlying National Calls for Patient-Centered, Culturally Competent, and Culturally Sensitive Health Care	19
Prevalence of Health Disparities	19
Factors Influencing Health Disparities	23
Health care quality	23
Health care access	24
Patient-provider communication	26
Hypertension: A Major Health Disparities Problem that Negatively Impacts Racial and Ethnic Minorities	28
Solving the Health Disparities Problem: The Roles of Patient-Centeredness, Cultural Competence, and Cultural Sensitivity	30
Defining Patient-Centeredness	30
Defining Cultural Competence	31
Defining Cultural Sensitivity	32
Do Patient-Centeredness and Cultural Competence lead to Improvements in Health Outcomes?	33
Overview of existing models associating cultural competence and/or patient- centeredness with patients' health outcomes	33
Assessing cultural competence and patient-centered care	36
Overview of the existing evidence associating general patient-centered and/or cultural competence interventions with patients' health outcomes	39
General characteristics of health care provider cultural competence training interventions	41
Overview of existing literature associating culturally competent health care provider training interventions with health care delivery	44
Overview of existing literature associating culturally competent health care provider training interventions with patients' perceptions of their health care environment	45

Overview of existing literature associating culturally competent health care provider training interventions with patients' health outcomes	46
Patient-Centered Culturally Sensitive Health Care: Evolution of a New Health Care Orientation with Potential for Reducing Health Disparities	49
Defining "Patient-Centered Culturally Sensitivity Health Care"	49
Operationalizing and Measuring Indicators of Patient-Centered Culturally Sensitive Health Care	52
Differentiating Patient-Centered Culturally Sensitive Health Care from Cultural Competence.....	54
The Tucker Patient-Centered Culturally Sensitive Health Care Model	55
Overview of the PC-CSHC Model.....	56
Research Supporting the PC-CSHC Model.....	57
Associations among perceived cultural sensitivity, interpersonal control, health care satisfaction, and health promoting lifestyle behaviors.....	57
Association between health care satisfaction and treatment adherence.....	59
Associations of treatment adherence and engagement in a health promoting lifestyle with health outcomes/statuses.....	59
The PC-CSHC Intervention Program	60
Health Care Physical Environment and Clinic Interventions.....	61
Health Care Provider and Office Staff Training Interventions	62
Patient Training/Empowerment Interventions	63
3 METHODS	65
Participants	65
African American Patients	65
White Patient Participants	66
Clinic Staff.....	67
Measures.....	67
Procedure.....	71
Participant Recruitment.....	72
Patient recruitment	72
Provider and office support staff recruitment	74
Overview of the Research Study for Testing the Effects of the PC-CSHC Intervention Program	76
Descriptions of the Three Components of the PC-CSHC Intervention Program.....	77
Component 1: The physical environment and policies intervention.....	77
Component 2: Health care provider/office staff training	78
Component 3: Patient empowerment training.....	83
4 RESULTS.....	88
Descriptive Data for all Major Variables.....	88
Results of the Preliminary Pearson Correlations.....	89
Results of Analyses to Test Research Questions 1 and 2	90

Research Question 1	90
African American patient participants	91
White patient participants.....	91
Research Question 2	92
Hypothesis 1	93
African American patient participants	93
White patient participants.....	96
Hypothesis 2	96
Diastolic blood pressure readings	98
Systolic blood pressure readings.....	98
5 DISCUSSION.....	105
Summary of the Results.....	105
Descriptive Data	105
Hypothesis 1	107
Hypothesis 2	110
Research Question 1	111
Research Question 2.....	112
Limitations and Directions for Future Research.....	113
Design Limitations	114
Assessment Limitations.....	116
Training Limitations.....	117
Conclusions and Implications for Counseling Psychologists.....	117
APPENDIX	
A DEMOGRAPHIC DATA QUESTIONNAIRE (DDQ)	121
B MEDICAL DATA QUESTIONNAIRE (MDS)	123
C MARLOW-CROWNE SOCIAL DESIRABILITY SCALE (MCSDS).....	125
D TUCKER - CULTURALLY SENSITIVE HEALTH CARE INVENTORY-AFRICAN AMERICAN PATIENT FORM (T-CUSCHI-AA).....	127
E TUCKER - CULTURALLY SENSITIVE HEALTH CARE INVENTORY- Caucasian AMERICAN PATIENT FORM (T-CUSCHI-CA).....	134
F STUDY PARTICIPATION INVITATION LETTER.....	141
G STUDY QUESTIONNAIRE PACKET COVER LETTER.....	143
REFERENCES	145
BIOGRAPHICAL SKETCH	157

LIST OF TABLES

<u>Table</u>	<u>page</u>
3-1 Demographic Characteristics of Patient Participants in the Present Study by Race.....	87
4-1 Means and standard deviations for the variables investigated in the present study at baseline by race/ethnicity.....	100
4-2 Pearson correlations among the major variables of interest in the present study for patient participants at baseline by race/ethnicity and for the total sample.	101
4-3 Results of MANOVA testing differences at baseline in mean scores for the components of the T-CSHCI-patient form in association with group, gender, and gender x group for White patient participants.	101

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
3-1 Flowchart Showing the Order of and Timeline for the Recruitment, Intervention and Data Collection Activities in the PC-CSHC Intervention Program.....	86
4-1 Profile plot showing the means for the provider behaviors and attitudes component of the T-CSHCI patient form for African American patient participants from baseline to post-intervention by clinic.	102
4-2 Profile plot demonstrating time x gender interaction effect in cultural sensitivity ratings of office staff behaviors and attitudes for African American patient participants.....	102
4-3 Profile plot demonstrating gender x race interaction effect for systolic blood pressure means for African American patient participants.	103
4-4 Profile plot showing means for systolic blood pressure readings of African American patient participants by time, group, and time x group.	103
4-5 Profile plot showing means for systolic blood pressure readings of White Patient participants by time, group, and time x group.	104

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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Lisa Ann Ferdinand

May 2008

Chair: Carolyn M. Tucker
Major: Counseling Psychology

The present study sought to address the health disparities problem by using a literature-based model as a framework to examine the longitudinal impact of a pilot 15-month intervention program on the cultural sensitivity ratings and health outcomes of low-income African American and White patients with hypertension. Participants consisted of 110 African American patients, 115 White patients, and 48 clinic staff.

Patients were administered a Demographic Questionnaire, a Medical Data Questionnaire, the Tucker-Culturally Sensitive Health Care Inventory – Patient Form, and the Marlow-Crowne Social Desirability Scale – Short Form. Clinic staff completed a Clinic Staff Demographic Data Questionnaire. Participants were recruited from two community-based clinics, one of which served as an intervention clinic.

Results of conducted analyses did not offer statistically significant support that participating in the intervention program resulted in higher ratings of perceived cultural sensitivity or improved health outcomes. However, important trend effects were found.

Specifically, results indicated that the cultural sensitivity ratings of providers' behaviors and attitudes by African American patients at the intervention clinic increased more than their

counterparts at the control clinic at post-intervention. In addition, the systolic blood pressure readings of African American patients at the intervention clinic decreased over the course of the intervention period compared to their counterparts at the control clinic.

It was also found that the African American female patients rated both their providers' behaviors and attitudes and their office staff's behaviors and attitudes as significantly more culturally sensitive than did their male counterparts at both baseline and post-intervention, and White female patient participants rated their providers' behaviors and attitudes as significantly more culturally sensitive than did their male counterparts at baseline. Together these findings suggest that there may be gender differences in perceived cultural sensitivity of health care experienced.

In sum, the results of this study provide support for replicating it with larger patient populations as the trend effects reported suggested that, with greater power, a significant impact of the tested intervention program may have been empirically evidenced. Furthermore, the results of the present study highlight the importance of conducting future research focused on examining gender differences in perceived culturally sensitivity ratings.

CHAPTER 1 INTRODUCTION

The term health disparities refers to existing differences among specific groups with regard to adverse health conditions, including differences in the incidence, prevalence, mortality, and burden of diseases (National Institutes of Health, 1999). Health disparities have been especially well documented for members of low-income and racial and ethnic minority groups at all points in the health care process, at all sites of care, and for many medical conditions. The following six health care areas are particularly affected: infant mortality, cancer screening and management, cardiovascular disease, diabetes, HIV infections/AIDS, and immunizations (Agency for Healthcare Research and Quality [AHRQ], 2003, 2005; Centers for Disease Control and Prevention [CDC], 2005; United States Department of Health and Human Services [HHS], 2000).

Health disparities among racial and ethnic minorities and individuals from lower socioeconomic backgrounds have been attributed to: (a) a number of biological causes such as genetic predispositions for certain medical conditions that tend to cluster in populations targeted by health disparities initiatives (e.g., Collins, Green, Guttmacher, & Guyer, 2003); (b) a number of social and environmental factors such as economics, culture, and sociopolitical power (e.g., Johnson et al., 1995); and (c) racism-related stress (e.g., Clark, Anderson, Clark & Williams, 1999). However, extensive research suggests that social and environmental influences are the largest contributors to the health disparities problem (e.g., Institute of Medicine, 2002). In particular, recent research has focused on sociocultural differences among and between patients, health care providers, and the health care system that: (a) engender poor communication between patients and their providers, (b) create disparities in the quality of health care given to majority patients as compared to low-income and racial/ethnic minority patients, and (c) contribute to

disparities between majority patients and low-income and racial/ethnic minority patients with regard to their access to health care (AHRQ, 2003; 2005). Patient-centeredness, cultural competence, and cultural sensitivity are health care orientations that concentrate on addressing the sociocultural differences that exist among and between patients, health care providers, and the health care system. As such, these health care orientations have all been proposed in the health care disparities literature as potential targets to bring about solutions to the health and health care disparities problems.

Patient-centeredness includes perceiving and evaluating health care from the patient's perspective and adapting care to meet the patient's needs and expectations (Beach, Saha, & Cooper, 2006). Cultural competence refers to, "the ability to understand and work with patients whose beliefs, values and histories are significantly different from one's own" (Rothschild, 1998, p. 299), and it emphasizes having the awareness, knowledge, skills and experiences needed for working with culturally diverse patients (Campinha-Bacote, 2002). Cultural sensitivity has been defined as an ongoing awareness of cultural differences and similarities among populations (Majumdar, Browne, Roberts & Carpio, 2004).

Experts in the health care field have suggested that improving cultural competence and/or cultural sensitivity may reduce racial and ethnic health and health care disparities through a range of interventions focused on changing the health care system, educating and/or training providers and patients, and fostering partnerships with the communities in which patients live (e.g., Betancourt, Green, Carillo, & Park, 2005; Branch & Fraser, 2000). Importantly, educating and training health care organization staff has been recognized as the single most important element in ensuring the cultural competence of an organization (HHS Office of Minority Health [OMH], 2001). However, few studies exist that have actually studied the effects of cultural

sensitivity and cultural competence interventions, including educational and training interventions for providers, on patients' health status outcomes. Furthermore, few models exist that predict the paths through which such effects could occur. The lack of empirical evidence linking cultural sensitivity or cultural competence interventions to improvements in patients' health outcomes has in turn led to ambivalence within the medical community regarding the utility and effectiveness of cultural sensitivity and cultural competence interventions (Betancourt, 2004).

It is also important to note that the terms cultural competence and cultural sensitivity have multiple definitions that have often been used inter-changeably in the health care literature, leading to criticisms regarding the lack of shared and validated definitions of these terms in the existing literature (e.g. Beach et al., 2006). Moreover, despite the focus on patient-centered care that has been emphasized by national health care organizations (e.g., IOM, 2002), definitions of cultural competence and cultural sensitivity, and interventions based on those definitions, have often excluded the perspectives of patients. Rather, definitions and models of cultural competence and/or sensitivity have largely been derived from the "expert opinions" of physicians and other health care providers (e.g., Thom, Tirado, Woon & McBride, 2006, p. 1).

In an effort to invite patients' perspectives into the literature on health and health care disparities, Tucker and her colleagues conducted a program of research focused on assessing patient-identified needs among low-income and racial/ethnic minority patients with regard to their health care, and developing interventions focused on addressing these needs (Tucker et al., 2003; Tucker, Herman et al., 2007). These researchers coined the term "patient-centered culturally sensitive health care," which they assert differs from existing constructs in the literature in its emphasis on assessing and being responsive to patients' needs/desires and

involving patients as active partners in their health care. Specifically, patient-centered culturally sensitive health care is “cultural competence plus” and (a) emphasizes displaying patient-desired modifiable provider and staff behaviors and attitudes, implementing health care center policies, and displaying physical health care center environment characteristics that culturally diverse patients identify as indicators of respect for their culture and that enable these patients to feel comfortable with, trusting of, and respected by their health care providers and office staff; (b) conceptualizes the patient-provider relationship as a partnership that emerges from patient-centeredness; and (c) is patient empowerment oriented (Tucker, Herman et al., 2007). Supporting Tucker and her colleagues’ assertions that patient-centered culturally sensitive health care differs from constructs such as cultural competence and cultural sensitivity is research suggesting that even when health care providers have the stated goal of patient empowerment practices such as involving patients as health care partners, these providers often undermine their stated goal in covert and subtle ways that are perceived by patients (e.g., Paterson, 2001).

In an attempt to address the lack of models and empirical research relating constructs such as patient-centered culturally sensitive health care to patients’ health status outcome variables, Tucker, Herman et al. (2007) recently proposed a literature-based Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Model to explain linkages among (a) patient-centered culturally sensitive health care interventions, (b) the experience of patient-centered culturally sensitive health care by low-income and racially/ethnically diverse patients who use community-based physical health care clinics, and (c) these patients’ health outcomes/statuses. This Model suggests that (a) patient-centered culturally sensitive health care training promotes patient-centered culturally sensitive health care, as indicated by physical environment characteristics and policies of the health care clinic, provider behaviors and attitudes, and office staff behaviors and

attitudes; (b) this care influences patients' perceived levels of provider cultural sensitivity and interpersonal control, both of which impact patients' level of engagement in a health promoting lifestyle and level of health care satisfaction; (c) the latter influences patients' level of treatment adherence; and (d) both level of treatment adherence and level of engagement in a health promoting lifestyle directly influence patients' health outcomes/statuses. The PC-CSHC Model is depicted in Figure 1.

Using the PC-CSHC Model as a guiding framework, the proposed study will investigate the impact of a pilot Patient-Centered Culturally Sensitive Health Care Intervention Program (the PC-CSHC Intervention Program) on health status outcomes of low-income African American patients and White patients diagnosed with hypertension alone, or in combination with diabetes, coronary heart disease and/or high cholesterol. In so doing, the proposed study seeks to contribute empirically to the literature suggesting that patient-centered culturally sensitive health care educational and training interventions are necessary at every learner level of the health care system, consistent with mandates issued by the OMH (2001). Ultimately, the goal of the proposed study is to address the health and health care disparities problem. This goal is aligned with calls for counseling psychologists to: (a) use their knowledge of counseling theories, research, and practice to address the pressing health and health care challenges facing the United States (Carter, 2003); (b) be more involved in behavioral medicine and health psychology (Altmaier, 1991; Klippel and DeJoy, 1984); and (c) more clearly demonstrate their commitment to the social justice identity of the field through the elimination of social ills such as oppression and inequality (Baluch, Pieterse, & Bolden, 2004; Helms, 2003; Speight & Vera, 2004; Vera & Speight, 2003).

Based on Tucker's PC-CSHC Model the following hypotheses will be examined in the proposed study:

(1) Following the implementation of a pilot PC-CSHC Intervention Program at a primary care clinic (i.e., the intervention clinic), an intervention group of patients who participate in the program (i.e., adult primary care African American patients and White patients from primarily low-income backgrounds who have been diagnosed with hypertension alone, or in combination with diabetes, coronary heart disease, and/or high cholesterol) will evidence significantly higher ratings of perceived cultural sensitivity in provider and office staff behaviors and attitudes, and in their health care clinic environment (i.e., physical characteristics and policies) than will a control group of patients who are demographically and medically similar to the intervention group participants, and who receive care at a primary care clinic that is similar to the intervention clinic, but who are not exposed to the PC-CSHC Intervention Program (i.e., the control clinic).

(2) Following the implementation of the PC-CSHC Intervention Program mentioned in Hypothesis 1, the patients who participate in the PC-CSHC Program (i.e., the intervention group at the intervention clinic) will evidence significantly lower diastolic and systolic blood pressure readings than will the patients who are not exposed to the intervention program (i.e., the control group at the control clinic).

The following 2 exploratory research questions will also be investigated:

(1) Among the patient research participants in the proposed research, are there significant differences in their perceived cultural sensitivity ratings at baseline (i.e., prior to implementing the PC-CSHC Intervention Program) in association with gender or group (i.e., control vs. intervention)?

(2) Among the patient participants in the proposed research, are there significant differences in health outcomes (i.e., diastolic and systolic blood pressure readings) at baseline (i.e., prior to implementing the PC-CSHC Intervention Program) in association with race (i.e., African American vs. White), gender, or group (i.e., control vs. intervention)?

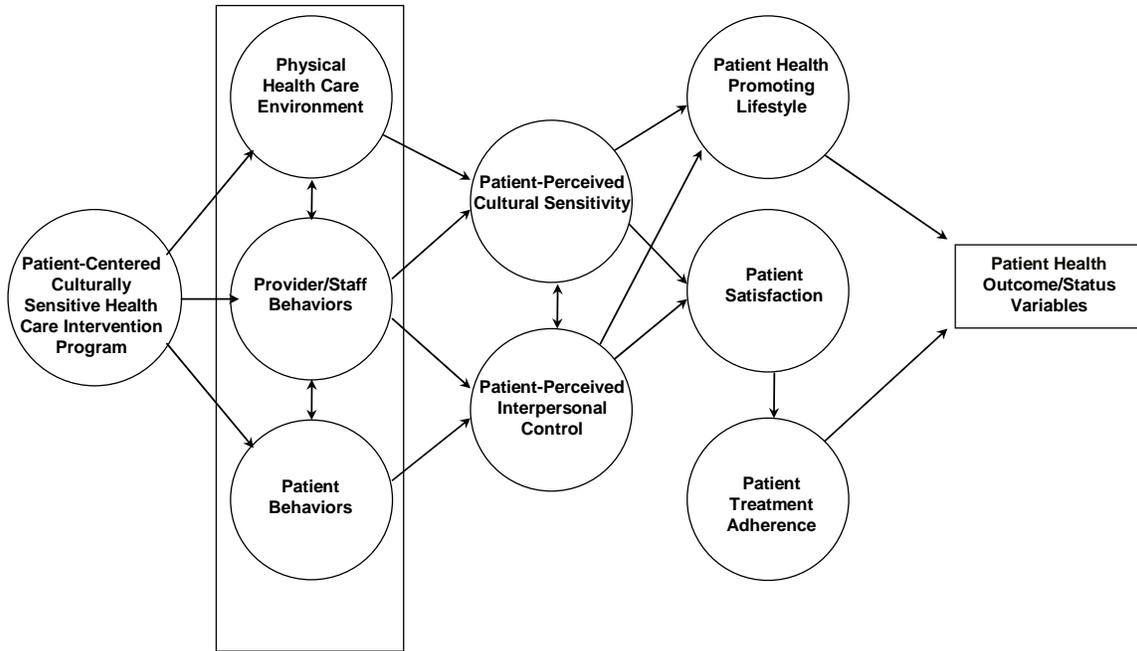


Figure 1-1. The Patient-Centered Culturally Sensitive Health Care Model (PC-CSHC Model).

CHAPTER 2 REVIEW OF THE LITERATURE

This chapter presents an overview of the existing literature that addresses the need for patient-centered culturally sensitive health care interventions and for examining the impact of such interventions on patient health outcomes. First, a discussion of the health disparities problem underlying growing national calls for patient-centeredness, cultural competence and cultural sensitivity in the health care delivery process is presented. The literature on hypertension is given special attention as hypertension is a major health disparity problem – one that disproportionately affects racial and ethnic minorities. Second, the roles of patient-centeredness, cultural competence, and cultural sensitivity in solving the health disparities problem are explored. Third, recently advocated “patient-centered culturally sensitive health care” to help solve the health disparities problem is defined and differentiated from similar health care orientations set forth in the health care literature. Fourth, the Tucker Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Model that theorizes linkages between patient-centered culturally sensitive health care and health outcomes is described and the literature supporting the model is presented. Finally, the Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Intervention Program tested in the proposed research is briefly described and research on each sub-component of this intervention program is presented. In each instance, the relevance of the literature to the proposed study will be discussed, and the manner in which the proposed study extends the existing literature is highlighted.

The Health Disparities Problem Underlying National Calls for Patient-Centered, Culturally Competent, and Culturally Sensitive Health Care

Prevalence of Health Disparities

Within the past three decades several reports issued by the United States Department of Health and Human Services (HHS) and other governmental and non-governmental agencies have

focused on: (a) highlighting the prominent health disparities that exist between majority groups and the primary racial and ethnic minority groups (i.e., African Americans, Asian Americans/Pacific Islanders, Hispanics, and Native Americans), among the primary racial and ethnic minority groups, and between higher and lower income groups; and (b) identifying strategies to eliminate these disparities (e.g., Agency for Healthcare Research and Quality [AHRQ], 2003, 2005; HHS, 2000). In the *National Healthcare Disparities Report* ([NHDR]; AHRQ, 2003), which was the first annual report on health care disparities intended to provide a balanced summary of the state of health and health care disparities in the U.S., it was stated that although the health of Americans in the past 100 years has improved overall, the following were also true: (a) clear disparities persist in life span, health status, and health care use among different racial, ethnic, and socioeconomic groups in the U.S.; (b) the number of Americans who are vulnerable to experience the effects of such disparities is expected to increase over the next 50 years; and (c) disparities are pervasive national problems affecting health care at all points in the process, at all sites of care, and for many medical conditions. Importantly, the findings of the 2005 NHDR were largely consistent with the first NHDR, and demonstrated that disparities related to race, ethnicity, and socioeconomic status continue to pervade the American health care system (AHRQ, 2005).

According to the Centers for Disease Control and Prevention ([CDC], 2005), the following six health areas particularly reflect the disparities that affect multiple racial and ethnic minority groups at all life stages: infant mortality, cancer screening and management, cardiovascular disease (CVD), diabetes, HIV infections/AIDS, and immunizations. The incidence, mortality, and survivorship statistics associated with these health areas are alarming.

The U.S. ranks poorly relative to other industrialized nations on infant mortality, and there are large disparities by race, ethnicity, and socioeconomic status (Shi, Stevens, Wulu, Politzer & Xu, 2004; Wise, Kotelchuck, Wilson, & Mills, 1985). In fact, the infant mortality rate for African American infants is more than twice the rate for White infants (13.6 deaths per 1,000 live births for African Americans vs. 5.7 deaths per 1,000 live births for Whites); and among American Indian and Alaska Native populations, the death rate is 51% higher than among White individuals (OMH, 2007b). In addition, although the infant mortality rate for Hispanic infants and White infants is the same, the infant mortality rate within the Puerto Rican subgroup is 40% higher than Whites (OMH, 2007b).

With regard to cancer, compared to non-Hispanic Whites, Hispanics have higher rates of cervical, esophageal, gallbladder, and stomach cancers; Asian Americans have higher rates of stomach and liver cancers; and Alaska Natives have higher rates of colorectal cancer (AHRQ, 2003). The incidence of cancer among African Americans is approximately 35% higher than for non-Hispanic Whites, and African American men have the highest prevalence of prostate cancer in the world (Bennett, 2004). In addition, Hispanic women are twice as likely to die of cervical cancer as non-Hispanic White women, and are more likely to die of breast cancer than are women of any other racial or ethnic group (CDC, 2005). Furthermore, it has been reported that cancer survival is lower among African Americans compared to non-Hispanic Whites for almost all cancers regardless of site or stage of treatment (Ghafoor et al., 2002).

The statistics for cardiovascular disease (CVD) are equally striking. Heart disease and stroke are the leading causes of death among all racial and ethnic groups in the U.S. (CDC, 2005). However, compared to non-Hispanic Whites, heart disease deaths are higher among African Americans and lower among Hispanics, Asian Americans, and American Indians

(AHRQ, 2003). Among African Americans and Hispanics age 20–44, stroke incidence is almost 2.5 times higher as compared to non-Hispanic Whites (Bennett, 2004). In addition, hypertension—an important risk factor for CVD—is 40% more prevalent among African Americans compared to non-Hispanic Whites; and, African Americans develop hypertension at an earlier age, experience a more severe course, and are at higher risk for problems such as kidney failure and hypertension-related death (Meyers, Wollery, & Creswell, 2004).

The CDC (2005) further reported that in 2000, American Indians, Alaska Natives, African Americans, and Hispanics were all 2 to 3 times more likely to have diagnosed diabetes when compared to non-Hispanic Whites. The findings from the CDC were no less astonishing for HIV infections, AIDS, and immunizations. Although African Americans and Hispanics together represented less than 30% of the U.S. population in 2004, they accounted for 69% of adult AIDS cases and 78% of pediatric estimated AIDS cases. Furthermore, in 2001, Hispanics and African Americans aged 65 and older were less likely than non-Hispanic Whites to report having received influenza and pneumococcal vaccines.

Numerous studies have also indicated an association between low socioeconomic status and the occurrence of heart disease, diabetes, obesity, low birth weight, and illness related to death (e.g., Adler et al., 1994; HHS, 2000). In addition, the NHDR indicated that cancer death rates tend to be higher among people of lower socioeconomic class, and that persons of lower socioeconomic status are more likely to die from HIV (AHRQ, 2003). These and other differences in health status between the poor and the affluent are often attributed to unhealthy behaviors and inadequate access to health care among people of lower socioeconomic status. These factors, however, only account for a proportion of the socioeconomic differences in health

(Institute Of Medicine [IOM], 2002; Lu, Samuels, & Wilson, 2004); health care disparities persist even when these factors are controlled.

Factors Influencing Health Disparities

A variety of biological (e.g., Collins, Green, Guttmacher, & Guyer, 2003), and social and environmental (e.g., Clark, Anderson, Clark, & Williams, 1999; Johnson et al., 1995) factors have been associated with the health disparities problem among racial and ethnic minorities, and individuals from lower socioeconomic backgrounds. However, the growing health disparities literature has increasingly suggested that social and environmental factors are the largest contributors to the health disparities problem (e.g., IOM, 2002), with sociocultural differences among and between patients, health care providers, and the health care system being cited by health care experts as central contributors to the problem (Betancourt, Green & Carrillo, 2002). More specifically, Betancourt (2006) indicated that the root causes of health disparities stem from: (a) health system factors, including issues related to the complexity of the health care system, and the disproportionate difficulty minority patients may experience navigating the system; (b) care-process variables, including stereotyping among health care providers and clinical uncertainty due to poor communication between patients and providers; and, (c) patient-level variables, including the refusal of services, poor adherence to treatment and delay in seeking care. The impact of health system factors, care-process variables and patient-level variables on health care quality, health care access, and patient-provider communication is discussed below.

Health care quality

The following are among the more striking research findings regarding health care quality dimensions that have been reported in the health care literature: (a) African American enrollees in Medicare in the U.S. receive less primary and preventative care and experience higher rates of

amputations than non-Hispanic Whites (Gornick et al., 1996); (b) African Americans and Hispanics with extremity fractures are less likely than non-Hispanic Whites to receive analgesics at emergency care departments (Todd, Deaton, D'Adamo, & Goe, 2000); (c) ethnic and racial minorities and persons of lower socioeconomic status are less likely to receive cancer screening services (AHRQ, 2003); (d) African Americans, Asian Americans/Pacific Islanders, American Indians, and Alaska Natives are all less likely to receive a kidney transplant within 3 years of renal failure compared to non-Hispanic Whites (AHRQ, 2003); (e) racial, ethnic, and socioeconomic disparities in recommendations for and receipt of coronary revascularization procedures have been repeatedly demonstrated (Carlisle et al., 1999; Hannan et al., 1999; Okelo et al., 2001; Schneider et al., 2001; Watson et al., 2001); (f) diabetic patients of low socioeconomic position are less likely to receive some recommended diabetic treatment services (AHRQ, 2003); (g) primary care physicians focus more on biomedical than psychosocial aspects of their patients' illnesses, especially when the patients are African American and have low incomes (Roter et al., 1997); and (h) non-Hispanic Whites and men are more likely to be referred for cardiac catheterization than African Americans and women, respectively (Schulman et al., 1999). These findings clearly demonstrate that health system factors and care-process variables, such as stereotyping, impact the quality of health care that racial and ethnic minority and low-income patients receive. In so doing, health system factors and care-process variables contribute to the national health disparities problem.

Health care access

Access to health care typically refers to using health care services in a timely manner in order to achieve the best health care outcomes (Millman, 1993). Patients from racial and ethnic minority and low socioeconomic backgrounds are less likely to enter the health care system, and

are more likely to encounter structural barriers once they interact with the health care system (AHRQ, 2003).

Entry into the health care system. Entry into the health care system refers to the likelihood that an individual will (a) have health insurance coverage and (b) have a usual source of health care (AHRQ, 2003). Multiple studies suggest that racial and ethnic minorities and individuals from low socioeconomic backgrounds, particularly low-income non-White Hispanics, are more likely to be either uninsured or underinsured even when they have stable jobs (Doty & Holmgren, 2004; Hoffman, Schoen, Rowland & Davis, 2001).

Individuals who lack health insurance and a usual source of care are more likely to delay seeking health care, to go without needed health care, and to have trouble paying their medical bills; furthermore, they are less likely to have a regular doctor, to have prescriptions filled, and to receive follow-up care following an emergency room visit (Klein, Glied, & Ferry, 2005). These individuals are subsequently at risk for a range of negative health-related outcomes including receiving less preventative care, receiving diagnoses at more advanced disease states, receiving less therapeutic care, and having poorer health statuses, all of which have made lack of health insurance the sixth-leading cause of death among people ages 25–64 years (AHRQ, 2003; Davis, 2003; Schoen & DesRoches, 2000).

Structural barriers within the system. Structural barriers to health care include factors that affect a person's ability and willingness to obtain health care and adhere to treatment recommendations of health care providers. The NHDR (AHRQ, 2003) concluded that African Americans and the uninsured are more likely to report waiting over one hour at the Emergency Room for semi-urgent or non-urgent care, and to report leaving the Emergency Room without ever being seen. Geographic availability of health institutions and resources may also have a

differential impact on racial and ethnic groups (IOM, 2002). For instance, one study found that only 25% of pharmacies in predominantly non-White neighborhoods carried opioid analgesic supplies compared to 72% of pharmacies in predominantly White neighborhoods (Morrison, Wallenstein, Natale, Senzel, & Huang, 2000). Other structural barriers to health care noted in the literature include poor transportation to clinics, and an inability to schedule appointments during hours convenient to patients, especially those in low-skill or low-paying jobs (Millman, 1993).

Patient-provider communication

American Indians and Alaska Natives, Asian Americans/Pacific Islanders, African Americans, Hispanics, low-income populations, and individuals without a high school diploma are more likely than non-Hispanic Whites, individuals with middle and high income levels, and individuals who attended college, respectively, to report poor communication with their physicians (AHRQ, 2003). Patient-provider communication can be hindered by a number of factors, all of which may be associated with poorer health outcomes among patients. These factors include (a) differences in communication style and language between patients and providers, (b) levels of general illiteracy and health illiteracy among patients, and (c) differences in health- and illness-related cultural beliefs held by patients and providers.

Differences in communication style and language. When health care providers give information and explanations to their patients, and show sensitivity, reassurance and support, their patients tend to have a greater understanding of health issues and to be more committed to treatment recommendations (Suarez-Almazor, 2004). However, current research suggests that patients' expectations of medical encounters are often not fulfilled (Platt et al., 2001; Suarez-Almazor, 2004). For example, African Americans, Asian Americans, and Hispanics and low income populations are more likely to feel disenfranchised in the decision-making process compared to non-Hispanic Whites with higher incomes (AHRQ, 2003). Furthermore, Johnson,

Roter, Powe and Cooper (2004) found that doctors were less likely to engage African American patients in conversation compared to non-Hispanic White patients, and the tone of visits with African American patients was generally less friendly than with non-Hispanic White patients.

Differences in patient-provider communication styles and expectations can be exacerbated by differences in language between patients and physicians. In the year 2000, 47 million people in the U.S. spoke a language other than English at home, and almost 12 million people lived in households where no one was fluent in English (Shin & Bruno, 2003). In fact, language differences and resulting poor communication are among the most challenging areas of serving immigrant and ethnically diverse patients (Clement, 1992). A shortage of bilingual providers and trained professional interpreters, insufficient reimbursement for language services by insurers, and inadequate language services in medical settings may discourage non-English speaking patients from receiving and seeking care (Hornberger et al., 1996; Weech-Maldonado, Morales, Spritzer, Elliott, & Hays, 2001; Youdelman & Perkins, 2005).

Levels of general and health illiteracy. The IOM (2004) reported that approximately 90 million adults may lack the necessary literacy skills to effectively use the U.S. health system, with literacy levels being lower among the elderly, those with lower educational levels, those who are poor, minority populations, and groups with limited English proficiency (e.g., recent immigrants). Furthermore, those who need health information the most often have the least access to it, as such information is often distributed through sources with which racial and ethnic minorities, as well as individuals from low socioeconomic backgrounds, may have less contact (e.g., the internet) (AHRQ, 2003). Ironically, a study of U.S. physicians revealed that the majority of them believed that the ability of their patients to speak English rarely or never have

played a role in any differences or disparities in health care that exist among their patients (Kaiser Family Foundation, 2002).

Differences in cultural beliefs. Communication between the provider and patient may also be affected by cultural factors other than language. Specifically, individuals from different cultural backgrounds (a) may construct their own meanings and explanations for illness and these constructions may conflict with the traditional Western biomedical model of medicine (Borrayo & Jenkins, 2003; Kundhal & Khundal, 2003), (b) may misrepresent symptoms to their health care providers, as certain illnesses and symptoms (e.g., symptoms of depression in many Asian cultures) are stigmatized in some cultures (Kundhal & Khundal, 2003), and (c) may avoid preventive care such as breast cancer screening due to cultural health beliefs about the causes and risks associated with various diseases (e.g., Borrayo & Jenkins, 2003; Mitchell, Lannin, Mathews, & Swanson, 2002; Palmer, Fernandez, Tortolero-Luna, Gonzales, & Mullen, 2005). Furthermore, as many as 50% of patients who require health care use complementary and alternative medicines (e.g., herbal remedies), and the majority of these patients do not communicate this information to their physicians (Robinson & McGrail, 2004); yet, complimentary and alternative medicines may interfere with conventional treatments. Non-disclosure of the use of these medicines can thus impact patients' well-being and chances of survival (Tasaki, Maskarinec, Shumay, Tatsumura, & Kakai, 2002).

Hypertension: A Major Health Disparities Problem that Negatively Impacts Racial and Ethnic Minorities

According to the HHS *Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure* (HHS, 2003), there are four blood pressure classifications: normal, prehypertension, stage 1 hypertension, and stage 2 hypertension. Individuals with a systolic blood pressure of less than 120 mmHg and a diastolic blood pressure

of less than 80 mmHg are classified as having normal blood pressure. Individuals with prehypertension have a systolic blood pressure that ranges from 120 to 139 mmHG, or a diastolic blood pressure that ranges from 80 to 89 mmHg. Individuals with stage 1 hypertension have a systolic blood pressure that ranges from 140 to 159 mmHg, or a diastolic blood pressure that ranges from 90 to 99 mmHg. Finally, individuals who are classified as having stage 2 hypertension have a systolic blood pressure that is greater than or equal to 160 mmHg or a diastolic blood pressure that is greater than or equal to 100 mmHg. The proposed study focuses on adult male and female African American and White primarily low-income patients with prehypertension, stage 1 hypertension, or stage 2 hypertension, alone or in combination with one or more other chronic health problems (i.e., diabetes, coronary heart disease, and/or high cholesterol).

Adult patients with hypertension alone, or hypertension in combination with other chronic problems were chosen as the target population for the proposed study for several reasons. First, hypertension or high blood pressure affects approximately 50 million individuals in the United States (HHS, 2003); however, most persons with hypertension do not have their blood pressure under control, and among this group the proportion who are aware of having a high blood pressure is higher among women than among men (CDC, 2005). Second, hypertension (i.e., stage 1 or stage 2) continues to be more prevalent among racial and ethnic minorities. For example, the OMH reported that African Americans are 1.5 times more likely than non-Hispanic Whites to have high blood pressure, and American Indian/Alaska Native adults are 1.3 times more likely than White adults to have high blood pressure (OMH, 2007a). Third, the relationship between blood pressure and CVD is continuous, consistent and independent of other risk factors – the higher the blood pressure, the greater the chance of heart attack, heart failure,

stroke, and kidney disease (HHS, 2003). Importantly, the CDC (2005) has identified CVD as one of the six areas that most reflect disparities among racial and ethnic minorities. Fourth, hypertensive patients, especially those with other chronic conditions, have the challenge of being adherent to multidimensional treatment regimens over long periods of time; therefore, they are required to interact with health care providers and office staff personnel who may or may not be culturally sensitive. As such, testing the impact of a patient-centered culturally sensitive health care intervention program on the health outcomes of hypertensive patients is extremely relevant to the health disparities literature.

Solving the Health Disparities Problem: The Roles of Patient-Centeredness, Cultural Competence, and Cultural Sensitivity

The disparities in health and health care, including those related to hypertension, have been clearly documented and have been found to be largely attributable to sociocultural differences among and between patients, health care providers, and the health care system. Patient-centeredness, cultural competence and cultural sensitivity are all constructs related to health care movements that have focused on addressing these sociocultural differences. As such, promotion of patient-centeredness, cultural competence, and cultural sensitivity have been put forward as integral components of any interventions or strategies launched to address the health disparities problem.

Defining Patient-Centeredness

In their paper summarizing the role of patient-centeredness in health care quality, Beach, Saha, and Cooper (2006) suggested that core features of patient-centeredness include: (a) understanding the patient as a unique person, (b) exploring the patient's experience of illness, (c) finding common ground regarding treatment through shared decision-making, and (d) emphasizing the development of the doctor-patient relationship. These authors concluded that,

“in essence, patient centeredness involves perceiving and evaluating health care from the patient’s perspective and then adapting care to meet the need and expectations of patients” (p. vi). Echoing these sentiments, the 2001 IOM report, *Crossing the Quality Chasm*, described compassion, empathy, and responsiveness to the needs, values, and expressed preferences of the patient as hallmarks of patient-centeredness.

Defining Cultural Competence

Wu and Martinez (2006) defined cultural competency as,

A system of health care services delivery in which care and services are provided in a way that respects the patient and results in each patient receiving equal care regardless of cultural background, national origin, race or ethnicity, English-language fluency, literacy level, socioeconomic status, or other relevant factors (p. 1)

In a similar vein, Betancourt, Green, Carrillo, & Ananeh-Firempong (2003), suggested that cultural competence entails understanding the importance of social and cultural influences on patients’ health beliefs and behaviors, considering how these factors interact at multiple levels of the health care delivery system, and devising interventions that consider these issues to assure quality health care delivery to diverse patient populations. Betancourt et al. also proposed a three-level framework for achieving cultural competence that includes: (a) organizational cultural competence interventions, designed to ensure that the leadership and workforce of the health care delivery system is diverse and representative of its population; (b) structural cultural competence interventions, designed to ensure that the structural processes within a health care delivery system allow full access to quality health care for all of its patients; and (c) clinical cultural competence interventions, designed to enhance provider knowledge of the relationship between soicocultural factors and health beliefs and behaviors and to equip providers with the tools and skills to manage these factors appropriately.

Defining Cultural Sensitivity

The terms “cultural sensitivity” and “culturally sensitive health care” have often been used interchangeably with the term “cultural competence” in the health care literature. In fact, in their review on the evidence base for cultural competency in health care, Goode, Dunne, and Bronheim (2006) searched health databases using both “cultural competence” and “cultural sensitivity” as keywords, thus acknowledging the tendency for health care researchers to consider the terms equivalent. Indeed, although Resnicow, Baranowski, Ahluwalia, and Braithwaite (1999) suggest that cultural competence is a descriptor of practitioners, and cultural sensitivity is a descriptor of messages and materials (Resnicow et al., 1999), definitions of cultural sensitivity are often similar to those offered for cultural competence. For example, Majumdar, Browne, Roberts, and Carpio (2004) defined cultural sensitivity as, “an ongoing awareness of cultural differences and similarities among populations. It is the need to be responsive to national and racial characteristics” (p. 162). Other authors consider cultural sensitivity as one of several dimensions of cultural competence (e.g., Kim-Godwin, Clarke, & Barton, 2001). Given the tendency for the terms “cultural competence” and “cultural sensitivity” to be used interchangeably in the health disparities literature, for the remainder of this literature review, the more widely used term “cultural competence” (broadly defined to include “cultural sensitivity”), will be focused upon in describing relevant theoretical, assessment and outcome research.

Beach et al. (2006) suggested that while patient-centeredness and cultural competence both aim to improve health care quality, they emphasize different aspects of quality. Whereas patient-centeredness movements aim to elevate quality for all patients, movements focused on cultural competence aim to balance quality, to improve equity, and reduce disparities by specifically improving care for people of color and other disadvantaged populations. Beach et al. further

contended that patient-centered and culturally competent health care systems and health care interactions are both integral for individualized and equitable care that is safe, effective, efficient and timely, and that such high quality care leads to improved health outcomes.

Do Patient-Centeredness and Cultural Competence lead to Improvements in Health Outcomes?

Although some experts in the field have advocated for cultural competency as a matter of social justice, regardless of its impact on outcomes (Branch & Fraser, 2000), the assumption that patient-centered and/or culturally competent interventions can lead to improved health outcomes has been the primary impetus for national calls for patient-centered and culturally competent care. For example, the IOM (2002) included patient-centered care among its 6 domains for improving quality of care for patient outcomes. Yet, very little empirical research actually exists that links patient-centered and/or culturally competent care to improvements in patient health outcomes (Betancourt et al., 2002; Kim-Godwin et al., 2001). In part, this lack of empirical evidence is attributable to: (a) a lack of clear and testable models that clearly describe a path through which cultural competence and/or patient-centeredness could impact health outcomes and (b) problems with assessing patient-centeredness and cultural competence.

Overview of existing models associating cultural competence and/or patient-centeredness with patients' health outcomes

Kazdin (2003) indicated that to understand human functioning and phenomena of interest (e.g., the health disparities problem), we should not simply collect facts or empirical findings; rather, we should aim to relate these findings to each other and to other phenomena in a cohesive way. Theoretical and/or conceptual models offer one mechanism for understanding associations among related phenomena. As previously described, a large literature now exists that empirically documents the existence of health and health care disparities, and many experts in the field suggest that cultural competence and patient centeredness are key components to reducing or

eliminating these disparities through improving health outcomes. However, few models have been proposed in the literature that clearly specify how increases in cultural competence and/or patient centeredness in health care could contribute to improved health outcomes among patients. Furthermore, those that do exist often lack specific and measurable constructs.

For example, Kim-Godwin et al. (2001) proposed a model for the delivery of culturally competent community care that linked cultural competence to health outcomes. This model is comprised of three sets of constructs: (a) cultural competence, which consists of four interdependent dimensions including caring (attitudes, judgments and actions that show support and professional skills), cultural sensitivity (the desire and effort to develop programs and services in a manner that respects the cultural diversity of populations), cultural knowledge (knowledge of integrated systems of learned behavior that are characteristic of members of groups and their system of attitudes, feelings, and values) and cultural skills (abilities, roles and functions in community settings); (b) the health care system, which consists of an integration of a complex array of other systems including the cultural system, the community system, and the health system; and (c) health outcomes, which refer to public health indicators such as incidence and prevalence rates. These authors proceeded to develop and test a measure of cultural competence (the Cultural Competence Scale) in order to test the dimensions of cultural competence set forth by the model, but failed to specify how the cultural competence dimensions could be empirically linked to health outcomes through the health care systems pathway that is stipulated by the model.

Beach et al. (2006) outlined a model that broadly suggested that patient-centered and culturally competent health care systems and health care interactions would lead to individualized (i.e., patient-centered) and equitable care, which would improve the quality of

care in terms of safety, effectiveness, efficiency, and timeliness, which would in turn lead to improved health outcomes. Though intuitively compelling, the lack of specificity of the model's constructs impedes the generation of testable hypotheses from the model.

In their conceptual model that attempted to link cultural competency to eliminating racial and ethnic health disparities, Branch and Fraser (2000) perhaps outlined the most specific published model linking cultural competence to improved outcomes in the published literature. Based on a review of the cultural competency literature between 1990 and 2000, these authors suggested that cultural competency techniques could be clustered into nine categories: interpreter services, recruitment and retention, training, coordinating with traditional healers, use of community health workers, culturally competent health promotion, inclusion of family and/or community members, immersion into another culture, and administrative and organizational accommodations.

Branch and Fraser then proposed a model suggesting that cultural competency techniques could potentially change both clinician and client behavior by (a) improving communication, (b) increasing trust, (c) creating a greater knowledge of the differences among racial and ethnic groups in epidemiology and treatment efficacy, and (d) expanding understanding of patients' cultural behaviors and environments. These authors further suggested that these behavior changes could lead to the provision of more appropriate services such as (a) prevention and screening activities being undertaken with full knowledge of risk factors, (b) better informed diagnoses, and (c) treatment related patient education that is culturally tailored to improve adherence.

Finally, the model suggests that the provision of these more appropriate services would lead to improved outcomes such as higher levels of health status, increased overall functioning,

and improved satisfaction among patients. The fact that Branch and Fraser's conceptual model has not been tested empirically, despite being proposed several years ago, may speak to the model's complexity and the lack of adequate measures to assess the techniques associated with the delivery of culturally competent and patient-centered care.

Assessing cultural competence and patient-centered care

Much of the literature on assessing cultural competence has focused on the effectiveness of cultural competency educational and training initiatives. This literature consistently suggests that assessing the effectiveness of cultural competence and patient centered care is limited because there is no consensus on the definition of cultural competence, and no standard curricula or universally accepted certification or credentialing for cultural competence (e.g., OMH, 2001; Betancourt, 2003).

Price et al. (2005) documented further limitations in a systematic review of empirical studies evaluating cultural competence training of health professionals between 1980 and 2003. Their review yielded 64 articles that met the following inclusion criteria: (a) they were written in English, (b) they were published after 1980, (c) they included human data or original data, (d) they had a full article available for review, (e) they were relevant to minority health, (f) they had an intervention or had an evaluation of an intervention, and (g) they targeted health care providers or organizations.

Analysis of the 64 articles included in the review led Price et al. to conclude that studies evaluating cultural competence training of health professionals lack methodological rigor in five quality domains: (a) representativeness of the targeted providers (e.g., most of the studies lacked an adequate description of the setting and population from which study subjects were drawn and few adequately described provider demographics); (b) completeness of the description of the intervention (e.g., most articles clearly stated their objectives, but only 21 described interventions

with enough detail to facilitate replication of them); (c) potential for bias and confounding (e.g., only 8 studies employed concurrent and similar comparison groups); (d) outcome assessment (e.g., only 27 studies used objective evaluation strategies such as written examinations or validated self-efficacy scales, and 15 studies reported outcomes that did not match the study objectives); and (e) reporting analytic approach (e.g., only 14 of the 64 studies reported the number and reasons for noninclusion of data in the analysis and only 15 studies reported the magnitude of the difference between groups and an index of variability). Based on their review, Price et al. concluded that, “the quality of evidence from interventions to improve cultural competence of health professionals is generally poor...[and] of particular concern is that the quality of the literature does not appear to be consistently improving over time” (p. 583).

Assessing cultural competency training programs is further compromised because, although many assessment tools continue to be developed and reviewed, these assessments have not been rated against each other or validated, subsequently making it difficult to determine and compare the effectiveness of cultural competence education and training programs (Hobgood, Sawning, Bowen & Savage, 2006; OMH, 2001). Furthermore, courses on cultural competence may pose significant challenges for evaluation because: (a) the effects of social desirability may bias evaluations of attitudes about race, ethnicity, class and culture; (b) measures that evaluate knowledge or facts do not necessarily capture the fluidity of culture and diversity among different racial, ethnic and cultural groups; and (c) less than favorable evaluations may be given to courses that require students to discuss personal and private perceptions about race, ethnicity, culture and class because such courses may be viewed negatively (Betancourt, 2003).

Standard 9 of the OMH’s national standards for culturally and linguistically appropriate services (CLAS) in health care states: “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 the internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations” (OMH, 2001, p. 88). However, organizational cultural competency assessments perhaps face greater challenges than those associated with assessing health care personnel.

For example, much of the existing cultural competency literature focuses on the importance of cultural awareness, knowledge, attitudes and skills of individuals, without describing how health systems can become culturally competent, and most articles describe a single approach to cultural competency, making it difficult for health systems to identify an overview of techniques available to them (Branch & Fraser, 2000). In addition, the dearth of literature addressing the costs and benefits to the system resulting from cultural and linguistic competency interventions represents a significant barrier to attracting investments from health care organizations already burdened with burgeoning health care expenditures. Finally, funding shortages may impact coalitions and grant-funded projects aimed at investigating and achieving organizational competence (Chrisman, 2007).

Importantly, efforts have been made to address these gaps in the literature. For example, experts in the field have offered frameworks for achieving organizational competency (e.g., Chrisman, 2007; Thompson-Robinson et al., 2006). Furthermore, the OMH final report on the CLAS standards included recommendations for tools for organizational self-assessment of cultural competence (OMH, 2001). In addition, researchers are beginning to assess the “business case” for cultural competency (e.g., Goode et al., 2006). Perhaps in response to such initiatives, it appears that a growing number of organizations in academia, government, managed care and community health care are overcoming the challenges associated with integrating cultural

competency into health care systems (Betancourt et al., 2002; Betancourt, Green, Carrillo, & Park, 2005; Wu & Marinez, 2006), and developing measures and benchmarks for assessing organizational cultural competency (e.g. Siegel, Haugland, & Chambers, 2003).

Ngo-Metzger et al. (2006) addressed another important issue in assessing cultural competency that has been often neglected in the literature. These authors suggested that, given the emphasis on patient-centeredness in the health care literature, measuring the quality of culturally competent care should involve obtaining the patients' perspectives. These authors further indicated that obtaining patients' perspectives was particularly important when measuring five of multiple domains that the authors believe contribute to culturally competent care.

Whereas the first two of these domains involve interactions between patients and providers, the last three involve patient-provider interactions as well as patients' interactions with other health care staff and the health care system overall. The five domains are: (a) patient-provider communication, (b) respect for patient preferences/shared decision-making, (c) experiences leading to trust or distrust, (d) experiences of discrimination, and (e) linguistic competency. Yet, cultural competence has historically been, and continues to be, assessed primarily from the provider's perspective. For example, in a systematic review of health care provider education interventions designed to impact cultural competence among providers, only 4 of 34 studies reviewed assessed cultural competence from the patients' perspectives (Beach et al., 2005).

Overview of the existing evidence associating general patient-centered and/or cultural competence interventions with patients' health outcomes

In a recent report assessing the evidence for cultural and linguistic competency in health care, Goode et al. (2006) suggested that the lack of empirical evidence linking cultural competence to health outcomes is indicative of the developmental stage of the field. As with most new areas of complex research, most of the present literature focuses on defining concepts

and issues and identifying important research questions. Goode et al. conducted a literature review of studies focused on cultural and/or linguistic competence from January 1995 to March 2006 and found 365 studies that addressed cultural and linguistic competence and health outcomes and well-being; however, only 25 of these studies used experimental designs focused on outcome research, with the majority of these studies focused on practice or service delivery (i.e., clinical and structural cultural competence interventions), and only 1 focused on organizational or policy levels (i.e., organizational cultural competency interventions). Notably, the studies reviewed focused on a range of the culturally competent intervention techniques described by Branch and Fraser (2000) including interpreter services, training, use of community health workers, culturally competent health promotion, inclusion of family and/or community members, and administrative and organizational accommodations. Unfortunately, Goode et al. were unable to determine the differential impact of various techniques from the information available.

Based on their review of the literature, Goode et al. concluded that the current evidence provided supports the efficacy of cultural and linguistic competency interventions at the organizational and practice levels, in terms of intermediate outcomes of short-term interventions, such as increased rates of cancer screening, improved adherence to treatment regimens, or better physiologically based measures. However, at the time of the review, none of the studies directly addressed the ultimate outcome of decreased incidence of a disease for a population, or decrease in morbidity or mortality as a result of the intervention used. It is additionally noteworthy that none of the studies included in the Goode et al. review focused specifically on training interventions, making it difficult to isolate the impact of training interventions on health outcomes among patients.

Furthermore, Goode et al. identified the following problems with the 25 studies using experimental designs to examine the associations between cultural and linguistic competence and health outcomes that were reviewed: (a) studies initiated an intervention with a sample from only one diverse racial or ethnic group; (b) studies often called an intervention culturally competent or a related term, but without fully describing or defining the culturally competent terms or elements; (c) studies often did not isolate cultural competency as an independent variable in the design and did not measure its sole effects; (d) studies often did not include a control group; (e) studies compared interventions to groups that received a different intervention, thereby making it difficult to interpret the results; and, (e) studies reported the results of the intervention as a whole, making the results difficult to interpret.

Goode et al.'s suggestions for future research in the area included the following: (a) use of validated and shared definitions of cultural competence; (b) refined population definitions to include cultural variables other than race, ethnicity or language; (c) use of designs that test the specific effects of cultural competence; (d) implementation of longitudinal and large sample studies to investigate ultimate health outcomes; and (e) use of methods and measures that examine the relationship among organizational policies, structures and practices, quality and effectiveness of care, and health outcomes and well-being.

General characteristics of health care provider cultural competence training interventions

In their final report on the national standards for CLAS in health care, the Office of Minority Health in the HHS (OMH, 2001) indicated that staff education and training was likely the single most important element in ensuring the cultural and linguistic competence of an organization. Health care provider training interventions have varied with regard to training level, training content, and contact time. For example, in the Beach et al. (2006) review, of the 34 intervention programs reviewed, 21 programs targeted pre-professionals (i.e., students), 1

program targeted residents/fellows, 1 program targeted pre-professionals and residents/fellows, 9 programs targeted professionals, and 1 program targeted professionals and residents/fellows. In addition, programs differed in terms of the degree to which the curricular content focused on specific cultural content, general concepts of culture, racism, doctor-patient interactions, gender, access, and socioeconomic status, with some programs focusing on as many as four of these content areas, and others focusing on only one content area.

Programs further differed in their contact time with program participants, varying from one four-hour session total to sessions of varying length that were held over a 4-year period of time. Importantly, Beach et al. concluded that both longer and shorter duration interventions were associated with positive outcomes. In addition, curricular content focusing on general concepts of culture and specific cultural information (alone and together) were also associated with positive outcomes. However, more recently, there have been calls for a more exclusive focus on each of these content areas (e.g., Brathwaite & Majumdar, 2006; Eiser & Ellis, 2007).

Cultural competence training interventions have also included a variety of curricular methods. For example, the curricular training methods reported in one or more of the 34 studies included in the Beach et al. (2005) review of health care provider educational interventions are: (a) audio/visual (7 studies), (b) group discussions (17 studies), (c) case scenarios (12 studies), (d) clinical experiences (10 studies), (e) interviewing members of another culture (6 studies), (f) lectures (15 studies), (g) cultural immersion experiences (7 studies), (h) demonstrations or role modeling (5 studies), (i) language lessons (3 studies), (j) food shopping/planning (1 study), (k) hospital tours (1 study), (l) cultural and history learning (1 study), (m) drill/practice exercises (3 studies), (n) brainstorming (2 studies), (o) conduction of community activities (1 study), (p) community service (1 study), (q) home visits (1 study), (r) outreach with national prevention

organization (1 study), (s) written assignments (1 study), (t) visits to local hospitals and health centers (1 study), (u) field trips into patient communities (1 study), (v) web pages (1 study), (w) written and verbal presentations (1 study), (x) simulations of clinical encounters (1 study), (y) personal experiences (1 study), and (z) written cultural autobiography (1 study).

Interestingly, 6 studies described training programs that used 1 curricular method, 21 studies described programs that combined between 2 or 3 curricular methods, and 6 studies described training programs that combined between 5 and 9 curricular methods. Notably, Beach et al. concluded that experiential as well as non-experiential interventions were associated with positive outcomes. However, these authors were unable to conclude which types of training interventions were most effective in impacting targeted outcomes (i.e., health care provider knowledge, attitudes and skills) due to the heterogeneity and intermingling of curricular content and methods. In addition, more recent research suggests that having both affective/experiential and cognitive components may be more beneficial (e.g., Caffrey, Neander, Markle, & Stewart, 2005)

In a similar effort to organize the literature on teaching culturally appropriate health care, Hobgood et al. (2006) conducted a review of educational models and methods, and suggested that there are 6 primary educational models used to teach cultural competency to health care providers. These models include: (a) portfolio models, which comprise activities focused on self-evaluation and self-reflection; (b) cultural immersion models, which emphasize cultural exposure; (c) literary or media models, which employ poetry, movies, short stories, and other media to explore culture, relationships and difficult patient interactions; (d) clinical experience models, which employ clinical experiences in cultural competency trainings; (e) simulation models, which use structured clinical exams and other simulations to teach and assess cultural

competency skills; and (f) didactic models, which employ lectures and small group discussions in cultural competency trainings. However, consistent with the Beach et al. review findings, Hobgood et al. suggested that training programs often use a mixed-method approach that offers more than one type of educational experience. More recent examples of mixed-method training programs that have been reported in the literature include a five-component cultural competence course that targeted public health nurses in Canada, and which primarily used didactic and simulation educational approaches (Brathwaite, 2005); and a one-year course offered at the School of Health Professions and Studies at a University of Michigan commuter campus, which employed didactic, literary, clinical, portfolio, cultural immersion, and simulation educational experiences (Selig, Tropiano, & Greene-Moton, 2007).

Overview of existing literature associating culturally competent health care provider training interventions with health care delivery

In an attempt to critically evaluate the impact of health care provider training interventions on health care delivery, Beach et al. (2005) performed a systematic review of such interventions from 1980 to June 2003 using keywords such as “cultural sensitivity,” “transcultural,” “cultural diversity,” “multicultural,” and “cultural competency.” This review identified 34 empirical articles that had a before- and after-intervention evaluation or had a control group for comparison. The results of the Beach et al. review provided excellent evidence that cultural competence training (broadly defined) improves the knowledge of health professionals and good evidence that such training impacts the attitudes and skills of health professionals.

More specifically, 17 of the 19 articles that focused on knowledge demonstrated a beneficial effect, 21 of the 25 studies that focused on evaluating attitudes demonstrated a beneficial effect, and all of the 14 studies that evaluated skills demonstrated a beneficial effect. These authors also concluded that there were beneficial effects for both longer and shorter

duration interventions, experiential and non-experiential interventions and for curricula focusing on general concepts of culture as well as specific cultural information.

It is noteworthy that only 4 of the 34 studies reviewed by Beach et al. used patient perceptions (versus provider self-reports, video or audio tapes, exams, etc.) to assess differences in cultural competence prior to and following cultural competence training interventions. In addition, few studies have evaluated whether changes to providers' knowledge, attitudes and skills persist over time, and whether reported changes actually correlate with participants' behavior during clinical encounters. However, such evaluations seem necessary given the prevalence of self-report data and paper and pencil assessment instruments, and the influence of social desirability and other biases on these modes of assessment (Betancourt, 2003; Crandall, George, Marion, & Davis, 2003; Hobgood et al., 2006).

Overview of existing literature associating culturally competent health care provider training interventions with patients' perceptions of their health care environment

As noted earlier, few studies have examined the impact of culturally competent educational training provider interventions from the perspective of patients. Yet, obtaining patient perspectives is important as physicians' knowledge and intention to provide culturally competent and patient-centered care are not enough to ensure that such care will be delivered (Opie, 1998). For example, in a qualitative study examining self-care decision making among 22 Type 1 diabetes patients, Paterson (2001) found that providers often contradicted their stated goal of patient empowerment in covert and subtle ways that were identifiable by patients. Providers in this study frequently discounted the experiential knowledge of diabetics over time and did not provide patients with the resources necessary to make informed decisions.

The existing research suggests that there are mixed results regarding the efficacy of provider education training interventions when evaluated from the patients' perspectives. For

example, in all four studies included in the Beach et al. (2005) review that elicited patient evaluations of cultural competence training outcomes, there was evidence of increased patient-perceived cultural competence following training interventions. However, in a recent longitudinal study conducted by Thom, Tirado, Woon, and McBride (2006) involving 429 patients among whom were non-Hispanic White, Latino/Hispanic, African-American, and Asian patients, no significant changes in patient-reported cultural competency ratings following 2 interventions were found. In the first intervention, providers were given feedback on baseline cultural competency patient ratings. In the second intervention providers were given feedback on baseline cultural competency ratings, and given a 4.5-hour cultural competency training. At six-month follow-up there was little change in cultural competency ratings for either intervention group and no significant group differences in the amount of change after controlling for patient characteristics and baseline values of outcome measures. Differences in findings among the Thom et al. study and those included in the Beach et al. review may stem from: (a) the longitudinal nature of the Thom et al. study, and (b) differences in definitions of cultural competency and patient-reported evaluation methods used in the studies.

Overview of existing literature associating culturally competent health care provider training interventions with patients' health outcomes

Although multiple studies have investigated the impact of various culturally competent interventions on a variety of patient health status outcomes (Goode et al., 2006), only two studies have investigated the specific impact of culturally sensitive or culturally competent training interventions on such outcomes. In the first of these studies, Majumdar et al. (2004) conducted a randomized control longitudinal study assessing the effects of cultural sensitivity training on health care provider attitudes and patient outcomes. The study was executed in Canada and involved 114 health care providers and 133 patients of mostly Canadian, British and European

origin. These researchers found that, at post-intervention, there were no statistically significant differences in mean scores between patients in the control group (i.e., those treated by providers who did not undergo cultural sensitivity training) and in the intervention group (i.e., those treated by providers who did undergo cultural sensitivity training) on mean levels of client satisfaction, mental health, physical health, and activities of daily living. However, patients in the intervention group demonstrated higher levels of social functioning and an improvement in overall functional capacity (as assessed by the Off-Axis Ratio Multidimensional Measure of Functional Capacity) without a significant increase in expenditures for health care after 1.5 years following the training intervention.

It is difficult to determine how the results of the Majumdar et al. study generalize to the case of low-income and racial/ethnic minority patients in the US, especially given several criticisms of this study that are consistent with those previously highlighted by Price et al. (2005) and Goode et al. (2006). For example, Majumdar et al. failed to disclose the details of the cultural sensitivity training intervention that was provided in their study. Furthermore, these researchers failed to operationalize “mental health”, “physical health,” and “activities of daily living” (e.g., no sample items were given for the assessments that measured these constructs). As such, it is unclear what specific patient health outcomes were measured in the studies, and what specific behaviors or attitudes demonstrated the increases in social functioning and functional capacity that the study reported. In addition, although these authors reported the national identity and language of the participating patients, they failed to report the racial and ethnic identities and social economic statuses for the patient participants.

In the second published study that has evaluated the impact of culturally competent training interventions on patient health status outcomes, Thom et al. (2006) investigated the

impact of a 4.5-hour cultural competency training on the health outcomes of 429 patients with either diabetes or hypertension. The study involved 53 primary care physicians at 4 diverse practice sites. At all four practice sites, physicians received feedback on cultural competency behaviors reported by their patients; however, two of the practice sites were also randomly assigned to receive the training intervention, which was based on a cultural competency model that was developed by one of the researchers and an expert panel of physicians. This model focused on knowledge of patients (including knowledge of patients' cultural health beliefs and identification of their level of acculturation with respect to mainstream health beliefs), communication skills (including listening, explaining, acknowledging, providing recommendations, and working effectively with interpreters), and cultural brokering (including negotiating a treatment plan with patient and family, understanding community resources available to patients, and working with the health care system to meet the needs of culturally diverse patients).

At six-month follow-up, these researchers reported no measurable impact of the tested cultural competence training on disease-specific patient outcomes (e.g., patients' satisfaction, weight, or systolic blood pressure), compared to outcomes of patients who had been treated by physicians who had not received the training (i.e., physicians who only received feedback on cultural competency behaviors reported by their patients). In attempting to interpret their results, Thom et al. suggested that the brevity of their intervention (4.5 hours) and the lack of reinforcement of behaviors learned in the training during the 6-month period between the training and the outcome measurement period may have contributed to their non-significant findings. The Thom et al. study is the only one that has assessed the longitudinal impact of cultural competency trainings on disease-specific patient outcomes over a 6-month period. The

study suggests that positive training effects on physician knowledge, attitudes and skills that have been reported in the literature (e.g., Beach et al., 2006) may not persist over time, and highlights the need for longitudinal studies focused on patient-centered evaluations of such trainings to extend the present literature base.

In summary, patient-centered, culturally sensitive, and culturally competent care have all been promoted in the literature as central mechanisms for addressing the health and health care disparities problems through improving patient health outcomes. However, very little empirical research exists that links patient centered, culturally sensitive and/or culturally competent health care interventions (including health care provider and office staff training interventions) to improvements in patients' health outcomes. Moreover, although some evidence does support the efficacy of patient-centered, culturally sensitive, and culturally competent interventions in terms of intermediate outcomes, a lack of clear and testable models, as well as problems with assessing these constructs continue to plague research in this area. The following section describes a new construct – patient-centered culturally sensitive health care. The proposed study seeks to expand the existing literature by using a clear and testable literature-based model to examine whether patient-centered culturally sensitive health care training interventions are associated with improvements in health outcomes among patients.

Patient-Centered Culturally Sensitive Health Care: Evolution of a New Health Care Orientation with Potential for Reducing Health Disparities

Defining “Patient-Centered Culturally Sensitivity Health Care”

Ironically, despite the emphasis on patient-centeredness that is touted in the health care literature, missing from most existing definitions of cultural competence or cultural sensitivity is any mention of the importance of patient perspectives or experiences. Definitions have also relied on broad, unobservable characteristics that are difficult to teach and evaluate. In an effort

to move beyond and integrate core features of prior definitions of patient-centeredness, cultural competence and cultural sensitivity, Tucker and her colleagues (Herman et al., 2007) offered a definition of “patient-centered culturally sensitive health care.”

This definition has been described as “cultural competence plus” and emphasizes the perspectives of culturally diverse patients, rather than professional experts, on behaviors, attitudes and health care environment characteristics and policies that convey patient-centeredness and cultural sensitivity. According to these researchers, patient-centered culturally sensitive health care: (a) emphasizes displaying patient-desired modifiable provider and office staff behaviors and attitudes, implementing health care center policies, and displaying physical health care center environment characteristics that culturally diverse patients identify as indicators of respect for their culture and enable these patients to feel comfortable with, trusting of, and respected by their health care providers and office staff; (b) conceptualizes the patient-provider relationship as a partnership that emerges from patient-centeredness; and (c) is patient empowerment oriented. Brief explanations of these characteristics are described below.

Display of patient-identified indicators. Because health care providers and office staff often participate in expert-centered culturally competent health care training and yet not display this competence at post-training in ways that are recognized by culturally diverse patients (Paterson, 2001), it seems important that such training be primarily based on what culturally diverse patients view as indicators of cultural sensitivity. Obtaining this information requires (a) providing opportunities for culturally diverse patients to identify the indicators of culturally sensitive health care and evaluate the level of occurrence of these indicators, and (b) using this patient evaluation feedback to develop, modify and evaluate training and other interventions to improve health care quality as perceived by culturally diverse patients. This assessment,

feedback-based intervention, and evaluation process must be ongoing over time given that (a) the composition of providers, office staff and patients at any health care center changes periodically and (b) individual health care professionals and organizations vary in their opportunities for and commitment to becoming more culturally sensitive, thus requiring this cultural sensitivity to be a developmental process.

Patient-centered patient-provider partnerships. Central to these partnerships are providers who demonstrate empathy, compassion, and responsiveness in relation to the assessed needs, values, and preferences of their patients, and patients who are actively involved in identifying these needs, values and preferences (Paterson, 2001). These partnerships have been associated with increased treatment adherence by patients (Beck, Daughtridge & Sloane, 2002), improvements in the health statuses of patients (Michie, Miles, & Weinman, 2003), and reductions in misdiagnosis of patients' health problems due to poor patient-provider communication (DiMatteo, 1998). Furthermore, patients want to be active partners in their health care (Earnest, Ross, Wittevrongel, Moore & Lin, 2004; Ross, Moore, Earnest, Wittevrongel & Lin, 2004).

Patient-empowerment oriented. There is agreement among researchers that empowerment of minorities must include enabling them to experience a psychological sense of personal and interpersonal control; and attending to social, political, and legal factors that influence this perceived control (McWhirter, 1991; Paterson, 2001). Thus, promotion of this perceived control among minority patients likely requires the supportive involvement of these patients and their health care center providers and office staff as well as individuals at their health care centers who control the resources and policies of these centers (e.g., administrators).

Operationalizing and Measuring Indicators of Patient-Centered Culturally Sensitive Health Care

A central feature of Tucker's definition of patient-centered culturally sensitive health care (Herman et al., 2007) is the communication or display of specific patient-identified modifiable provider and office staff behaviors and attitudes, and clinic environment characteristics and policies that show respect for patients and their cultures and/or make patients feel comfortable with and trusting of their health care providers, and that enable patients to feel comfort and a sense of belonging in their health care settings. In order to identify these modifiable provider and office staff behaviors and attitudes, and clinic characteristics and policies, Tucker and her colleagues conducted 2 studies with convenience samples of primarily low-income African American, Hispanic and White patient-participants.

Focus Group Study. In the first of these studies, Tucker et al. (2003) conducted 20 ethnicity and gender concordant focus groups with 52 African American patient participants (31 men and 31 women), 45 Hispanic patient participants (18 men and 27 women), and 38 White patient participants (15 men and 23 women), who were recruited from four community-based primary care clinics in north central Florida that serve a disproportionately high percent of low-income patients and patients who identify as racial/ethnic minorities. The focus groups were conducted in community settings (e.g., library meeting rooms and churches), and the following questioning route was used to guide the focus group discussions: (a) What does/could your doctor do to make you feel comfortable/uncomfortable with him or her? (b) What makes you trust/not trust your doctor? What could your doctor do to help you trust him or her more? (c) What does/could your doctor do to show you respect and be sensitive to your needs? (d) What could your doctor do to show that he or she is sensitive to your needs and is respectful of you as

an African American /Hispanic/White? (e) What can doctors do to become better at helping patients from your racial, language or cultural background?

African American, Hispanic, and White focus group patient participants identified 176, 125 and 197 behaviors, attitudes and/or clinic characteristics and policies, respectively, that made them feel comfortable with, trusting of, and/or respected by health care providers and office staff, and/or that made them feel a sense of comfort and/or belonging at the health care clinic.

Validating focus group findings. To verify and extend the findings of the focus group studies, Tucker, Herman et al. (2007) used the focus-group generated items to develop race/ethnicity-specific forms of a Health Care Importance Rating Survey (HIRS). These researchers then asked an independent sample of patients, who were demographically similar to those in the focus group study, to complete the relevant (i.e., race/ethnicity-specific version) HIRS by rating the importance of each item using a scale from 1 to 5 where 1 = “not at all important” and 5 = “extremely important.” The participants in the validation study consisted of 82 African American (17 men and 65 women), 45 Hispanic (15 men and 30 women), and 94 White (26 men and 68 women) mostly low-income patient participants who were recruited from Area Health Education Clinics throughout Florida.

Notably, the racial/ethnic groups represented among those who completed the HIRS rated 86% to 100% of the behaviors and attitudes concerning provider behaviors and attitudes as important. Furthermore, the African American patients rated 87% of the clinic office staff behaviors and attitudes and 59% of the clinic physical characteristics as important. The Hispanic patients rated 100% of the clinic office staff behaviors and attitudes and 82% of the focus clinic

physical characteristics as important. Finally, the White patients rated 87% of the clinic office staff behaviors and attitudes, and 55% of the clinic physical characteristics as important.

In sum, there was a high degree of within-group consistency (i.e., within racial/ethnicity-specific samples) between independent samples of primarily low-income African American, Hispanic, and White primary care patient participants on attitudes and behaviors of health care providers and office staff, and on the clinic environment characteristics that convey patient-centered culturally sensitive health care. The items that were rated as important in the validation study were used to construct the Tucker-Culturally Sensitive Health Care Inventory – Patient Form (T-CUSHCI – Patient Form; Tucker, Mirsu-Paun et al., 2007) that will be used to measure participants’ perceived level of culturally sensitive health care in the proposed study. Detailed descriptions of the development of and reliability data for the T-CUSCHCIs are given in Chapter 3. The items that were rated as important in the validation study were also used to develop the pilot Patient-Centered Culturally Sensitive (PC-CSHC) Intervention Program that will be tested for its effects in the proposed study.

Differentiating Patient-Centered Culturally Sensitive Health Care from Cultural Competence

Tucker and her colleagues (Tucker et al., 2005) sought to empirically determine if there was a difference between the constructs “patient-centered culturally sensitive health care” and “cultural competence.” In order to do this, these researchers asked 22 physicians and 10 other health care providers (e.g., nurse practitioners) to complete self-report measures of cultural competence (Cultural Competence Self Assessment Questionnaire – Service Provider Version [CCSQ-SPV]; Mason, 1995) and patient-centered cultural sensitivity (Tucker-Culturally Sensitive Health Care Inventories – Physician and Health Care Provider Forms [T-CSHCI-PF Form and T-CSCHI-HCP Form]; Tucker, Mirsu-Paun et al., 2007). Bivariate Pearson

correlational analyses revealed that only one of seven subscales of the CCSQ-SPV was significantly correlated with the T-CSHCI-PF, and indicated no significant correlations between the CCSQ-SPV and the T-CSHCI-HCP. Tucker and her colleagues concluded that patient-centered culturally sensitive health care and culturally competent health care are related, but different constructs and further suggested that interventions based on both of these types of health care are needed to effectively address health disparities.

In summary, “patient-centered culturally sensitive health care” is a fairly new, important and clearly defined construct for describing health care that attends to the needs of culturally diverse people. It is novel in that it takes into account patients’ perspectives and needs. Moreover, it is clearly operationalized so that it can be measured empirically from the perspectives of patients and/or health care providers and office staff, thus allowing interventions based on the construct to be evaluated with clearly interpretable results. The proposed study attempts to address the health disparities problem by testing the specific effects of a Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Intervention Program on the health outcomes of mostly low-income patients with hypertension alone or with other chronic health problems – a group at risk for health disparities. The model that guides the proposed study will be described in the next section.

The Tucker Patient-Centered Culturally Sensitive Health Care Model

Wu and Martinez (2006) lamented that, although there has been a profusion of research in the field of cultural competency, especially research focused on defining cultural competence, there has been considerably less work focused on taking cultural competency from theory to action. In a similar vein, recognizing that the relationship between culturally competent health care and health outcomes has not been thoroughly tested, Kim-Godwin et al. (2001) suggested that both qualitative studies (e.g., focus group with culturally diverse populations) and

quantitative studies could be used to develop and test models suggesting hypothesized relationships between cultural competence in health care and major morbidity and mortality indicators. In an effort to address this dearth in the literature, Tucker, Herman et al. (2007) proposed the Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Model to describe how a patient-centered culturally sensitive health care intervention program, based on these researchers' earlier described qualitative focus group data, could be ultimately associated with improved health outcomes of patients. The PC-CSHC Model thus offers health care organizations a framework for taking patient-centered culturally competent health care from theory to action.

Overview of the PC-CSHC Model

The PC-CSHC Model is a formative but testable literature-based model for understanding the theorized associations between (a) patient-centered culturally sensitive health care and (b) patients' health promoting treatment behaviors (e.g., treatment adherence), engagement in a health promoting lifestyle (e.g., eating healthy), and health outcome/health statuses (e.g., blood pressure). In sum, the PC-CSHC Model hypothesizes relationships among health care system factors, health care process variables, and patient-level health related variables – the “root causes of disparities” (Betancourt, 2006) – and patient health outcomes.

Specifically, the PC-CSHC Model postulates that (a) patient-centered culturally sensitive health care interventions promote patient-centered culturally sensitive health care as indicated by clinic physical environment characteristics and policies, provider behaviors and attitudes, and office staff behaviors and attitudes; (b) this care influences patients' perceived levels of provider cultural sensitivity and interpersonal control, both of which impact patients' level of engagement in a health promoting lifestyle and level of health care satisfaction; (c) the latter influences

patients' level of treatment adherence; and (d) both level of treatment adherence and level of engagement in a health promoting lifestyle directly influence health outcomes/statuses.

The proposed study is a longitudinal study that examines the impact of a PC-CSHC Model-based pilot intervention program (i.e., the PC-CSHC Intervention Program) on low-income hypertensive patients' (a) perceptions of cultural sensitivity in the health care they experience and (b) health outcomes (i.e., diastolic and systolic blood pressure) over a 15-month period. The proposed study will extend the existing literature base and addresses several of the methodological concerns identified by Price et al. (2005) and Goode et al. (2006) by: (a) implementing a clearly defined and replicable culturally sensitive health care intervention program that is based on patients' perspectives regarding health care providers' and office staff members' views of what constitutes culturally sensitive health care; (b) evaluating the impact of this intervention program on clearly operationalized health outcome measures; (c) utilizing patient assessments versus provider self-assessments of patient-centered culturally sensitive health care; (d) controlling for the impact of social desirability on found intervention effects; and (e) assessing whether any positive changes in patients' perceived levels of patient-centered culturally sensitive health care associated with the tested PC-CSHC Intervention Program persist over an extended (i.e., a 5-month period) following participation in the final component of the PC-CSHC Intervention Program. The following section describes the literature supporting the PC-CSHC Model.

Research Supporting the PC-CSHC Model

Associations among perceived cultural sensitivity, interpersonal control, health care satisfaction, and health promoting lifestyle behaviors.

Research suggesting a link between patient-perceived cultural sensitivity and patient-reported health care satisfaction includes a study by Joffe, Manocchia, Weeks, & Cleary (2003)

exploring what patients value in their hospital care. These researchers found that patients' self-reported levels of confidence and trust in their providers, treatment with respect and dignity by their providers, and attention to their physical comfort by their providers (i.e. patients' self-reported levels of patient-centered culturally sensitive health care) were all significantly associated with patients' positive evaluations of their hospital care (i.e., patient satisfaction). Harris, Luft, Rucy, & Tierney (1995) similarly found among African American patients that these patients' level of trust in their providers and level of perceived treatment with respect and dignity by their providers were significantly associated with their (the patients') level of health care satisfaction, which in turn was found to be a significant predictor of higher adherence to medical regimens and better health among these patients.

Support for the hypothesized link between patients' perceived cultural sensitivity and their engagement in a health promoting lifestyle comes from research that provides evidence of the effectiveness of culturally sensitive health promotion programs implemented with adults who have low levels of literacy (Winkleby, Howard-Pitney, & Albright, 1997) and working-class, multiethnic workers (Sorensen et al., 2005). Such programs have also been effective in helping women living in a low-income community quit smoking (O'Loughlin, Renaud, & Paradis, 1996).

Support for the theorized link between patients' perceived interpersonal control and patient satisfaction comes from the results of a study by Jahng, Martin, Golin, and Dimatteo (2004). These researchers found that when patients who desire to be involved in their care were matched with providers who support such patient involvement, high levels of perceived patient satisfaction resulted. It has also been found that physicians who see their relationships with their patients as partnerships have more satisfied patients compared to physicians who have more authoritarian relationships with their patients (Like & Zyzanski, 1987).

Research suggesting an association between perceived interpersonal control by patients and their level of engagement in health promoting lifestyle behaviors has also been reported in the medical literature. For example, Auerbach et al. (2002) found that patients' ability to engage in behaviors to control their diabetes was related to their desire for behavioral involvement in their own health care.

Association between health care satisfaction and treatment adherence.

In the formative PC-CSHC Model patient health care satisfaction is theorized to directly influence patient treatment adherence; however, patient health care satisfaction is not directly associated with health outcomes/statuses. Indeed no evidence for causal paths going from health care satisfaction to health outcomes was found in a one-year longitudinal study of 590 older patients' health statuses and health care satisfaction (Hall, Milburn, & Epstein, 1993). However, it has been found that health care satisfaction predicts more continuous health care, adherence to medical regimens, and ultimately better health (DiPalo, 1997; Greenfield & Attkisson, 1989; Hall et al., 1993; Harris et al., 1995). The association between health care satisfaction and treatment adherence among African Americans has also been well documented (Harris et al., 1995).

Associations of treatment adherence and engagement in a health promoting lifestyle with health outcomes/statuses.

Support for these theorized associations comes in part from the conclusion in the Institute of Medicine's 2002 Report (titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*) that the link between improved patient-provider communication and health status of patients may be through improved patient satisfaction and treatment adherence. Furthermore, a number of studies suggested that there is an association between engagement in health promoting behaviors and health outcomes/statuses. For example, in a 12-week after-school

health education, activity, and food monitoring intervention program to increase fruit and vegetable consumption among African American children, adolescents and their parents, it was found that program participation (i.e., engagement in health promoting behaviors) resulted in improvements in body fat level, BMI, and endurance walk/run time among the participating parents, and improvements in systolic blood pressure among the children and adolescents (Engels, Gretebeck, Gretebeck, & Jimenez, 2005). In another study, Rimmer et al. (2000) examined the effects of a 12-week health promotion intervention among a predominantly urban group of adult African American stroke survivors. Results revealed that compared to a control group, the intervention group participants had made significant higher gains on a number of health outcome measures at the post-intervention period, including reduced total cholesterol and reduced weight.

The PC-CSHC Intervention Program

The PC-CSHC Intervention Program includes three sub-components. The first sub-component involves changing the physical health care clinic environment and clinic policies in ways that allow culturally diverse patients to feel a sense of comfort and belonging in the clinic, and partnering with health care administrators and providers in making these changes. The second sub-component of the intervention program involves training health care providers and office staff to engage in behaviors and display attitudes that mostly low-income culturally diverse primary care patients (i.e., African American and White primary care patients similar in socio-demographic characteristics to the patients in the proposed research) have identified as behaviors and attitudes that make them feel comfortable with, trusting of, and respected by their health care providers/office staff and that make them feel that their culture is respected. Finally, the third sub-component in the PC-CSHC Intervention Program involves training/empowering patients to motivate/inspire desired behaviors and attitudes from providers and office staff and

desired changes in the health care clinic physical environment and policies, especially those behaviors, attitudes and environment and policy changes earlier identified by similar patients as indicators of patient-centered culturally sensitive health care.

It is noteworthy that the PC-CSHC Intervention Program can be differentiated from other reported intervention programs that address culturally appropriate health care delivery by its focus on all rather than one or two of the following variables: patient factors, provider factors, and health care system factors. In addition, the PC-CSHC Intervention Program meets several of the recommendations for taking cultural competency from theory to action that were set forth by Wu and Martinez (2006). Specifically, the PC-CSHC Intervention Program: (a) invites community representation and feedback in all three intervention components; (b) attempts to integrate patient-centered cultural sensitivity into multiple systems (i.e., clinic physical environment and policies, providers, office staff, and clinic administrators) of the health care organization; (c) attempts to ensure that the changes made are manageable, measurable, and sustainable; and (d) elicits a commitment from leadership to the changes made during the intervention program. Finally, the PC-CSHC Intervention Program fulfills the CLAS guidelines for facilitating community and patient involvement in designing and implementing CLAS-related activities (OMH, 2001). For example, community representatives participate as panelists in the provider training sub-component of the PC-CSHC Intervention Program, and as co-facilitators in the patient-empowerment training sub-section of the PC-CSHC Intervention Program. The following sub-sections focus on briefly describing the literatures relevant to each of the PC-CSHC Intervention Program's sub-components.

Health Care Physical Environment and Clinic Interventions

Although considerably less attention in the health care literature has focused on changing the physical environment of health care sites (e.g., health clinics/centers) to achieve cultural

sensitivity and/or cultural competency, there are increasing calls in the literature for such changes. For example, Kune-Karrer and Taylor (1995) called for the removal of artwork and paintings in clinics and hospitals that may be culturally insensitive. In addition, Branch and Fraser (2000) suggested that health care systems could alter their physical environments to make them more welcoming to minority group members. Furthermore, the CLAS standards mandate that “health care organizations 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” (OMH, 2001, p. 77).

Perhaps more importantly, however, is the growing literature base suggesting that patients consider their physical health care environments and policies as important indicators of culturally competent health care, and that such indicators are associated with patient health outcomes. For example, participants in focus groups of low-income and racial/ethnic minority patients identified physical and policy aspects of health care clinic environments as important aspects of patient-centered culturally sensitive health care (Tucker et al., 2003). Additionally, the inclusion of providers and office staff at health care clinics who speak the language of their patients has been advocated and has been found to be associated with lower health distress, less pain severity, and fewer pain effects among patients (Ferguson et al., 1998).

Health Care Provider and Office Staff Training Interventions

The vast majority of interventions designed to achieve cultural sensitivity/competence have focused on clinical cultural competence interventions; that is, those interventions designed to enhance provider knowledge of the relationship between sociocultural factors and health beliefs and behaviors and to equip providers with the tools and skills to manage these factors appropriately. The focus on clinical cultural sensitivity/ competence interventions, in part,

reflects increasing mandates from national health care organizations that cultural competence education must be integrated into training programs at every learner level.

For example, the national CLAS standards in health care included the following mandate: “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” (OMH, 2001, p. 59). Additionally, the Association of American Medical Colleges has approved mandatory diversity accreditation requirements, and in some states legislation has been proposed requiring questions related to cultural competence on board examinations (OMH, 2001). The response to such mandates has been a mushrooming of the literature on cultural competency education and training generally (Beach et al., 2006), and health care field-specific educational initiatives and/or frameworks for achieving cultural sensitivity/competence (e.g., Hobgood et al., 2006; Reynolds et al., 2005; Shaya & Gbarayor, 2006), detailed descriptions of which were given in earlier sections of this literature review.

Patient Training/Empowerment Interventions

The increased attention that patient training and empowerment has received in the health care literature is evidenced in the twelfth national standard for CLAS in health care, which calls for health care organizations to “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” (OMH, 2001, p. 102). Similarly, Betancourt et al. (2002), in outlining recommendations and practical approaches for eliminating racial and ethnic disparities in health care through cultural competency, called for programs to be developed that help patients navigate the health care system and become a more active partner in the clinical encounter. It is noteworthy that there is a wide body of literature on the use of culturally competent interventions to increase patient

education and empowerment focused on health-related behaviors including: patient-provider communication (Tran et al., 2003), genetic counseling (Charles, Kessler, Stopfer, Domchek, & Halbert, 2005), cancer screening (Braun, Fong, Kaanoi, Kamaka & Gotay, 2005; Powe, Ntekop & Barron, 2004; Tu et al., 2006), health promotion (Melkus et al., 2004) and adherence behaviors (e.g., Russell, 2006). However, no reported studies to date have utilized patient empowerment trainings specifically to help patients learn how to elicit culturally sensitive or competent health care delivery.

CHAPTER 3 METHODS

Participants

Six hundred patients (300 at the control clinic, 300 at the intervention clinic) and 48 clinic staff (i.e., health care providers and office support staff) were invited to participate in the present study. A total of 224 patients (121 patients at the control clinic, 103 at the control clinic) and all of the clinic staff who were invited to participate qualified for and gave their written consent to participate in the present study and comprised the final study sample. The demographic characteristics of the patient participant sample are presented in Table 3-1.

African American Patients

A total of 110 African American patient participants participated in the present study. Twenty-five (23%) of these patient participants were male and 85 (77%) were female. The patient participants ranged in age from 28 – 85 years, with a mean age of 52.7 years. The distribution of self-reported household incomes for the sample is as follows: (a) 49.1% earned below \$10,000, (b) 10% earned between \$10,001 and \$20,000, (c) 9.1% earned between \$20,001 and \$30,000, (d) .9% earned between \$30,001 and \$40,000, (e) 2.7% earned above \$40,001, and (f) 28.2% did not report a household income. The distribution of self-reported educational attainment for the African American patient participant sample is as follows: (a) 15.4% did not attain a high school diploma, (b) 30% attained a high school diploma, (c) 12.7% attained some college education or technical school training, (d) 3.6% attained a college education, (e) 2.7% attained professional or graduate education, and 35.5% did not report their educational attainment. In addition, 79.1% of the African American patient participants indicated that English was their preferred language, whereas 20.9% of these participants did not specify a language preference.

With regard to their medical history, 11.8% of the African American patient participants reported being diagnosed with high blood pressure alone, whereas 43.6% reported being diagnosed with high blood pressure with at least one other chronic condition. The distribution of self-reported number of years since being diagnosed with high blood pressure is as follows: (a) 16.4% had been diagnosed for one year or less, (b) 18.2% had been diagnosed for 2-3 years, (c) 8.2% had been diagnosed for 4-5 years, (d) 8.2% had been diagnosed for 6-7 years, (e) 4.5% had been diagnosed for 8-9 years, (f) 20% had been diagnosed for more than 10 years, and (g) 24.5% did not report the length of time they had been diagnosed with hypertension.

White Patient Participants

A total of 114 White patient participants participated in the present study. Thirty-nine (33.9%) of these patient participants were male and 76 (66.1%) were female. The White patient participants ranged in age from 25 – 89 years, with a mean age of 57.5 years. The distribution of self-reported household incomes for the sample is as follows: (a) 22.6% earned below \$10,000, (b) 14.8% earned between \$10,001 and \$20,000, (c) 11.3% earned between \$20,001 and \$30,000, (d) 7.8% earned between \$30,001 and \$40,000, (e) 21.7% earned above \$40,001, and (f) 21.7% did not report a household income. The distribution of self-reported educational attainment for the White patient participant sample is as follows: (a) 6.9% did not attain a high school diploma, (b) 20.9% attained a high school diploma, (c) 28.7% attained some college education or technical school training, (d) 11.3% attained a college education, (e) 11.3% attained professional or graduate education, and 20.9% did not report their educational attainment. In addition, 77.4% of the White patient participants indicated that English was their preferred language, 1.7% indicated that a language other than English or Spanish was their preferred language, and 20.9% of these participants did not specify a language preference.

With regard to their medical history, 2.6% of the White patient participants reported being diagnosed with high blood pressure alone whereas 34.2% reported being diagnosed with high blood pressure with at least one other chronic condition. The distribution of self-reported number of years since being diagnosed with high blood pressure is as follows: (a) 21.7% had been diagnosed for one year or less, (b) 7.8% had been diagnosed for 2-3 years, (c) 7.8% had been diagnosed for 4-5 years, (d) .9% had been diagnosed for 6-7 years, (e) 4.3% had been diagnosed for 8-9 years, (f) 17.4% had been diagnosed for more than 10 years, and (e) 40% did not report the length of time they had been diagnosed with hypertension.

Clinic Staff

Thirty-two health care providers (22 physicians and 10 other health care providers; 19 females and 13 males) participated in the present study. Of these providers, 9.4% were African American, 3.1% were Asian American/Pacific Islander, 75% were European American, 9.4% were Hispanic, and 3.1% identified as “other.” These providers ranged in age from 26 years to 60 years with a mean age of 37.7 years. This group consisted of US citizens (78.1%) and non-US citizens (21.9%), among whom only 3 (9.4%) reported being fluent in Spanish, and 4(12.5%) indicated being fluent in a language other than English. The mean number of years in clinical practice for this provider group was 9.5 years. In addition to the providers, 16 office staff participated in the present study, all of whom were females and US citizens. Of these staff participants, 25% were African American and 75% were European American. Staff participants ranged in age from 28 years to 71 years, with a mean age of 44.9 years. Their mean number of years in clinical practice was 12.3 years.

Measures

The health care provider and office staff participants in the study anonymously completed a Clinic Staff Demographic Data Questionnaire (CSDDQ) to obtain information about these

participants' gender, race/ethnicity, job title, language fluency (in English and other languages), and number of years in practice at the clinic site.

The patient participants in the study anonymously completed an Assessment Battery (AB) consisting of various instruments to measure the following variables: (a) demographic characteristics and medical history, (b) patient participants' perceived level of cultural sensitivity in the health care they experience, and (c) patient participants' tendency to respond to the assessments in the AB in a socially desirable manner. Patient participants' health outcomes were also assessed by obtaining their systolic and diastolic blood pressure readings from their clinic charts, after obtaining their written consent. Copies of the instruments in the AB that was completed by patient participants may be found in the appendices; however, brief summaries are described below:

Patient participant demographic data questionnaire (PPDDQ). This questionnaire was constructed and administered to obtain information on participants' age, gender, race/ethnicity, education, language preference, and socioeconomic status.

Medical data questionnaire (MDQ). This questionnaire was constructed to obtain information on patient participants' medical history with hypertension, and other chronic conditions such as diabetes, and high cholesterol.

Tucker-culturally sensitive health care patient inventory – patient forms (T-CSHCI – Patient Forms). Tucker and her colleagues developed race/ethnicity-specific T-CSHCI – Patient Forms to assess patients' perceived level of cultural sensitivity in the health care that they experience. The T-CSHCI – Patient Forms consist, in part, of behaviors and attitudes of health care providers that patients who use community health care clinics have identified as making them feel trusting of and comfortable with their health care providers and that make them feel

that their health care provider is respectful of their culture. Additionally, the inventories include behaviors of clinic office staff and physical characteristics and policies of the health care clinic environment that such patients have identified as promoting their comfort and sense of belonging at their health care clinic.

The directions for the T-CSHCI – Patient Forms instruct respondents (i.e., patients) to rate how much they agree that: (a) their health care provider displays each of the listed provider behaviors and attitudes (b) the office staff at their clinic display each of the listed behaviors and attitudes, and (c) their clinic operates in accordance with the listed policies and has the listed physical environment characteristics. The rating options are on a Likert Rating Scale where 4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree. Mean scores (ranging from 1 – 4) are obtained for the following components of the T-CSHCI – Patient Form: (a) the provider behaviors and attitudes component, (b) the office staff behaviors and attitudes component, and (c) the clinic characteristics and policies component. Higher mean scores indicate higher levels of perceived patient-centered cultural sensitivity in health care experienced.

There are African American, Hispanic and White American forms of the T-CSHCI – Patient Form. The forms for African American patients and White patients were used in the present study. The form that was administered to a particular patient participant depended on the patient’s self-identified racial/ethnic affiliation. A sample item from the African American form of the T-CSHCI – Patient Form is “the person I see most often for my health care when I visit my clinic talks to me during my visit.” A sample item from the White American form of the T-CSHCI – Patient Form is “the clinic staff members at my clinic do not show prejudice against me.”

The reliability data of the African American form of the T-CSHCI – Patient Form and the reliability of the White American form of the T-CSHCI – Patient Form were determined using a sample of 89 low-income African American patients and 91 low-income White patients, respectively, all of whom were attending community-based primary care clinics (Tucker et al., 2007). These patients were each administered a T-CSHCI – Patient Form twice, 5 months apart. For the African American form of the T-CSHCI – Patient Form, five-month test-retest reliabilities for the provider behaviors/attitudes component, clinic office staff behaviors/attitudes component, and clinic environment characteristics and policies component were .99, .98, and .98, respectively; split-half reliabilities for these T-CSHCI – Patient Form components were .94, .95, and .97, respectively; and internal consistencies for these T-CSHCI – Patient Form components were .98, .95, and .97, respectively. For the White American form of the T-CSHCI – Patient Form, five-month test-retest reliabilities for the provider behaviors/attitudes component, clinic office staff behaviors/attitudes component, and clinic environment characteristics and policies component were .99, .98, and .97, respectively; split-half reliabilities for these components were .75, .69, and .85, respectively; and internal consistencies for these components were .99, .98, and .92, respectively.

The Marlowe-Crowne social desirability scale – short form (MCSDS-SF). The MCSDS (Strahan & Gerbasi, 1972) is a 20-item scale that is used to measure the degree to which participants respond to questionnaires, such as those in the assessment battery, in a socially desirable manner. The Short-Form is based on the original 33-item instrument developed by Crowne & Marlowe (1960). The Kuder-Richardson 20 (KR-20) reliability coefficients for the short version are comparable to those of the original version (KR-20 = .83 for college females and .78 for college males). Studies revealed that Pearson correlations between the original

version and the short version were as high as .98, indicating adequate construct validity for the short version (Strahan & Gerbasi, 1972). Respondents were asked to mark “True” or “False” in response to ten items keyed in the true direction and then items keyed in the false direction. Raw scores are summed and then averaged to give a final range between 0 and 1, with higher scores indicating high need for approval.

Procedure

This study occurred as one part of a larger National Institute of Health grant-funded research program on patient-centered culturally sensitive health care. The present study involved two community-based primary care clinics in a moderately-sized city in North Central Florida that serve demographically similar populations of primarily low-income patients. One clinic was arbitrarily assigned to be the intervention clinic, and the other clinic was assigned to be the control clinic. To be included in the study, patient participants met the following criteria: (a) they were 18 years or older; (b) they obtained health services at one of the two community clinics at least 3 times in the year prior to the study; (c) they identified as African American not of Hispanic origin, or White not of Hispanic origin; (d) they had a diagnosis of hypertension, alone or in combination with diabetes coronary artery disease, and/or high cholesterol for at least 1 year prior to the start of the study; (e) they were able to communicate effectively with others verbally or in writing in his or her native language; and (f) they gave witness-verified and written consent to participate.

The present study occurred in two stages. The first stage focused on participant recruitment and involved a multi-modal patient recruitment strategy and a clinic staff member recruitment strategy. The second stage involved testing the effects of the Patient-Centered Culturally Sensitive Health Care (PC-CSHC) Intervention Program. Prior to implementing both stages of

this study, the administrators of both clinics were contacted to obtain their endorsement for the research.

Participant Recruitment

Patient recruitment

A multi-modal recruitment strategy was used to recruit patients in order to address the well-documented challenges of recruiting, enrolling and/or retaining low-income and minority patient participants in health disparities research, which result from: (a) mistrust due to power differences and past experiences, (b) fears of mistreatment and exploitation, and (c) fears that data will be used to advance researchers' careers and portray communities in a negative light rather than to address community health problems (Adderley-Kelly & Green, 2005; Dancy, Wilbur, Talashek, Bonner, & Barnes-Boyd, 2004; Loftin, Barnett, Bunn & Sullivan, 2005; Yancey, Ortega, & Kumanyika, 2006). These challenges often lead to inadequate numbers of needed participants for rigorous examination of intervention effects and/or ethnicity-specific analyses, which allow results to be appropriately generalized (Yancey et al., 2006).

The recruitment of patient participants in the present study involved the following: (a) awarding a health care provider at the intervention clinic and a provider at the control clinic a \$300 honorarium each to identify up to 1000 potential patient participants at his or her respective clinic who meet the criteria for research participation, and (b) awarding an office support staff person at each clinic a \$300 honorarium to do the tasks involved in mailing each of the potential patient participants an invitation packet. In addition, the following two supplemental recruitment strategies were implemented: (a) a recruitment poster, specifying the inclusion criteria for participation, was displayed in both the intervention clinic and the control clinic that invited potential patient participants who met the specified criteria to fill out a slip to receive an invitation packet for the research study; and (b) a commercial was televised on a local television

station inviting potential patient participants to call the Principal Investigator (PI) to request an invitation packet for the research study. The slips provided on the posters requested the following contact information: name, telephone number, address, race/ethnicity, and clinic name.

Potential patient participants were mailed an invitation packet. Invitation packets for all recruitment methods contained: an invitation letter, an informed consent form with appropriate HIPPA language, and a brief demographic data form. The invitation letter sent to all participants was designed to: (a) describe the research study, (b) request agreement to be considered for research participation and to later participate if they were randomly selected to do so, (c) inform patient participants that their selection for an invitation to participate would be the result of an arbitrary selection process, (d) explain what participation would involve and how their confidentiality would be protected, (e) explain how much they would be paid for their participatory time in the study (i.e., \$20 each time they complete a set of questionnaires and \$60 for participating in a one-time 4-hour patient training workshop on strategies for obtaining culturally sensitive health care), and (f) request a telephone number to contact the patient participants by telephone to inform them whether or not they were selected to be a patient participant.

All of the potential patient participants were told that, if they were selected to participate, their participation in the research would involve completing a set of questionnaires, which would take them approximately 45-minutes to complete, six times (although only two of the six datasets were used in the present study; see Figure 3-1) and that they could choose to have a family member, friend, or researcher read the questionnaires to them. The potential patient participants at the intervention clinic were also told in letters sent to them that, after their fourth time of completing questionnaires, they would be asked to participate in a 4-hour training to promote

culturally sensitive health care among patients. The potential patient participants at the control clinic were told that, after completing the sixth set of questionnaires, they would be invited to participate in a 4-hour training to promote culturally sensitive health care among patients. This latter training was provided for patients at the control clinic because it is ethically appropriate to do so.

Patients who were willing to be considered for research participation were asked to: (a) read and sign the informed consent form in front of a witness, (b) complete a brief demographic data form (soliciting the patient's name, gender, race, age, socioeconomic status, number of visits to their clinic in the last year, and telephone number), and (c) to return this information to the PI in a pre-stamped and pre-addressed return envelope that will be provided. Using a stratified sampling procedure, the PI used demographic data that was returned by potential patient participants to select the final group of patient participants from the intervention clinic and the final group of patient participants from the control clinic, such that these groups were similar in terms of gender and race. These patient participants were then contacted by telephone (or by letter if no telephone was available) to inform them that they had been selected as research participants, and approximately when they would receive their first set of questionnaires to complete. The participant data returned to the researchers was kept confidential according to University of Florida policies and State law; furthermore, this data was kept in a locked filing cabinet. All subsequent data sent to participants was pre-coded and thus did not include patients' names. This was done to further protect participant confidentiality. A master list containing participant names and codes was kept by the PI in a locked filing cabinet.

Provider and office support staff recruitment

Each of the following three groups of clinical staff at the intervention and control clinics was invited to participate in the present study: (a) physicians, (b) other health care providers

(e.g., nurses, nurse and physician assistants), and (c) office support staff. The procedure for recruiting potential clinic provider and staff participants involved sending each clinic staff member a letter (along with two copies of an informed consent form and the Clinic Staff Demographic Data Questionnaire [CSDDQ]) from the Principal Investigator and the Clinic Administrator which stated the purpose of the study and requested research participation. It was stated in each letter that participation would involve: (a) completing a set of questionnaires 6 times (although the CSDDQ is the only questionnaire that is relevant to the present study), (b) participating in a 4-hour provider and staff training session on patient-centered culturally sensitive health care delivery, and (c) giving witness-verified written consent to participate.

Furthermore, in the letter that each potential clinic provider and staff participant received, it was stated that providers and staff who participated in the present study would receive the appropriate continuing medical education credits plus \$90 for participating in the staff training, and \$20 for completing each set of questionnaires. In addition, it was explained that to protect their anonymity, the clinic providers and staff who agreed to be research participants would be asked to generate their own confidential research code to place on their CSDDQ rather than their names. Additionally, the potential clinic provider and staff participants were informed in the letter that (a) all completed questionnaire data would be mailed directly to the researchers or placed in sealed envelopes and deposited in a tamper-proof box at their clinic from where they would be retrieved by the researchers, and (b) the researchers would keep this data in a locked file in the Psychology Department to protect the confidentiality of all of the clinic providers and staff who agreed to be research participants.

Clinic providers and office staff members who agreed to participate in the research were instructed in the invitation letter to sign both copies of the witness-verified informed consent

form and to return one of these copies to the researchers along with a completed CSDDQ via a provided pre-addressed, stamped envelope within one week. Clinic providers and office staff members at the intervention clinic and at the control clinic who returned the requested completed CSDDQ and signed informed consent form within the specified timeframe were mailed the first set of questionnaires to be completed within one week of receiving the requested documents.

Overview of the Research Study for Testing the Effects of the PC-CSHC Intervention Program

Each of the three components of the PC-CSHC Intervention Program (i.e., the physical environment and policies intervention component, the health care provider/office staff training intervention component, and the patient empowerment training component) occurred 5 months apart over a total period of 15 months (see Figure 3-1). The interventions occurred sequentially and within the first 2 months of each 5-month period, allowing patient participants up to 3 months to experience each intervention before being re-administered the Assessment Battery (AB). The interventions were implemented sequentially, rather than simultaneously in order to allow the impact of each intervention component on the variables under investigation to be independently ascertained for analyses relevant to the larger National Institute of Health research program on patient-centered culturally sensitive health care, of which the present study was a part. Importantly only the baseline data (i.e., the data collected prior to the PC-CSHC Intervention Program), and the data collected following the implementation of the final component of the PC-CSHC Intervention Program (i.e., the patient empowerment training component) were used in the present study (see Figure 3-1).

Prior to beginning the intervention program (i.e., at baseline), and following each intervention at the intervention clinic (at the end of each of the 5-month periods), patient-participants at both clinics were sent the AB, which was pre-coded as earlier described, and

asked to complete it and return it in pre-stamped and pre-addressed return envelopes. Within 2 weeks of completing the AB, each participant was mailed a check for \$20. Each patient participant who attended the patient training intervention was mailed a check for \$60, 2 weeks after the training. Each clinic provider and office staff member participant who attended the clinic provider and office staff training was mailed a check for \$90 within 2 weeks following the training. In addition, following each component of the intervention at the intervention clinic (i.e., at the end of each 5-month period), trained research assistants obtained patients' health outcome data (i.e., their systolic and diastolic blood pressure readings) from their clinic charts. Finally, following the final data collection period, the three components of the Intervention Program were implemented simultaneously at the control clinic; however, no post-intervention data was collected, as implementing a version of the Intervention Program at the control clinic was an ethically responsible action rather than a research activity. The schedule for implementing the Intervention Program and collecting the data for the study is summarized in Figure 3-1 below.

Descriptions of the Three Components of the PC-CSHC Intervention Program

Component 1: The physical environment and policies intervention

The PC-CSCH physical health care environment and policies intervention component consisted of modifying the intervention clinic environment and policies so that they were consistent with earlier mentioned patient-identified culturally sensitive health care characteristics. These modifications included: (a) creating and displaying a culturally sensitive calendar that highlights cultural holidays, especially those relevant to the cultures that are most represented at the target clinic; (b) displaying culturally sensitive educational brochures (e.g., written in Spanish), especially on topics that are relevant to the groups most represented at the clinic; (c) displaying culturally sensitive magazines (e.g., magazines that highlight African-American and Hispanic people and culture); (d) creating and displaying comment cards and

locked suggestion box in which the cards can be placed so that patients can give feedback to the clinic staff (including providers and administrators); (e) obtaining and displaying bilingual restroom signs; (f) obtaining and displaying toys for patients' children to play with in the waiting area; (g) displaying culturally sensitive posters, especially on topics that are relevant to the groups most represented at the clinic; (h) displaying culturally sensitive art featuring people from different cultures; (i) creating and displaying a bilingual policy brochure; (j) creating and displaying a "Patients Bill of Rights" brochure; (k) creating and displaying a "Clinic Policies" brochure; and (l) purchasing a DVD/VCR player so that DVDs and videos on health topics of interest to the patients served can be played in the waiting area.

Component 2: Health care provider/office staff training

This component of the PC-CSHC Intervention Program consisted of a 4-hour provider/office staff training workshop focused on training clinic providers and office staff in skills and strategies for engaging in patient-identified behaviors and attitudes that indicate patient-centered culturally sensitive health care (Tucker et al., 2003). The workshop comprised 5 main components: (a) a pre-workshop introduction, (b) an overview of the existing health disparities literature, (c) teaching of techniques (ways to engage in verbal and non-verbal behaviors as well as ways to display attitudes) that indicate provider/sensitivity sensitivity training, (d) small group discussions, and (e) a patient panel. Notably, the first 2 components of the training program were more cognitive, while the last 3 components were more experiential. In addition, whereas the first 2 components focused primarily on increasing participants' knowledge of culturally sensitive health care, the last 3 components focused on increasing participants' knowledge of culturally sensitive health care, helping participants to examine their attitudes towards culturally diverse patients, and teaching participants skills to engage in the delivery of culturally sensitive health care (i.e., knowledge, awareness, and skills). Importantly,

the workshop components also included curricular content focused on general aspects of culture, specific cultural content, and sociocultural factors that impact provider-patient interactions – all of which have been associated with positive training outcomes (Beach et al., 2006). Each of these components will be briefly described below.

Pre-workshop introduction. During the pre-workshop introduction, which lasted approximately 15 minutes, provider and office staff participants were introduced to the intervention program presenters, asked to complete a pre-workshop knowledge assessment to assess pre-workshop knowledge in the areas of the training, and introduced to the program objectives.

Overview of health disparities literature. In the second component of the provider/office staff training intervention, which lasted approximately 1 hour, the term “patient-centered culturally sensitive health care” was defined, background literature on the health disparities problem was presented, and evidence for the association between improved culturally sensitive and competent health care and improved health outcomes among patients was discussed. As part of this process, examples of the focus group generated views of patients that provided the foundation for the training were presented by playing sound clips containing actual patient quotes recorded by diverse patients. Finally, the behaviors and attitudes of providers and office staff that were rated the most important indicators of culturally sensitive health care by culturally diverse patients were also presented.

TIPS training. The third component of the workshop lasted approximately 1.25 hours and focused primarily on skills training related to the earlier-presented patient behaviors that were rated as very important indicators of culturally sensitive health care. This component of the workshop utilized Meichenbaum’s (1977) cognitive modeling and self-instruction training

approach. This approach empowered learners (i.e., health care providers and office staff) by using a step-by-step teaching and learning method that made learning simple and easy. This approach also used demonstration modeling and role-plays as well as learning theory-based strategies. The latter strategies included (a) using praise and encouragement in response to efforts to learn and actual learning of new behaviors, attitudes, and skills; and (b) encouraging the learners (e.g., providers and office staff) to praise themselves for their efforts to use and actual use of target behaviors, attitudes, and skills.

The training content emphasized skills, behaviors, and attitudes for effectively communicating with patients who are not highly educated and/or are not fluent in English toward the goals of building rapport and trust, and showing empathy in interactions with culturally diverse patients. The skills training included a focus on the following: (a) the behaviors and skills for conveying an empathetic attitude (i.e., the actions and skills for conveying respect, warmth, and genuineness), and (b) the microskills described by many counseling psychologists (e.g., Ivey, D'Andrea, Ivey, & Simek-Morgan, 2002). These microskills include (a) culture-informed nonverbal attending skills including effective use of eye contact, body language, vocal tone and speech rate, physical space, and time; (b) listening skills including use of open ended questions, encouraging, paraphrasing, reflection of feeling and summarization; (c) influencing skills including interpretation/reframing, giving directives, advice/information provision, self-disclosure, feedback, identification of logical consequences, and use of an influencing summary; and (d) supportive confrontation skills.

In this component of the workshop, providers were also invited to view three culturally sensitive health care demonstration videos, which showed actual practicing physicians (one African American, one Hispanic, and one non-Hispanic White physician in each video) and

office staff (non-Hispanic White) displaying via role-plays many of the behaviors, attitudes, and skills that indicate patient-centered culturally sensitive health care (e.g., greeting the patients with a smile, explaining the consequences of medications, and responding supportively to the patient's comments about faith and prayer). Each videotaped role-play was of a physician alone or with office staff providing health care services to a patient (i.e. an African American, Hispanic, or non-Hispanic White patient) with or without accompanying family members. Furthermore, the provider(s) in each videotape was racially/ethnically different from the patient. Providers were asked to be aware of their attitudes during the role-plays and to use the knowledge and skills already presented to evaluate the demonstration role-plays. The following questions, among others, were used to facilitate this process: "What struck you most about the demonstration you just saw?" "Are there any behaviors that you think the providers (and/or office staff) could have demonstrated to more effectively show culturally sensitive health care based on the TIPS that were presented?"

Small group discussions. This component of the workshop lasted 45 minutes and commenced with a presentation on (a) common culture-specific as well as more universal beliefs held among culturally diverse individuals (i.e., patients and potential patients) regarding health care and the contributors to health, illness, and healing; (b) historical, cultural, and socioeconomic context factors that often impact health, illness, healing, and treatment adherence/non-adherence of particular groups of patients; and (c) how these and other sociocultural differences among patients, health care providers and the health care system can contribute to health disparities.

Following this presentation, providers were asked to break into small groups based on their roles in the health care organization (e.g., physician, nurse practitioner, office staff) to discuss

how interpersonal (i.e., individual attitudes) and organizational (i.e., health care system factors) barriers could prevent them from engaging in the TIPS (i.e., behaviors, attitudes, and skills for demonstrating culturally sensitive health care) previously taught. Examples of questions that provider participants were encouraged to consider included: “What personal and organizational barriers will keep you from implementing patient-centered culturally sensitive health care?” “What resources are needed to facilitate the provision of patient-centered culturally sensitive health care at your health care site?” and “What strategies can be used to overcome barriers that exist and to maximize resources that are present?” Providers and office staff were also invited to identify their anxieties, frustrations, and stressors related to providing health care to low-income patients and to culturally diverse patients. After 15 – 30 minutes, each small group reported on their discussion to the larger group, and there was a large group discussion focused on overcoming the barriers presented. With the participants’ permission, the feedback presented was anonymously recorded (i.e., combined together so that individual comments cannot be linked to individual participants) so that it could be communicated to the health care organization administrators.

Patient Panel. Finally, in the last component of the provider and office staff educational training workshop, which lasted approximately 45 minutes, participants were given the opportunity to anonymously submit, or directly ask questions to a panel of culturally diverse patients at the workshop to elicit helpful information for (a) providing care to patients that reflects sensitivity to the conditions and constraints that negatively impact their health and health care, and (b) understanding the health and health care behaviors of culturally diverse patients. At the end of the workshop, participants were asked to complete a post-training knowledge

assessment and to publicly commit to doing something learned at the workshop to promote their cultural sensitivity/competence.

Component 3: Patient empowerment training

The patient health and health care empowerment training component of the PC-CSHC Intervention Program consisted of a 4-hour workshop for culturally diverse patients. The workshop comprised 4 main components: (a) a workshop introduction and an overview of health disparities problem, (b) skills training, (c) small group discussion, and (d) a provider panel. As with the provider educational training workshop, the patient empowerment training workshop included both cognitive and experiential activities. In addition, in order to increase participation, child-care services and refreshments were provided for participants. Each component of the workshop is described below.

Workshop introduction. In the first component of the patient empowerment training intervention, which lasted approximately 25 minutes, participants were introduced to the intervention program presenters, asked to complete a pre-workshop knowledge assessment to assess pre-workshop knowledge in the areas of the training, and introduced to the program objectives. Participants were then given a definition of “patient-centered culturally sensitive health care” and a brief summary of the health disparities problem.

Skills Training. The second component of the patient empowerment training intervention lasted approximately 1.5 hours and consisted of skills training in the following areas to empower and enable patient participants to inspire culturally sensitive health care behaviors from their clinic providers and office staff: (a) assertiveness skills, (b) behavioral management skills (e.g. use of praise of specific clinic provider and office support staff behaviors that patients would like demonstrated more often), (c) stress and anxiety management skills, (d) cognitive-behavioral anger management skills, and (e) skills for giving negative feedback and positive feedback to

others (e.g., to providers and clinic office staff) in constructive and respectful ways. These skills were taught using Meichenbaum's cognitive modeling and self-instruction training approach, which was earlier described. Role-plays, group discussions, demonstrations, and power point slides were all used as training tools. Importantly, the skills training component of the patient workshop also involved educating patient participants about the relationship between negative emotional states (e.g., stress, anxiety, depression, and anger) that can result from culturally insensitive interactions with clinic staff, and their experience of chronic illness. As such, patients were additionally encouraged to participate in health promotion activities (e.g., exercising, eating healthy meals) to help improve both their physical and mental health.

In addition, community representatives, who were trained prior to the workshop, participated in presenting some of the skills that were discussed. Finally, this component ended with a summary of tips and strategies that participants could use for a successful health care visit. Examples of tips for obtaining patient-centered culturally sensitive health care included the following: (a) taking a list or having a family member/friend list your (the patient's) questions and symptoms so that you can simply give the list to your provider at the beginning of the health care visit, (b) introducing yourself as you wish to be called (e.g., as Mr., Ms., or Señor[a] Jones), (c) bringing a tape recorder or a friend to take notes on the views of the attending provider regarding your health problems and the recommended treatment for these problems, and (d) requesting that the provider give you literature on any diagnoses made and on any medications recommended.

Small group discussions. In this component of the workshop, which lasted approximately 45 minutes, participants were first presented with the list of the most important indicators of patient-centered culturally sensitive health care identified by focus group participants (Tucker et

al., 2003). Participants were then divided into small groups to discuss how the behaviors taught during the skills-training component could be used to elicit the culturally sensitive health care behaviors that were presented. Patient participants were additionally asked to share what strategies they had used in the past to elicit such behaviors, or to overcome barriers related to eliciting the desired behaviors. Culture-specific behaviors such as how to effectively request or express concerns regarding a Spanish interpreter were also discussed in these small groups.

Panel discussion. The final component of the workshop lasted approximately 1 hour. It involved a discussion among primary care clinic providers and clinic office staff comprising a clinic staff panel, and patient participants in the workshop. The purpose of the panel discussion was to engender patient-provider communication about health and health care stressors with the ultimate goal of facilitating supportive patient-provider alliances versus adversarial relationships. In particular, patients were invited to anonymously submit, or directly ask the panel participants questions about their health care or the health care system, and panelists were invited to share individual or systemic frustrations of which the patients may not have been aware. The workshop ended by asking participants to complete a post-training knowledge assessment and to publicly commit to doing something learned at the workshop to engender cultural sensitivity/competence among their health care providers and office staff.

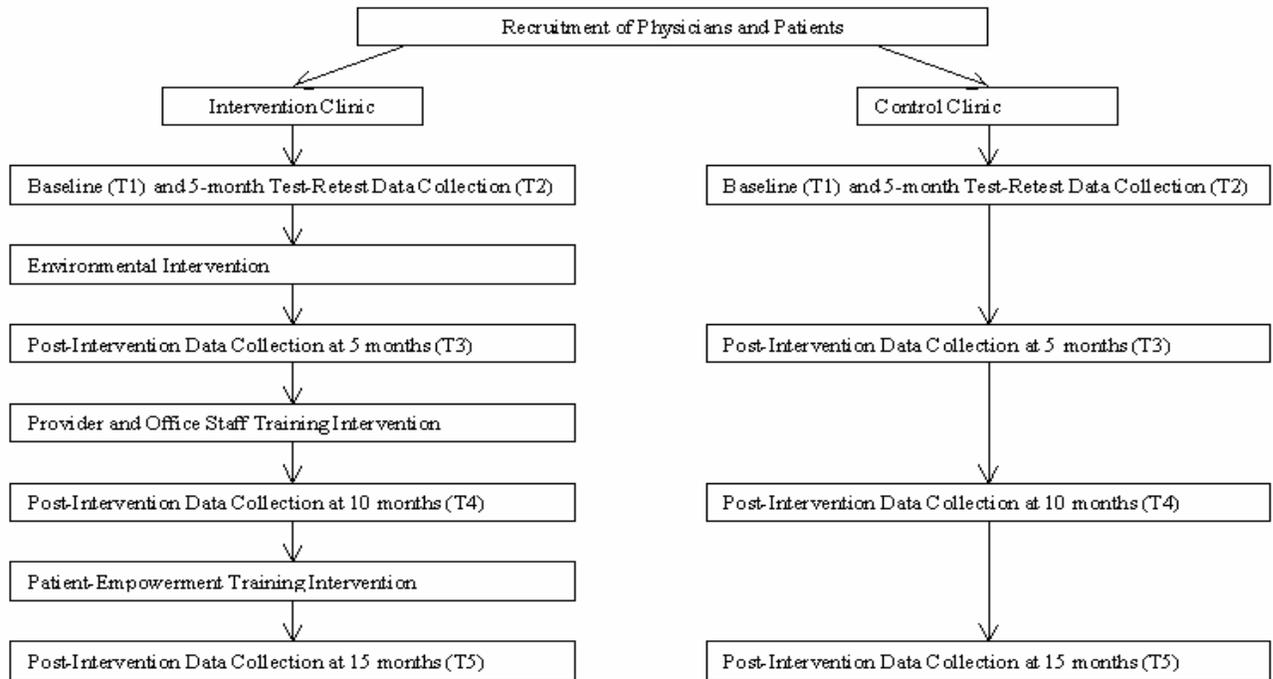


Figure 3-1. Flowchart Showing the Order of and Timeline for the Recruitment, Intervention and Data Collection Activities in the PC-CSHC Intervention Program.

Table 3-1. Demographic Characteristics of Patient Participants in the Present Study by Race.

Characteristics	<i>N</i>	%
African American Patients	110	48.9
Gender		
Male	25	22.7
Female	85	77.3
Income		
Less than \$10,000	54	49.1
\$10,0001 - \$20,000	11	10.0
\$20,001 - \$30,000	10	9.1
\$30,001 - \$40,000	1	.9
Above \$40,001	3	2.7
Education		
No high school diploma	17	15.4
High school diploma	33	30.0
Some college	14	12.7
College	4	3.6
Professional/graduate	3	2.7
Self-reported diagnosis		
High blood pressure only	13	11.8
High blood pressure with another condition	48	43.6
White Patients	114	51.1
Gender		
Male	39	33.9
Female	76	66.1
Income		
Less than \$10,000	26	22.6
\$10,0001 - \$20,000	17	14.8
\$20,001 - \$30,000	13	14.4
\$30,001 - \$40,000	9	10.0
Above \$40,001	25	27.8
Education		
No high school diploma	8	6.9
High school diploma	24	20.9
Some college	33	28.7
College	13	11.3
Professional/graduate	13	11.3
Self-reported diagnosis		
High blood pressure only	3	2.6
High blood pressure with another condition	39	34.2

CHAPTER 4 RESULTS

This chapter presents the results of analyses conducted to address the hypotheses and research questions set forth in this study. The results are divided into four major parts. First, the descriptive data for all of the major variables in the study are reported. Second, the results of preliminary Pearson correlational analyses that were conducted to assess the degree of association at baseline between the major variables under investigation, and to determine the degree of association between the Marlowe-Crowne Social Desirability Scale – Short Form and each of the other variables are presented. Third, the results of general linear model analyses that were executed to address the two research questions are presented. Finally, the results of general linear model analyses that were conducted to test the two primary hypotheses addressed by the present study are presented.

Descriptive Data for all Major Variables

Table 4-1 presents the baseline means, standard deviations, and ranges for each variable under investigation in this study. Perhaps most interesting in Table 4-1 is the data suggesting that both African American patient participants and White patient participants rated their providers' behaviors and attitudes as more culturally sensitive than their office staff's attitudes and behaviors, which were in turn rated as more culturally sensitive than the clinic environment. In addition, the data suggest that, at baseline, African American patient participants rated both their office staff's behaviors and attitudes and their clinic environments as more culturally sensitive than did White patients. In contrast, White patient participants appeared to rate their providers' behaviors and attitudes as more culturally sensitive than did African American patient participants at baseline.

Results of the Preliminary Pearson Correlations

Three Pearson correlation analyses were conducted to examine the degree of association among the major variables under investigation and to examine the associations between these variables and social desirability (as measured by the Marlowe-Crowne Social Desirability Scale-Short Form). The major variables of study included in each correlational analysis along with social desirability were patient perceived patient-centered cultural sensitivity as indicated by mean scores for components of the T-CSHCI (i.e., the provider behavior/attitudes component, the office staff behaviors/attitudes component, and the clinic physical environment and policies component), and systolic and diastolic blood pressure. The results of the three correlation analyses performed are shown in Table 4-2. The first of the correlational analyses was performed using the data of the African American patient participants, the second was performed using the data of the White patient participants, whereas the third was performed using the total sample of participants.

Most noteworthy in Table 4-2 are the moderate to high intercorrelations among the three T-CSHCI component mean scores for the African American patient participants and for the White patient participants. Specifically, for the African American patients, intercorrelations among the mean component scores ranged from $r = .767, p < .01$ (provider behaviors/attitudes and clinic physical environment characteristics and policies) to $r = .844, p < .01$ (office staff behaviors/attitudes and clinic physical environment characteristics and policies). For the White patients, intercorrelations ranged from $r = .501, p < .01$ (provider behaviors/attitudes and office staff behaviors/attitudes) to $r = .774, p < .01$ (office staff behaviors and clinic physical environment characteristics and policies).

In addition, significant but low correlations were found between mean systolic and diastolic hypertension scores for both racial/ethnic groups ($r = .495$ for the African American

patients and $r = .392$ for the White patients; $p < .01$). Importantly, at baseline social desirability scores were not significantly correlated with any of the major self-report variables under investigation in the present study, suggesting that neither African American patient participants nor White patient participants responded to the instruments to assess these variables in a socially desirable manner.

Results of Analyses to Test Research Questions 1 and 2

Research Question 1

The first research question under investigation explored whether, among patient participants in the present study, there were significant differences in mean perceived patient-centered cultural sensitivity ratings on the components of the T-CSHCI-Patient Form (i.e., the provider behaviors and attitudes component, the office staff behaviors and attitudes component, and the clinic physical environment and policies component) at baseline in association with gender or group (intervention vs. control). Given the significant intercorrelations among the three mean component T-CSHCI-Patient Form scores at baseline that were identified in the preliminary correlation analyses, this research question was addressed using two multivariate analyses of covariance (MANOVAs) – one with the African American patients' data from the T-CSHCI-Patient Form, and one with the White patients' data from the T-CSHCI-Patient Form (given race-specific versions of these assessment instruments).

In each of these analyses, the mean scores for each T-CSHCI-Patient Form component (i.e., the provider behaviors and attitudes component, the office staff behaviors and attitudes component, and the clinic physical environment and policies component) at baseline were the dependent variables, and gender, group, and gender x group were the independent variables. It is important to note that data sets for reported analyses were not available from all African American and White patient participants who consented to participate in the study because many

participants (a) did not complete all parts of the assessment battery at baseline and/or post-intervention, and/or (b) did not have health outcome data (e.g., blood pressure readings) that was accessible to the research team during data collection.

African American patient participants

For the African American patient participants, data from 88 participants (6 males and 46 females at the intervention clinic, and 14 males and 22 females at the control clinic) were available for analysis. Results indicated that there were no significant multivariate effects for gender, group or gender x group.

White patient participants

Data from 88 White patient participants (11 males and 21 females at the intervention clinic, and 22 males and 34 females at the control clinic) were available for analysis. Results from the MANOVA revealed a significant multivariate effect for gender (Wilk's $\Lambda = .902$, $F(1, 84) = 2.981$, $p < .05$) and group (Wilk's $\Lambda = .911$, $F(1, 84) = 2.669$, $p = .05$; see Table 4-3); however, the multivariate effect for the group x gender interaction was not significant.

Three follow-up ANOVAs were conducted to further understand the multivariate effects that were obtained, consistent with suggestions made by Weinfurt (2000). In these ANOVAs, a different one of the three mean scores for the components of the T-CSHCI-Patient Form for White patient participants was the dependent variable, and group, gender and gender x group were the independent variables. The results of the ANOVA that was run for the provider behaviors and attitudes component of the T-CSHCI-Patient Form for White patient participants revealed only a significant between-subjects effect for gender ($F(1, 84) = 7.844$, $p < .01$), which accounted for about 9% of the variance in the mean scores for the provider behaviors and attitudes component. These results suggest that, at baseline, mean scores for the provider attitudes and behaviors component of the T-CSHCI-Patient Form for White female patient

participants ($M = 3.51$) were significantly higher than the mean scores for the provider attitudes and behaviors component of the T-SCHCI-Patient Form for White male patient participants in the present study ($M = 3.24$). The other two follow-up ANOVAs revealed no significant effects.

In sum, the analyses to test the first research question suggest that, at baseline, African American patients in the present study did not differ significantly in their ratings of the perceived cultural sensitivity of their providers' behaviors and attitudes, of their office staff's behaviors and attitudes, or of their clinic physical environment and policies in association with group (i.e., being the group at the intervention clinic or the group at the control clinic), group or gender x group. In contrast, the findings suggest that White patients in the present study differed significantly in their ratings of the perceived cultural sensitivity of their providers' behaviors and attitudes in association with gender. Specifically, White female patients as compared to the male patients rated their providers' attitudes and behaviors to be more culturally sensitive.

Research Question 2

The second research question under investigation examined whether, among patient participants in the present study, there were significant differences in health outcomes (i.e., diastolic and systolic blood pressure readings) at baseline (i.e., prior to the PC-CSHC Intervention Program) in association with race/ethnicity (i.e., African American vs. White), gender, or group (i.e., the patient participants at the control clinic vs. those at the intervention clinic). Given the significant intercorrelations at baseline among the systolic and diastolic blood pressure readings for the total sample that were identified in the preliminary Pearson correlations that were conducted (see Table 4-2), a MANOVA was conducted to address this research question. In this MANOVA systolic and diastolic blood pressure readings were the dependent variables, and race/ethnicity, gender, group, gender x group, group x race/ethnicity, gender x race/ethnicity, and gender x group x race/ethnicity were the independent variables.

For these analyses data were available from 36 patients at the control clinic (4 White males and 4 African American males, 8 White females and 20 African American females) and 65 patients at the intervention clinic (15 White males and 9 African American males, 28 White females and 13 African American females). Results indicated that there were no significant multivariate effects for race/ethnicity, gender, group, or the 2- or 3-way interactions of these variables, suggesting that, at baseline, African American patient participants and White patient participants in this study did not significantly differ in their diastolic or systolic blood pressure readings in association with their race/ethnicity, gender, group, gender x group, gender x race/ethnicity, or gender x group x race/ethnicity.

Hypothesis 1

Hypothesis 1 stated that, following the implementation of a pilot PC-CSHC Intervention Program at a primary care clinic (i.e., the intervention clinic), the group of patients who participated in the Program (i.e., adult primary care African American patients and White patients from primarily low-income backgrounds who have been diagnosed with hypertension alone, or in combination with diabetes, coronary artery disease, and/or high cholesterol) would evidence significantly higher ratings of perceived cultural sensitivity in provider and office staff behaviors and attitudes, and in their health care clinic environment (i.e., physical characteristics and policies) than would a control group of patients who were demographically and medically similar to the intervention group of patients and who received care at a primary care clinic that was similar to the intervention clinic (i.e., the control clinic) but who were not exposed to the Program.

African American patient participants

For the African American patient sample, the data of 17 patient participants (5 female patients from the intervention clinic, and 4 male and 8 female patients from the control clinic)

were available to test Hypothesis 1. Due to the small number of datasets available for analysis (and the consequent reduced power for detecting significant results), three repeated measures ANOVAs were conducted to test Hypothesis 1, instead of the proposed MANCOVA (which would be ideal given the found significant correlations among the dependent variables examined to assess intervention effects). Furthermore, repeated measures were deemed appropriate given the results of the analyses to address Research Question 1, which suggested that there were no significant baseline differences in the cultural sensitivity ratings for each component of the T-CSHCI Patient Form for African American patient participants in association with group.

In each repeated measures ANOVA, a different one of the three components of the T-CSHCI-Patient Form for African Americans was included as the dependent variable. Time (i.e., baseline vs. 15-months post-intervention), time x group, and time x gender were the within-subjects factors in each repeated measures ANOVA, whereas group and gender were the between-subjects factors. Given the absence of African American male patient participants at the intervention clinic at post-intervention, group x gender and time x group x gender interactions were not examined.

Results from the repeated measures ANOVA with mean scores for the provider behaviors and attitudes component of the T-CSHCI-Patient Form as the dependent variable indicated a significant within-subjects effect for time ($F(1, 14) = 4.549, p = .05$). This effect was driven by the fact that mean scores for the provider behaviors and attitudes component scores at post-intervention were significantly higher than the mean scores for the provider behaviors and attitudes component at baseline ($M = 3.21$ at baseline; $M = 3.39$ at post-intervention). Importantly, analysis of profile plots suggest that although patient participants at both clinics experienced an increase in perceived cultural sensitivity ratings from baseline to post-

intervention, the patient participants at the intervention clinic experienced a larger increase than did patients at the control clinic (see Figure 4-1), although the absence of a significant group x time interaction effect suggests that the difference in increased ratings between the two groups was not sufficient to attain statistical significance.

In addition, results of the repeated measures ANOVA with mean scores for the provider behaviors and attitudes component indicated a significant between-subjects effect for gender ($F(1, 14) = 7.222, p < .05$). Mean scores suggested that African American women at baseline and at post-intervention rated their providers' behaviors and attitudes as significantly more culturally sensitive than did their male counterparts ($M = 3.40$ for females at baseline, $M = 2.58$ for males at baseline; $M = 3.54$ for females at post-intervention, $M = 2.90$ for males at post-intervention).

Results from the repeated measures ANOVA with mean scores for the office staff behaviors and attitudes component of the T-CSHCI-Patient Form as the dependent variable indicated a significant between-subjects effect for gender ($F(1, 14) = 5.03, p < .05$). Mean scores suggested that African American female patients at baseline and at post-intervention rated office staff's behaviors and attitudes as more culturally sensitive than did their African American male counterparts ($M = 3.35$ for females at baseline, $M = 2.94$ for males at baseline; $M = 3.55$ for females at post-intervention, $M = 2.40$ for males at post-intervention). In addition, results indicated a significant time x gender interaction effect ($F(1, 14) = 6.908, p < .05$). Analysis of profile plots of the estimated marginal means and mean difference scores to understand this significant time x gender interaction indicated that African American female patient participants rated their office staff's behaviors and attitudes as more culturally sensitive than African American male patient participants at both baseline and post-intervention; however, the difference between the culturally sensitivity ratings of staff behaviors and attitudes of African

American female patients and African American male patients was larger at post-intervention compared to this difference at baseline (Mean Difference Score at baseline = .409; Mean Difference Score at post-intervention = 1.15; see Figure 4-2).

Results from the repeated measures ANOVA with mean scores for the clinic environment component of the T-CSHCI-Patient Form as the dependent variable suggested that there were no significant between-subjects (i.e., group and gender), within-subjects effects (i.e., time), or interaction effects (i.e., time x group or time x gender). These findings suggest that the cultural sensitivity ratings of the clinic environment did not differ significantly by gender, group (intervention clinic vs. control clinic), or time (baseline vs. post-intervention), or by any 2-way interactions of these variables for the African American patient participants in this study.

White patient participants

For the White patient sample, data from 14 patients (5 male and 8 female patients at the control clinic; 1 female patient at the intervention clinic) were available for analysis. Because the data for only 1 patient from the intervention clinic were available, Hypothesis 1 could not be tested with the data from the White patient sample.

Hypothesis 2

Hypothesis 2 stated that, following the implementation of the PC-CSHC Intervention Program, the participants who are exposed to the Intervention Program will evidence significantly lower diastolic and systolic blood pressure readings than will the control group of participants who are not exposed to the Intervention Program. Data from 37 patient participants were available to test Hypothesis 2 (5 African American female patients, 1 White male patient and 1 White female patient at the intervention clinic; and 5 African American male patients, 9 African American female patients, 6 White male patients, and 10 White female patients at the control clinic). Given the small sample of patients available at the intervention clinic (i.e., seven

patients) and the consequent reduced power available for detecting significant results using the originally proposed MANOVA, two repeated measures ANOVAs were conducted to test Hypothesis 2.

In the first of these repeated measures ANOVAs, mean diastolic blood pressure scores was the dependent variable, group, gender, race, group x gender, group x race/ethnicity, and race/ethnicity x gender were the between-subject factors, and time, time x group, time x gender, time x race/ethnicity, time x group x gender, time x group x race/ethnicity, and time x gender x race/ethnicity were the within-subjects factors. In the second repeated measures ANOVA, mean systolic blood pressure scores was the dependent variable, group, gender, race, group x gender, group x race/ethnicity, and race/ethnicity x gender were the between-subject factors, and time, time x group, time x gender, time x race/ethnicity, time x group x gender, time x group x race/ethnicity, and time x gender x race/ethnicity were the within-subjects factors. Given the absence of African American male patient participants at the intervention clinic, time x group x gender x race and group x race x gender interactions were not examined in either of the repeated measures ANOVAs to test Hypothesis 2. It is also noteworthy that in contrast to the analyses in which perceived cultural sensitivity was the dependent variable (i.e., analyses to test Hypothesis 1 and Research Question 1), for both repeated measures ANOVAS with blood pressure readings as the dependent variables, data from both African American and White patient participants were included into the same analysis. Whereas two different assessment instruments were used to evaluate perceived cultural sensitivity for African American patient participants and White patient participants (i.e., the African American and White versions of the PC-CSHC-Patient Forms), this was not the case for assessing blood pressure readings; as such, the data could be combined, thus allowing more power for analyses.

Diastolic blood pressure readings

Results of the repeated measures ANOVA using diastolic blood pressure readings as the dependent variable revealed no significant within-subject, between-subject or interaction effects. These results suggest that the patient participants in this study did not significantly differ in their diastolic blood pressure readings by gender, group (intervention vs. control), race/ethnicity (African American vs. White), time (baseline vs. post-intervention), or any interaction of these variables.

Systolic blood pressure readings

Results of the repeated measures ANOVA using systolic blood pressure readings as the dependent variable indicated a significant gender x race/ethnicity interaction effect ($F(1, 30) = 7.02, p = .05$). Profile plot analysis to understand this interaction indicated that whereas the African American male patient participants had lower systolic blood pressure readings than African American female patient participants at both testing times, the White male patient participants had higher systolic blood pressure readings than the White female patient participants at both test times (see Figure 4-3).

Overall, the analyses to test Hypothesis 2 suggested that the mean diastolic and systolic blood pressure readings of patient participants who were exposed to the Intervention Program did not significantly differ from those of patient participants who were not exposed to the Intervention Program. However, it is noteworthy that profile plots demonstrating means for both groups (i.e., intervention vs. control) at both testing times (baseline vs. post-intervention) suggest that the mean systolic blood pressure readings of African American patients at the intervention clinic decreased over time (i.e., from baseline to post-intervention), whereas the mean systolic blood pressure readings of their counterparts at the control clinic stayed about the same as shown in Figure 4-4. Moreover, Figure 4-5 suggests that this was not the case for White patients in the

study (although it is important to note that the profile plot shown was based on the limited data of 2 White patient participants at post-intervention). It is noteworthy that the small sample size of participants available to test Hypothesis 2 may have precluded the detection of any significant time x group and/or time x group x race interaction effects that may have been revealed with larger patient participant samples of African American patient participants and White patient participants.

Table 4-1. Means and standard deviations for the variables investigated in the present study at baseline by race/ethnicity.

Variables	<i>N</i>	<i>M</i>	<i>SD</i>	Range
African American Patient Participants				
Provider Behaviors/Attitudes	89	3.26	.55	1.63-4.00
Office Staff Behaviors/Attitudes	89	3.18	.55	1.52-4.00
Clinic Environment	88	3.11	.52	1.72-4.00
Diastolic Blood Pressure	47	82.31	7.54	64.85-101.14
Systolic Blood Pressure	47	134.16	11.20	111.33-159.43
Social Desirability	89	.68	.18	.20-1.00
White Patient Participants				
Provider Behaviors/Attitudes	88	3.41	.48	2.18-4.00
Office Staff Behaviors/Attitudes	88	2.99	.44	1.57-4.00
Clinic Environment	88	2.95	.37	1.84-4.00
Diastolic Blood Pressure	55	80.07	7.35	65.11-101.75
Systolic Blood Pressure	55	134.47	13.33	108.40-178.25
Social Desirability	89	.61	.21	.15-1.00

Table 4-2. Pearson correlations among the major variables of interest in the present study for patient participants at baseline by race/ethnicity and for the total sample.

	1	2	3	4	5	6
African American Patient Participants						
1. Provider Behaviors/Attitudes	-	.795**	.767**	-.061	.067	.081
2. Office Staff Behaviors/Attitudes		-	.844**	-.049	.132	.018
3. Clinic Environment			-	-.091	.026	.029
4. Diastolic Blood Pressure				-	.495**	-.313
5. Systolic Blood Pressure					-	-.151
6. Social Desirability						-
White Patient Participants						
1. Provider Behaviors/Attitudes	-	.501**	.574**	-.290	-.226	-.025
2. Office Staff Behaviors/Attitudes		-	.774**	-.101	-.021	.139
3. Clinic Environment			-	-.169	.090	.209
4. Diastolic Blood Pressure				-	.392**	.035
5. Systolic Blood Pressure					-	-.063
6. Social Desirability						-
Total Sample						
1. Provider Behaviors/Attitudes	-	.628**	.642**	-.193	-.103	.001
2. Office Staff Behaviors/Attitudes		-	.823**	-.043	.059	.106
3. Clinic Environment			-	-.101	.064	.135
4. Diastolic Blood Pressure				-	.427**	-.076
5. Systolic Blood Pressure					-	-.076
6. Social Desirability						-

Table 4-3. Results of MANOVA testing differences at baseline in mean scores for the components of the T-CSHCI-patient form in association with group, gender, and gender x group for White patient participants.

	Wilk's Λ	F	df	p	η^2
Gender	.902	2.981	1, 84	.036	.098
Group	.911	2.669	1, 84	.053	.089
Gender x Group	.966	.962	1, 84	.415	.034

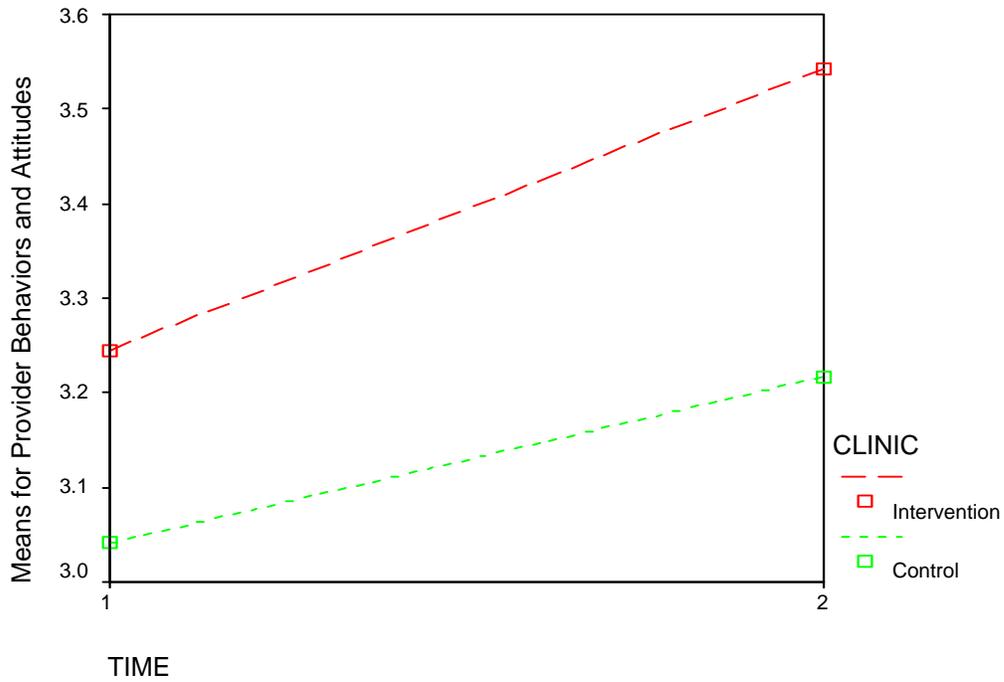


Figure 4-1. Profile plot showing the means for the provider behaviors and attitudes component of the T-CSHCI patient form for African American patient participants from baseline to post-intervention by clinic.

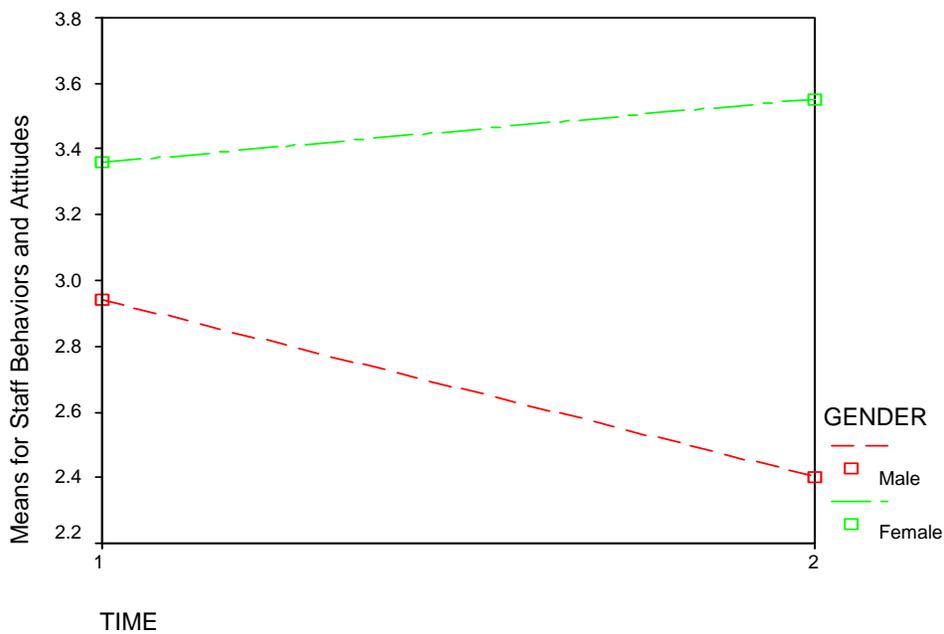


Figure 4-2. Profile plot demonstrating time x gender interaction effect in cultural sensitivity ratings of office staff behaviors and attitudes for African American patient participants.

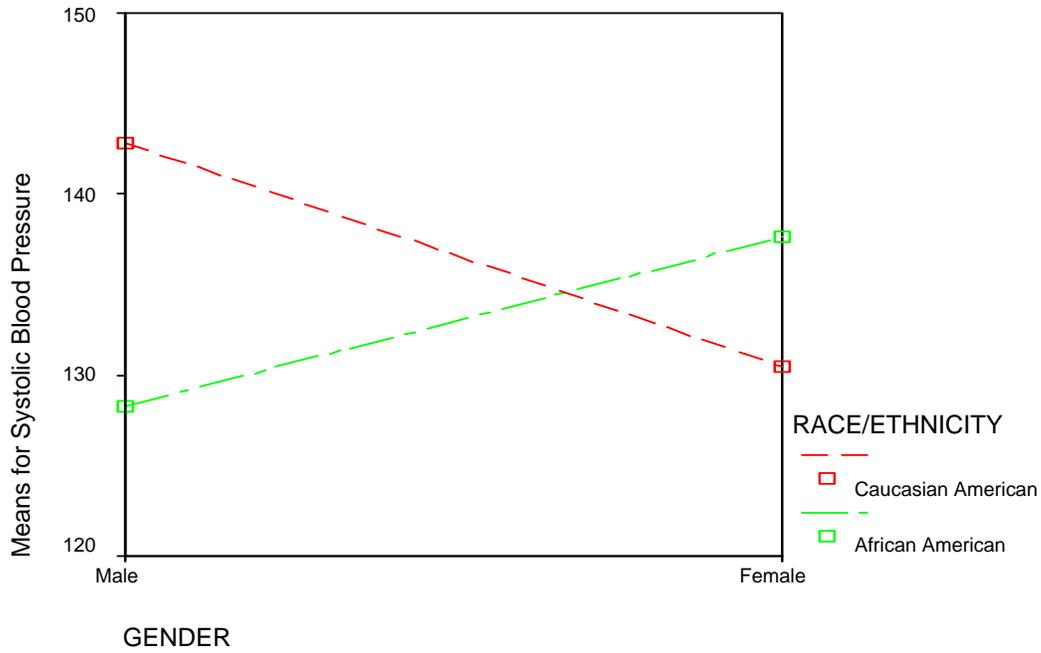


Figure 4-3. Profile plot demonstrating gender x race interaction effect for systolic blood pressure means for African American patient participants and White patient participants.

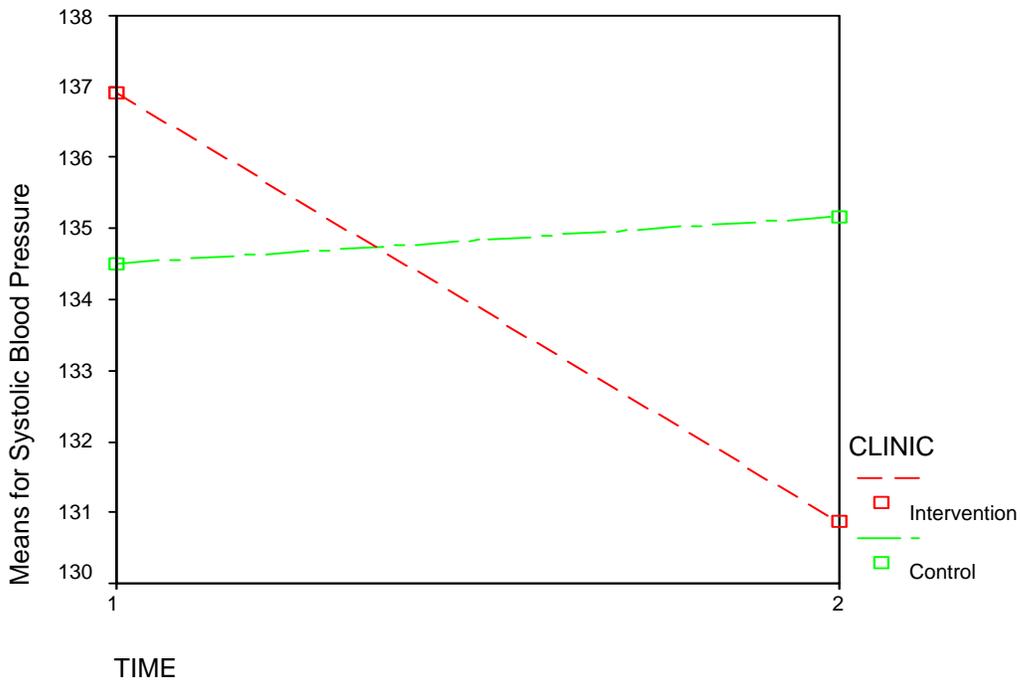


Figure 4-4. Profile plot showing means for systolic blood pressure readings of African American patient participants by time, group, and time x group.

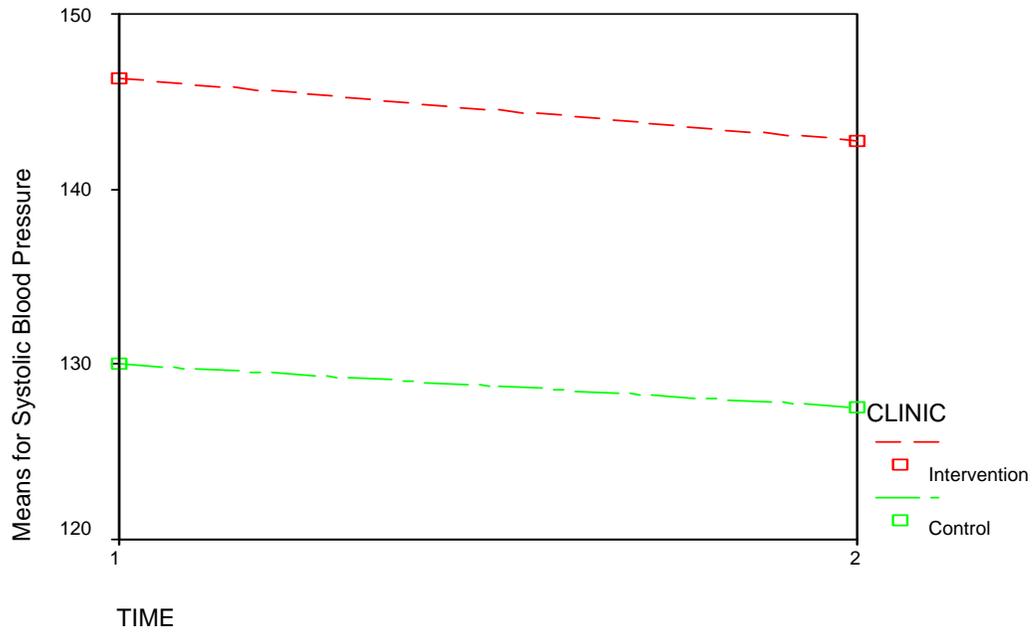


Figure 4-5. Profile plot showing means for systolic blood pressure readings of White Patient participants by time, group, and time x group.

CHAPTER 5 DISCUSSION

The purpose of this chapter is to (a) summarize and interpret the results of the present study, (b) identify limitations of the study and offer directions for future research, and (c) discuss the implications of the present study for counseling psychologists.

Summary of the Results

Descriptive Data

The descriptive data reported were interesting in several regards. First, African American patient participants and White patient participants rated their providers' behaviors as more culturally sensitive than their office staff's attitudes and behaviors, which were in turn rated as more culturally sensitive than the clinic environment. These findings are perhaps not surprising given that the vast majority of interventions designed to achieve cultural sensitivity/competence have focused on enhancing the knowledge of health care providers (versus office staff) about the relationship between sociocultural factors and health beliefs and equipping these providers with the tools and skills to manage these factors appropriately. Moreover, whereas medical associations have increasingly approved mandatory diversity accreditation requirements (e.g., OMH, 2001), thus providing the impetus for health care providers to increase their level of cultural sensitivity, this mandate has not applied to office staff and clinic administrators. Consequently, office staff and clinic administrators likely do not seek cultural competency/sensitivity training. Without such training it is understandable that the cultural sensitivity of office staff and clinic physical characteristics and policies may not be at the level that they could be.

The present results suggest the need to address the cultural sensitivity of the office staff and clinic physical environment characteristics and policies, as earlier concluded in a focus

group study to operationalize cultural sensitivity from the perspectives of culturally diverse patients (e.g., Tucker et al., 2003), and as mandated in the National Standards for Culturally and Linguistically Appropriate Services in Health Care (OMH, 2001).

In addition, the descriptive data indicated that, at baseline, African American patient participants rated both their office staff's behaviors and attitudes and their clinic environments as more culturally sensitive than did White patients, whereas White patients rated their providers' behaviors and attitudes as more culturally sensitive than did African American patients. These findings are interesting as they highlight the fact that although both African American patient participants and White patient participants rated their providers' behaviors and attitudes as most important (compared to office staff's behaviors/attitudes and the clinic environment) as earlier reported, there were ethnic/racial differences in mean ratings. These findings may be partially explained by the fact that 75% of the provider sample were White, whereas only 9.4% of the provider sample were African American. As such, there may have been fewer instances of behaviors (e.g., misunderstandings or differences in cultural health beliefs) that may have been perceived as culturally insensitive among White patient participants compared to African American patient participants.

In addition, African American patient participants may have been more attuned to culturally sensitive behaviors demonstrated by office staff members and in the clinic physical environment and policies leading to higher ratings of these behaviors and clinic characteristics among this patient sample compared to White patient participants. This view is consistent with earlier reported focus group findings, which suggested that African American patients may consider the behaviors of support staff and characteristics of the clinic physical environment and

policies as more central to their overall experience of cultural sensitivity, compared to White focus group patients (Tucker et al., 2003).

It is also noteworthy that a larger percentage of African American patient participants in the present study were from low-income backgrounds (e.g., 49.1% of the African American patient sample earned below \$10,000 compared to 22.6% of the White patient sample). As such, high ratings of office staff's behaviors and attitudes and the clinic physical environment and policies may reflect the emphasis that patients from lower income backgrounds may put on aspects of the health care environment such as having easy access to the clinic and health information and being treated quickly and fairly, which may be less relevant to higher income patient populations (e.g., patients in low-paying jobs may have lower general and health literacy and very limited ability to reschedule appointments during clinic hours).

Hypothesis 1

Hypothesis 1 stated that, following the implementation of a pilot PC-CSHC Intervention Program at a primary care clinic (i.e., the intervention clinic), a group of patients who participated in the Program (i.e., adult primary care African American patients and White patients from primarily low-income backgrounds who have been diagnosed with hypertension alone, or in combination with diabetes, coronary artery disease, and/or high cholesterol) would evidence significantly higher ratings of perceived cultural sensitivity in provider and office staff behaviors and attitudes, and in their health care clinic environment (i.e., physical characteristics and policies) than would a control group of patients who were demographically and medically similar to the intervention group participants and who received care at a primary care clinic that was similar to the intervention clinic (i.e., the control clinic), but who were not exposed to the Program. This hypothesis was tested separately for African American patient participants and White patient participants (given that there were different assessment instruments to measure

perceived cultural sensitivity for these two groups) using three repeated measured analyses of variance (ANOVAs) for each racial/ethnic group.

Unfortunately, limited data following the 15-month intervention period precluded testing Hypothesis 1 for the White patient participants. Results of analyses to test Hypothesis 1 with the African American patient participant data did not support Hypothesis 1, as there were no significant main or interaction effects found that would have suggested significant differences in patient-centered cultural sensitivity ratings between groups (control vs. intervention) at post-intervention. Nonetheless, the results of analyses that were conducted to test Hypothesis 1 yielded some interesting findings.

First, results of the repeated measures ANOVA with mean scores for the provider behaviors and attitudes component of the T-CSHCI-Patient Form as the dependent variable suggested that African American patient participants in the present study at both the intervention clinic and the control clinic rated their providers' behaviors and attitudes as significantly more culturally sensitive following the 15-month intervention period than they did at baseline. It is noteworthy that analysis of profile plots suggested that although patient participants at the intervention clinic and the control clinic both rated their providers' behaviors and attitudes as significantly more culturally sensitive following the intervention than at baseline, the increase from baseline to post-intervention in the intervention group was larger than the increase in ratings from baseline to post-intervention for the control group. These findings suggest partial, though non-statistically significant support for Hypothesis 1, and support the importance of replicating the present study with a larger sample of participants.

Second, the results of the repeated measures ANOVAs with both the providers' behaviors and attitudes component and the office staff's behaviors and attitudes component of the T-

CSHCI-Patient Form indicated that African American female patient participants at baseline and following the 15-month post intervention period both rated their providers' behaviors and attitudes and their office staff's behaviors and attitudes as significantly more culturally sensitive than did their African American male counterparts (at the control clinic as there were no African American male participants at the intervention clinic at post-intervention). In addition, results indicated the difference between African American female and male patient participants ratings of their office staff's behaviors and attitudes was larger at post-intervention compared to this difference at baseline.

It is first important to note that these results need to be interpreted with caution, given that there were more females than males available for analysis (20 males and 69 females at baseline, 4 males and 13 females at post-intervention) and this may have skewed the results. In addition, there were no African American males at the intervention clinic available for analysis precluding the emergence of any group x gender interaction effects.

Nonetheless, the results suggest that African American female patient participants in this study appeared to perceive both their providers' and office staff's attitudes and behaviors as more culturally sensitive than African American male patient participants. These results are particularly interesting given that gender disparities in health care, which suggest that women may receive a poorer quality of health care than their male counterparts, continue to be well documented (e.g., AHRQ, 2003; Schulman et al., 1999). The results of the present study may reflect a larger degree of mistrust among African American males versus African American females with regard to health care interactions, especially given the fact that health care atrocities such as those committed in the Tuskegee Syphilis Study targeted African American males. This distrust may subsequently lead to higher expectations among African American males regarding

behaviors and attitudes that are considered indicators of culturally sensitive health care among health care providers and office staff. However, it is noteworthy, that while the presence of distrust in the African American community resulting from awareness of studies like the Tuskegee Syphilis Study is well documented, less well documented is the differential experience of distrust among African American males and females (e.g., Adderley-Kelly & Green, 2005; Dancy, Wilbur, Talashek, Bonner, & Barnes-Boyd, 2004).

The present findings highlight the importance of conducting future research focused on examining gender differences in perceived cultural sensitivity among specific racial/ethnic groups, as such research is lacking. Special attention needs to be given to recruiting African American male patient participants in such research.

Finally, results of the repeated measures ANOVA with mean scores for the clinic environment component of the T-CSHCI-Patient Form as the dependent variable suggested that African American patient participants did not significantly differ in their perceived cultural sensitivity ratings of the clinic physical environment and policies with regard to gender, group (intervention vs. control), time (baseline vs. post-intervention) or any interaction of these variables and thus did not support Hypothesis 1. These results are interesting given that in a focus group study conducted by Tucker et al. (2003), both African American and Hispanic focus group participants noted the importance of changes to the clinic environment and policies as central to their experience of patient-centered culturally sensitive health care.

Hypothesis 2

Hypothesis 2 stated that, following the implementation of the PC-CSHC Intervention Program, the participants who are exposed to the Intervention Program will evidence significantly lower diastolic and systolic blood pressure readings than will the control group of participants who are not exposed to the Intervention Program. Results of analyses to test

Hypothesis 2 did not support this Hypothesis, although profile plot analysis suggested that, with larger patient participant samples significant time x group and/or time x group x race interactions may have been found. Specifically, these profile plots showed that the mean systolic blood pressure readings of African American patient participants at the intervention clinic decreased over time (i.e., from baseline to post-intervention), the systolic blood pressure readings of their African American counterparts at the control clinic stayed about the same.

In addition, it is notable that at baseline both African American patient participants and White patient participants had mean diastolic and mean systolic blood pressure readings in the prehypertensive range (i.e., mean diastolic blood pressure for White patients = 82.31 and for African American patients = 80.07; mean systolic blood pressure for White patients = 134.16 and for African American patients = 134.47). It is worth considering that the Intervention Program may have been more successful at decreasing these blood pressure readings (consistent with Hypothesis 2) if they had been in the stage 1 or stage 2 hypertension ranges (i.e., systolic blood pressure readings >140 mmHg and diastolic blood pressure readings > 90 mmHg). Indeed, it is likely that the patients who comprised the participant sample at baseline were already being medically treated for high blood pressure, and, as a consequence, the test of the impact of the pilot PC-CSHC Intervention Program on blood pressure readings of the participating patients was not a reliable one.

Research Question 1

The first research question under investigation explored whether, among patient participants in the present study, there were significant differences in mean perceived patient-centered cultural sensitivity ratings on the components of the T-CSHCI-Patient Form (i.e., the provider behaviors and attitudes component, the office staff behaviors and attitudes component, and the clinic physical environment and policies component) at baseline in association with

gender, group (intervention vs. control), or gender x group. Results of analyses to test Research Question 1 among African American patient participants revealed no significant differences at baseline in association with gender, group, or gender x group on any of the components of the T-CSHCI-Patient Form. This finding suggests that any differences in perceived patient-centered culturally sensitive health care that were found at post-intervention could be attributed to the effect of the PC-CSHC Intervention Program rather than pre-existing differences at baseline.

Results of analyses to test Research Question 1 among White patient participants indicated that, at baseline, mean scores for the providers' behaviors and attitudes component of the T-CSHCI-Patient Form for White females in the present study were significantly higher than the mean scores for White males. These results may reflect the fact that a majority of providers at the control and intervention clinics were female (60%) and White (75%); as such, White female patient participants may have felt more positively towards their providers compared to male patient participants. Importantly, this interpretation is consistent with the finding in a focus group study that White female participants reported a preference for female physicians, especially for gynecologic examinations (Tucker et al., 2003).

Research Question 2

The second research question under investigation examined whether, among patient participants in the present study, there were significant differences in health outcomes (i.e., diastolic and systolic blood pressure readings) at baseline (i.e., prior to the PC-CSHC Intervention Program) in association with race/ethnicity (i.e., African American vs. White), gender, group (i.e., the patient participants at the control clinic vs. those at the intervention clinic), race/ethnicity x gender, race/ethnicity x group, or race/ethnicity x gender x group. Results of analyses to test Research Question 2 suggested that African American patient participants and White patient participants in this study did not differ significantly in their

diastolic or systolic blood pressure in association with their race/ethnicity, gender, group, race/ethnicity x gender, race/ethnicity x group, or race/ethnicity x gender x group.

The lack of significant race/ethnicity differences in blood pressure readings at baseline is particularly interesting given the well-documented disparities in the incidence of high blood pressure among racial and ethnic minorities compared to White individuals (e.g., CDC, 2005; HHS, 2003; OMH, 2007a). The finding of no racial/ethnic differences in blood pressure readings at baseline in the present study may reflect the fact that both racial/ethnic minority groups of patient participants who participated in the present study were already being treated for hypertension, as suggested by the fact that these participants' baseline systolic and diastolic blood pressure readings were in the prehypertensive range. It is also possible that patients with higher blood pressure readings from either or both racial/ethnic minority groups chose not to participate in the study during the initial recruitment phase (e.g., because participating in a study focused on hypertension may have increased their anxiety about having the diagnosis), creating a selection bias that resulted in more patients with prehypertensive blood pressure readings (vs. patients with blood pressure readings in the stage 1 or stage 2 hypertension ranges) in the participant sample at baseline. Nonetheless, the findings of Research Question 2 suggest that any differences in diastolic or systolic blood pressure readings that were found at post-intervention could be attributed to the effect of the PC-CSHC Intervention Program rather than pre-existing differences at baseline.

Limitations and Directions for Future Research

Before reviewing the implications of the present study, it is necessary to describe the limitations of this pilot test of the PC-CSHC Intervention Program. The limitations existed in the design, assessment, and training areas of the present study.

Design Limitations

Design limitations include threats to external, internal and statistical conclusion validity, as well as conceptualization challenges that were inherent in the present study. Regarding external validity, which addresses the extent to which the results can be generalized or extended to people, settings, times, measures and characteristics other than those in the present study, the present study was primarily limited by the small sample of participants. As described in Chapter 3, notable challenges exist to recruiting and retaining low-income and ethnic minority participants in research studies including mistrust of researchers, fears of mistreatment and exploitation, and fears that data will be used to portray communities in a negative light (Adderley-Kelly & Green, 2005; Dancy et al., 2004; Loftin, Barnett, Bunn & Sullivan, 2005; Yancey, Ortega, & Kumanyika, 2006). It is likely that the present study faced some of these challenges, despite the use of a multi-modal recruitment strategy and the inclusion of community members in different phases of the study's implementation. It is also possible that some of these challenges contributed to a very small sample at post-intervention for analysis, especially at the intervention clinic. Specifically, whereas the numbers of African American patient participants and White patient participants at baseline were 110 and 114, respectively, the number of African American patient participants and White patient participants at post-intervention were 19 (5 of which were at the intervention clinic) and 18 (2 of which were at the intervention clinic), respectively.

In addition, the longitudinal design of the study (i.e., 15-months from baseline to post-intervention) likely also impacted retention of patient participants. Indeed, over the course of the study, at least 2 patient participants died, while several other patient participants moved without forwarding addresses or had their phones disconnected and, as such, could not be contacted for follow-up data collection. These problems are particularly common among low-income

participant samples. Unfortunately, the small sample size limits the generalizability of the present findings, which may not apply beyond individuals who are similar to the patient participants in this study.

Internal validity refers to the extent to which the intervention, rather than extraneous influences, can be considered to account for intervention effects found. Threats to internal validity from at least one source should be considered as a limitation to the present study. Indeed, while every effort was made on the part of the principal investigator to choose intervention and control clinics that had demographically similar patient and staff populations, and to use participant selection criteria to further increase the similarity of the patient population, it is possible that pre-existing differences, or differences that developed over the course of the study, between the populations at the intervention and control clinics, may have impacted results.

Statistical conclusion validity refers to the extent that a relation is shown, demonstrated or evident, and how well the investigation can detect effects if they exist. As has been discussed earlier, the small sample size, especially at the intervention clinic, of the post-intervention sample very likely compromised the statistical conclusion validity of the reported findings, as low power may have prevented the detection of main and interaction effects in the performed statistical analyses.

The present study also faced conceptual limitations, as the model that guided the study may not adequately address all of the variables that likely impact ratings of patient-centered culturally sensitive health care or health status outcomes. For example, the PC-CSHC Model addresses the potential impact of the physical environment characteristics and policies of the health care clinic on cultural sensitivity ratings and subsequently on patient health outcomes. However, it does not address the potential mediating and/or moderating effects of

socioenvironmental stressors such as low socio-economic status and racism-related stress, which have both been linked to the incidence of chronic illnesses such as hypertension (e.g., Johnson et al, 1995; Clark et al., 1999), on patient health outcomes or health status variables. For example, it may be the case that, in the absence of racism-related stress in the general environment, increases in patient-perceived cultural sensitivity may impact patient health outcomes/health status variables more than in the presence of racism-related stress. Similarly, patients confronting stresses as a result of socioeconomic status may be more or less likely able to demonstrate changes in health outcomes or health statuses as a result of increases in patient-perceived cultural sensitivity, depending on their poverty level.

Given all of the design limitations addressed above, future research should focus on replicating the present study with a larger sample size to address the threats to external, internal and statistical conclusion validity identified, and thus to increase the accuracy and generalizability of findings. In addition, future research should attempt to investigate the moderating and mediating effects of socioenvironmental stressors on the relationship between patient-perceived culturally sensitive health care and patient outcomes/health statuses.

Assessment Limitations

The assessment related limitations of the present study include using the pilot Tucker Culturally Sensitive Health Care Inventories-Patient Forms (T-CSHCI-PF) to help evaluate the PC-CSHC Intervention Program. Specifically, the reliabilities have been established only with a non-representative sample of the patients who participated in the present study. In addition, it is important to note that both of the T-CSHCIs that were used in the present study included over 100 items, and therefore are not yet practical for regular use by researchers or health care professionals. Future research to overcome the assessment related limitations of the present study should include conducting studies to establish the reliabilities and validities of the T-CSHCI

Patient-Forms using a national sample of patients, and conducting factor analyses of the inventory items in each T-CSHCI with the goal of reducing the number of items on each to make using them more practical.

Training Limitations

One important training-related limitation of the present study was that the PC-CSHC Intervention Program involved only a one-time 4-hour training workshop for clinic providers and office staff, and a one-time 4-hour training workshop for patients. Furthermore, the workshops were time consuming and difficult to incorporate into the busy schedules of clinic providers, office staff, and patients. Indeed, the attrition of patient participants at the intervention clinic, especially White patient participants and African American male patient participants, may in part be attributable to the time demands required for participation in the patient training workshop.

Notably, following their systematic review of health care provider education interventions designed to impact cultural competence, Beach et al. (2005) concluded that both shorter term (4-hour) and longer-term (sessions of varying length held over a 4-year period) interventions were associated with positive outcomes. However, Thom et al. (2006) suggested that the impact of shorter-term training programs may be negligible unless behaviors learned during the trainings are actively reinforced. To address this training specific limitation in future research similar to the present study, the training workshops should be divided into consecutive one-hour sessions to facilitate learning and practicing/reinforcement of taught skills.

Conclusions and Implications for Counseling Psychologists

The present study sought to address the health disparities problem, related specifically to hypertension, by using a literature-based model (i.e., the PC-CSHC Model) as a framework to examine the longitudinal impact of a pilot PC-CSHC Intervention Program on the health outcomes (i.e., systolic and diastolic blood pressures) of primarily low-income African American

primary care patients and White primary care patients with pre-hypertension or hypertension (alone, or with diabetes, coronary artery disease, and/or high cholesterol). Results of conducted analyses did not offer statistically significant support for the stated hypotheses; however, trend results suggest that, with larger participant samples and thus greater statistical power, the PC-CSHC Intervention Program may have evidenced significant intervention effects, especially among African American patient participants. Furthermore, the findings of the present study highlighted the importance of conducting future research focused on examining gender differences in perceived culturally sensitivity ratings, especially among ethnic minority populations.

There are several implications of the above findings for counseling psychologists. First, the trend results from this study, which was spearheaded by counseling psychology faculty and graduate students, suggest that counseling psychologists can conduct such research toward the goal of decreasing health care and health disparities that negatively impact low-income and ethnic minority populations. Involvement in such research is consistent with the social justice identity of the counseling psychology field (Baluch et al., 2004; Speight & Vera, 2004), as well as with specific calls for counseling psychologists to be involved in multidisciplinary efforts to eliminate health disparities that continue to represent a significant form of oppression to minority populations (Buki, 2007). Importantly, in order to conduct research and intervention programs, and to participate in policy development to help reduce health disparities, the education and training that is emphasized in the counseling psychology field needs to be expanded. For example, training of counseling psychologists needs to include training in how health care systems and clinics operate. Furthermore, counseling psychologists' training should incorporate a focus on culturally sensitive health promotion strategies.

In addition to conducting research to examine the impact of intervention programs such as the one tested in the present study, counseling psychologists can also be involved in more peripheral roles in such research studies as members of multidisciplinary health promotion research teams concerned with intervention research aimed at promoting patient-centered culturally sensitive health care and ultimately reducing health disparities. Such teams can benefit from the expertise of counseling psychologists in the areas of multicultural training, assessment and research that makes these professionals uniquely equipped to train health care professionals to provide patient-centered culturally sensitive health care. Because patient-centered culturally sensitive health care involves empowering patients, promoting this care is consistent with the empowerment of clients that has long been a central component of counseling interventions (Lee, 1991; McWhirter, 1991). Indeed, counseling psychologists are well equipped to empower patients to elicit patient-centered culturally sensitive health care through patient empowerment training workshops and through counseling interventions with clients who interact regularly with the health care system who deserve such empowerment.

Finally, counseling psychologists can use the PC-CSHC Intervention Program to inform their efforts to promote client-centered culturally sensitive counseling in mental health care settings (e.g., counseling centers and community mental health centers). Such counseling may indeed help to eliminate the problem of the underutilization of mental health care services by minorities. First, however, client-centered culturally sensitive counseling needs to be defined by culturally diverse clients. Counseling psychologists can facilitate this definition development by conducting focus groups with minority clients to identify specific behaviors and attitudes of their counselors and office staff members as well as physical environment characteristics and policies at counseling centers and mental health clinics that enable these clients to (a) feel comfortable

with, trusting of, and respected by their counseling center counselors and office staff members, and (b) feel a sense of belonging at the counseling center. Obtained focus group data could then be used to enhance the provision of culturally sensitive mental health counseling to culturally different clients. The obtained focus group data could also be used to create a culturally sensitive counseling inventory for clients to evaluate their counselors, counseling office staff, and counseling center physical environments and policies. Indeed, providing clients with opportunities for such evaluations truly represents culturally sensitive counseling at its very best.

APPENDIX A
DEMOGRAPHIC DATA QUESTIONNAIRE (DDQ)

**Please provide the requested information by shading in your answer.
It should look like this: •**

1. What is your gender?
 - Male
 - Female
2. Your Race/Ethnicity:
 - Cuban/Cuban-American
 - Dominican Republican
 - Mexican/Mexican-American/Chicano(a)
 - Puerto Rican
 - Other Hispanic/Latino (please specify: _____)
 - Caucasian/White/European-American
 - African-American/Black-American
 - Other (please specify: _____)
3. Current relationship status:
 - Single, living without a partner
 - Single, living with a partner
 - Married, living with a partner
 - Married, not living with a partner
 - Divorced or separated
 - Widow/Widower
4. Employment Status:
 - Work Full Time
 - Work Part Time
 - Do not work
5. Highest level of education that you have completed:
 - Elementary School
 - Middle/Junior High School
 - High School
 - Some College/Technical School
 - College
 - Professional/Graduate School
6. Annual household income level:
 - Below \$10,000
 - \$10,001 to \$20,000
 - \$20,001 to \$30,000
 - \$30,001 to \$40,000
 - Above \$40,001
7. Do you have children?
 - Yes (How many?: _____)
 - No

8. If so, do your children live with you?
- Yes
 - No
9. Religious Preference:
- Catholic
 - Baptist
 - Presbyterian
 - Methodist
 - Islamic
 - Buddhist
 - Jewish
 - Other (Please specify: _____)
10. Language Preference (for future mailings):
- English
 - Spanish
 - Other (Please specify: _____)
11. Which clinic do you attend?
- Family Practice Medical Group
 - Eastside Community Health care center
 - Other (Please specify: _____)
12. Have you changed clinics since beginning this research study?
- Yes
 - No
13. Have you changed doctors since beginning this research study?
- Yes
 - No
14. What other research studies are you involved with at your clinic? (check all that apply)
- "Florida Healthy State Program"
 - "Medicaid Study"
 - Other (please list): _____
15. Has there been a change in your primary care physician or nurse practitioner since you last completed these surveys?
- Yes
 - No
- If Yes, please explain: _____
16. Did you receive any help when filling out these surveys?
- Yes
 - No
17. How many times have you visited your clinic since last completing these surveys? _____
18. How many years have you lived in this community? _____
19. What is your Age? _____

APPENDIX B
MEDICAL DATA QUESTIONNAIRE (MDS)

Directions: For this set of questions, please fill in the blank or shade in the circle next to the appropriate response from the choices given. Remember, your answers to all questions in this packet are kept strictly confidential and private. Questions ONE through SEVEN are only about hypertension, if you do not have hypertension, please do not answer these.

1. If you have high blood pressure, how many years has it been since your health care provider told you (Circle one)?

0-1	2-3	4-5	6-7	8-9	10 +
years	years	years	years	years	years

<input type="radio"/>					
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

2. Have you experienced symptoms related to the high blood pressure (Circle one)?

YES NO

3. If you have experienced symptoms, please list them here:

4. Which of the following has your physician or other health care provider recommended to treat your high blood pressure (Check all that apply)?

- Medication
- Diet
- Exercise
- Weight Loss
- Other _____

5. Have any other members of your family been diagnosed with high blood pressure?

YES NO

6. If other members of your family have high blood pressure, what relation are they to you (check all that apply):

- | | |
|-----------------------------------|--------------------------------|
| <input type="radio"/> Mother | <input type="radio"/> Son |
| <input type="radio"/> Father | <input type="radio"/> Daughter |
| <input type="radio"/> Grandmother | <input type="radio"/> Aunt |
| <input type="radio"/> Grandfather | <input type="radio"/> Uncle |

7. How much do you agree or disagree that you can get ample amounts of education and consultation about hypertension (Circle your answer)?

<input type="radio"/>				
Strongly Agree	Somewhat Agree	Neutra 1	Somewhat Disagree	Strongly Disagree

8. What illnesses are you currently diagnosed with? (check all that apply)

- Diabetes (Low Blood Sugar)
- High cholesterol (Hyperlipidemia)
- High blood pressure (Hypertension)
- Coronary Artery Disease
- Other (please list): _____

9. How long ago were you told that you had the conditions listed above?

ILLNESS OR CONCERN	YEARS
_____	_____
_____	_____
_____	_____
_____	_____

10. Are you currently on any medications?

- YES If Yes, please list them: _____
- NO

11. Has your physician recommended you to exercise, diet, or take medications for any of these other illnesses or medical concerns? If so, please list:

- YES
- NO

APPENDIX C
MARLOW-CROWNE SOCIAL DESIRABILITY SCALE (MCSDS)

Directions: For each of the following statements, please fill in where you consider the statement to be True (T) or False (F).

	<u>True</u>	<u>False</u>
1. <u>I never hesitate to go out of my way to help someone in trouble.</u>	<input type="radio"/>	<input type="radio"/>
2. <u>I have never intensely disliked anyone.</u>	<input type="radio"/>	<input type="radio"/>
3. <u>I sometimes feel resentful when I don't get my way.</u>	<input type="radio"/>	<input type="radio"/>
4. <u>I like to gossip at times.</u>	<input type="radio"/>	<input type="radio"/>
5. <u>There have been times when I felt like rebelling against people in authority even though I knew they were right.</u>	<input type="radio"/>	<input type="radio"/>
6. <u>I can remember "playing sick" to get out of something.</u>	<input type="radio"/>	<input type="radio"/>
7. <u>There have been occasions when I took advantage of someone.</u>	<input type="radio"/>	<input type="radio"/>
8. <u>I'm always willing to admit it when I make a mistake.</u>	<input type="radio"/>	<input type="radio"/>
9. <u>I always try to practice what I preach.</u>	<input type="radio"/>	<input type="radio"/>
10. <u>I sometimes try to get even, rather than forgive and forget.</u>	<input type="radio"/>	<input type="radio"/>
11. <u>When I don't know something I don't at all mind admitting it.</u>	<input type="radio"/>	<input type="radio"/>
12. <u>I am always courteous, even to people who are disagreeable.</u>	<input type="radio"/>	<input type="radio"/>
13. <u>At times I have really insisted on having things my way.</u>	<input type="radio"/>	<input type="radio"/>
14. <u>There have been occasions when I felt like smashing things.</u>	<input type="radio"/>	<input type="radio"/>
15. <u>I would never think of letting someone else be punished for my wrongdoings.</u>	<input type="radio"/>	<input type="radio"/>
16. <u>I never resent being asked to return a favor.</u>	<input type="radio"/>	<input type="radio"/>

17. I have never been irked when people expressed ideas very different from my own. ○ ○
18. There have been times when I was quite jealous of the good fortune of others. ○ ○
19. I am sometimes irritated by people who ask favors of me. ○ ○
20. I have never deliberately said something to hurt someone's feelings. ○ ○

APPENDIX D
TUCKER - CULTURALLY SENSITIVE HEALTH CARE INVENTORY-AFRICAN
AMERICAN PATIENT FORM (T-CUSCHI-AA)

DIRECTIONS:

Take a few seconds to think about your experiences with the person you see most often for health care at your health care clinic. This person might be a doctor, a nurse practitioner, or some other health care provider. Now please rate how much you agree that this person shows each characteristic or behavior listed below when providing you with health care. Please use a rating of 4, 3, 2, or 1 where 4 = “Strongly Agree”, 3 = “Agree”, 2 = “Disagree”, and 1 = “Strongly Disagree”. Shade in the circle below the rating you choose like this ●. Please rate all characteristics and behaviors listed on each page. Do not give us your name. Your ratings will be confidential. Thus, please give honest ratings.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	THE PERSON I SEE MOST OFTEN FOR MY HEALTH CARE WHEN I VISIT MY CLINIC:
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Is compassionate or shows that he or she cares about how I feel.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Is honest and direct with me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Is dedicated to her or his work.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Has a lot of schooling.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Knows what he or she is doing.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Responds to my requests.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Appears to be concerned about my well-being.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Treats all of her or his patients equally.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Makes helpful and reasonable recommendations.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Explains things so that I understand them.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Shows that he or she is trying to help me out.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Treats me like a person, not just a number.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Shows that he or she is interested in more than just making money.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Follows a common procedure for treating all of his or her patients.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Shows that he or she is familiar with my health.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Consults with others to help me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Is not scared to touch me.

- 18. Takes my concerns seriously.*
- 19. Tries to communicate with me.
- 20. Talks to me during my visit.
- 21. Does not look down on me.*
- 22. Prescribes medicine only when he or she is sure of my illness.
- 23. Correctly diagnoses and treats my illness.
- 24. Is available for me.
- 25. Is consistent in her or his diagnosis and treatment of my illness.
- 26. Prescribes medicine only when he or she is sure of my illness.
- 27. Explains things so that I can understand them.
- 28. Listens to me.
- 29. Takes her or his time with me during my visit.
- 30. Lets me explain my symptoms before examining me.
- 31. Examines me carefully before making any decisions.
- 32. Refers me to a specialist when he or she cannot help me.
- 33. Explains everything he or she does to me.
- 34. Knows her or his limits as to what she or he can treat.
- 35. Does not make me wait long.
- 36. Puts on a fresh pair of gloves while I am in the examining room.
- 37. Follows up on my visits.
- 38. Talks to me before making decisions about prescriptions and treatments.
- 39. Has a positive attitude.
- 40. Keeps up with new research and treatments.
- 41. Treats me with respect.*
- 42. Puts my mind at ease.
- 43. Is polite.*
- 44. Gives me the information that I need.
- 45. Is sensitive to my needs.
- 46. Treats all of her or his patients the same way.
- 47. Speaks English well enough for me to understand what he or she is saying.
- 48. Lets me know about illnesses and diseases common among African Americans.

- 49. Prepares me for the next steps in treating my illness.
- 50. Shows that he or she remembers me.*
- 51. Looks professional.
- 52. Understands my financial situation.*
- 53. Comforts me.*
- 54. Makes me feel appreciated.
- 55. Shows care and concern for my child. [If no children, please do not rate this.]
- 56. Tries to help me out.
- 57. Creates positive feelings during my visit.
- 58. Chats with me during my visit.
- 59. Is nice.*
- 60. Is respectful of my religious beliefs.*
- 61. Knows how to make me feel comfortable.*
- 62. Understands the African American culture.*
- 63. Has training in working with African American patients.

Now please rate how much you agree that overall the staff members at your clinic show each of the following characteristics and behaviors. To do this, use the same scale as above and choose one of the four ratings for each characteristic and behavior, then shade in the circle below the rating you choose like this●. Please rate all of the listed characteristics and behaviors.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	THE CLINIC STAFF MEMBERS AT MY CLINIC:
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Are friendly.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Are helpful.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Are polite.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Are professional.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Are skilled at working with people.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Are welcoming.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Give me a card to remind me of my next appointment.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Call me the day before my appointment to confirm it.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Get back with me as promised.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Appear concerned about my well-being.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Treat me with respect.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Do not make unprofessional comments.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Treat me like a person, not a number.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Make fair decisions about who the doctor is going to see next.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Do not discriminate against me because of my race.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Do not look down on me.*
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Do not stereotype African American patients as unable to read and uneducated.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18. Allow me to reschedule a missed appointment within a reasonable time.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19. Keep my business confidential and private.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20. Do not gossip about patients.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21. Do not grab my children from me. [If no children, please do not rate this.]
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22. Do what the doctor told them to do for me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23. Work with my case even if I cannot pay the doctors' bills.

- 24. Pay attention to me.*
- 25. Listen to my complaints.*
- 26. Know my name.*
- 27. Admit me quickly after my initial registration or sign-in as a patient.
- 28. Take care of me as soon as I walk in.
- 29. Get the doctor to see me at the time of my appointment.
- 30. Work quickly to process my paperwork before and after I see the doctor.
- 31. Let me know if there are any changes to my record.
- 32. Give more work effort to seeing patients in the clinic than to answering phone calls.
- 33. Allow me to discipline my children while I am inside the clinic.
[If no children, please do not rate this.]

Now please rate how much you agree that the following *clinic characteristics* exist at your health care clinic. To do this, use the same scale as above and choose *one* of the four ratings for each clinic characteristic, then shade in the circle below the rating you choose like this

- Please rate all of the listed the clinic characteristics.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	MY HEALTH CARE CLINIC:
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Is a clean place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Is a comfortable place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Does not smell.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Is professional looking like a clinic should be.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Has affordable services.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Has doctors and nurses visibly moving about treating patients.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Has short waiting times to see the doctors.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Has procedures to make sure that I am seen by the doctor at the
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Is a calm place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Is open late for patients who work during the day.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Has fresh air.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Has brochures available about illnesses or diseases common to
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Has signs and posters about illnesses and procedures on the walls.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Has a hotline I can call for illness information.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Has a sign-in sheet.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Has large and spacious or roomy waiting rooms.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Has warm waiting rooms.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18. Has waiting rooms that are not crowded.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19. Has many chairs in the waiting room.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20. Has comfortable chairs in the waiting room.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21. Has many convenient places to park your car or other vehicle.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22. Has warm examining rooms.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23. Has many receptionists and staff members working.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	24. Has African American doctors working at the clinic.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	25. Has African American staff working at the clinic.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26. Has the same doctors all the time.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27. Makes sure that I am treated within 15 minutes of my appointment.

- 28. Makes sure that neither patients nor staff are allowed to gossip.
- 29. Has a social worker at the clinic available to help me with insurance and disability problems.

APPENDIX E
TUCKER - CULTURALLY SENSITIVE HEALTH CARE INVENTORY- CAUCASIAN
AMERICAN PATIENT FORM (T-CUSCHI-CA)

DIRECTIONS:

Take a few seconds to think about your experiences with the person you see most often for health care at your health care clinic. This person might be a doctor, a nurse practitioner, or some other health care provider. Now please rate how much you agree that this person shows each characteristic or behavior listed below when providing you with health care. Please use a rating of 4, 3, 2, or 1 where 4 = “Strongly Agree”, 3 = “Agree”, 2 = “Disagree”, and 1 = “Strongly Disagree”. Shade in the circle below the rating you choose like this ●. Please rate all characteristics and behaviors listed on each page. Do not give us your name. Your ratings will be confidential. Thus, please give honest ratings.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	THE PERSON I SEE MOST OFTEN FOR MY HEALTH CARE WHEN I VISIT MY CLINIC:
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Is concerned about my well-being.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Is confident in her or his skills.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Is honest and direct with me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Is courteous.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Is knowledgeable.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Is respectful of me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Is more knowledgeable about medicine than I am.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Takes time with me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Understands my feelings and views.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Listens to me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Consults with others to help me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Knows me and my case.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Explains things in ways I can understand.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Refers me to specialists when he or she cannot solve my
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Examines me thoroughly or carefully.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Prescribes medications only after examining me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Reviews my records before making a diagnosis.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18. Reviews my records before prescribing medications or
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19. Pays attention to her or his work.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20. Charges reasonable prices for services.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21. Does not stereotype me or assume I am like other patients.

- 22. Speaks and understands English well enough for me to
- 23. Understands her or his responsibility for my health.
- 24. Admits when he or she makes a mistake.
- 25. Is willing to learn.
- 26. Asks me questions about my symptoms.
- 27. Asks me about how I am feeling.
- 28. Explains medications and procedures in ways I can understand.
- 29. Treats me like a person.
- 30. Does not think that I am looking for a way to get high when I
- 31. Does not question the truth or accuracy of what I say I am
- 32. Does everything possible to help me out.
- 33. Does not try to diagnose all of my problems as psychological or
- 34. Treats all patients equally.
- 35. Is concerned about my present situation and my future situation.
- 36. Does not talk down to me.
- 37. Gives me information about my test results without my having
- 38. Has a good bedside manner during an emergency.
- 39. Pays attention to my opinions.
- 40. Understands my financial situation.
- 41. Enjoys what he or she is doing.
- 42. Tries to make my visit a positive experience.
- 43. Makes me feel noticeably better after my visit.
- 44. Shows appreciation for me and all of her or his patients.
- 45. Is nice.
- 46. Is welcoming.
- 47. Is open to alternative medication or treatments.
- 48. Is open to holistic ideas about health care.
- 49. Makes me feel like my visit to the clinic was informative or
- 50. Does not make me wait long.
- 51. Refers me for tests that I think I need.
- 52. Follows up on my visits.
- 53. Does not bring a group of medical students into my room
- 54. Leads a discussion of difficulties I might have with her or his
- 55. Is educated about working with patients of different cultures and
- 56. Tries to educate me.
- 57. Makes me feel accepted.

- 58. Gives me personal attention.
- 59. Looks me in the eyes.
- 60. Checks out my problem as soon as I go in to see her or him.
- 61. Refers me to a specialist when I request it.
- 62. Tries to connect with me.
- 63. Understands that people of different cultures have, and believe
- 64. Understands that Caucasian/White Americans are not
- 65. Works to make the clinic more racially integrated.
- 66. Hires staff who are eager to please.

Now please rate how much you agree that overall the staff members at your clinic show each of the following characteristics and behaviors. To do this, use the same scale as above and choose one of the four ratings for each characteristic and behavior, then shade in the circle below the rating you choose like this●. Please rate all of the listed characteristics and behaviors.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Are considerate.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Are helpful.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Are knowledgeable.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Treat me like an individual.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Run the clinic efficiently (without wasting time).
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Respond quickly to my doctor's requests.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Send me correct bills.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Do not threaten to send my name to a collection agency when I
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Follow up on my paperwork and visits.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Do not act smug or "uppity".
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Do not show prejudice against me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Do not put me on hold for long periods of time when I call.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Do not move me around from examining room to examining room before I see a doctor.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Are caring.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Are encouraging.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Are friendly.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Are genuine or sincere.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18. Are pleasant to me on the phone.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19. Are available whenever I visit the clinic.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20. Are willing to please me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21. Prepare me mentally for uncomfortable procedures.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22. Focus on my particular problem.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23. Keep all the people at the clinic organized.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	24. Acknowledge my arrival for my appointment.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	25. Take time with me.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26. Tend to me quickly.

- 27. Process my requests quickly.
- 28. Tell me exactly how much the tests are going to cost.
- 29. Explain items and charges on my bill.
- 30. Mail forms so I do not have to drive to the clinic to pick them up.
- 31. Do not shut the sliding glass window on me immediately after I
- 32. Do not assume that I can afford to pay for treatment and
- 33. Do not assume I am trying to cheat the system if I regularly ask
- 34. Do not immediately put me on hold when I call the clinic.
- 35. Are welcoming.

Now please rate how much you agree that the following *clinic characteristics* exist at your health care clinic. To do this, use the same scale as above and choose *one* of the four ratings for each clinic characteristic, then shade in the circle below the rating you choose like this

- . Please rate all of the listed clinic characteristics.

Strongly Agree	Agree	Disagree	Strongly Disagree	
4	3	2	1	MY HEALTH CARE CLINIC:
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Has a place to discuss your problems privately with the doctor or nurse.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Has a door that does not allow waiting patients to see into the examining room.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Has short waiting times to see a doctor.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Has doctors available for appointments during an emergency.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Has free parking.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Has accessible parking for disabled patients.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Is managed by individuals who want to improve my experiences at the clinic, not just to make money.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Is managed by individuals who let doctors do their jobs.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Has a program to help low income patients receive treatments they cannot afford.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Has procedures to make sure that patients get quality care regardless of how little they can pay for health care.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. Is a cheerful place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Is a comfortable place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. Is an inviting place.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. Is conveniently located.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. Meets the requirements of the Americans with Disabilities Act (ADA).
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. Is open to accept emergencies any time of the day or any day of the year.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. Is open until late in the evening.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18. Is well-staffed even in the evenings.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19. Has a friendly atmosphere.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20. Has educational materials on diseases that are available for patients.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21. Has magazines.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22. Has comfortable chairs.

- 23. Has a short wait to get an appointment at the clinic.
- 24. Has the same doctors available every time I go.
- 25. Has a rotation system where new doctors fill in when the doctors on shift are overworked.
- 26. Has plenty of parking.
- 27. Has safe parking.
- 28. Has many doctors working.
- 29. Has a pharmacy that is stocked with all the medications my doctor might prescribe.
- 30. Has fully open receptionist areas where I can sign in and talk to the receptionist.
- 31. Has a designated person to answer questions about charges and fees.
- 32. Has someone in the clinic who has control over what I am charged for and how much it costs.
- 33. Has many clinic staff members working.

APPENDIX F
STUDY PARTICIPATION INVITATION LETTER

Dear Patient:

You have an opportunity to participate in a University of Florida research study about your experiences as a patient at the Family Practice Medical Group.

WHAT IS THIS ABOUT?

The researcher wants to know about your experiences with your doctors, nurses, and clinic staff. The information you give us is very important because it may help us improve the health care and support that you and other patients like you receive from healthcare providers.

WHAT DO YOU HAVE TO DO?

If you agree to participate, we will mail Study Questionnaires to you. Depending on when you join the study and/or when you stop participation, you will be asked to complete between two and six assessment packets approximately once every four to six months. You may also participate in a short training session near the end of the study.

HOW LONG IS IT GOING TO TAKE?

Completing the Study Questionnaires should take no more than one hour each.

WILL MY ANSWERS BE KEPT PRIVATE?

Yes! Nobody will know if you agree to participate. Nobody at the Family Practice Medical Group will see your answers if you complete the questionnaires.

WILL I BE PAID?

Yes, you will be paid twenty dollars (\$20) each time you complete and return the Study Questionnaires that we will send you. You will also receive sixty dollars (\$60) if you decide to come to the training session near the end of the study.

HOW CAN I FIND MORE ABOUT THIS?

Please read the “Informed Consent Form” (in English or Spanish) that was mailed with this letter, or call the Principal Researcher (Dr. Carolyn Tucker) at (352) 392 – 0601, ext. 260.

WHAT SHOULD I DO IN CASE I DECIDE TO PARTICIPATE?

1. Sign the last page of both “Informed Consent Forms” (English or Spanish). Keep one copy for yourself.
2. Complete the Demographic Data Form.
3. Complete the Medical Data Form.
4. Return one copy of the “Informed Consent Form”, the Demographic Data Form and the Medical Data Form in the pre-addressed, postage paid envelope. DO NOT add postage, just seal the envelope and put it in your mailbox.

WHAT SHOULD I DO IF I MOVE?

If you move after you return the Informed Consent Form and before you receive more information from us, simply call (352) 392-0601, ext. 260 between 10:00 a.m. and 4:00 p.m. Feel free to call collect if necessary.

WHO CAN ANSWER SOME MORE QUESTIONS I HAVE?

If you have any questions about this research, contact the Principal Researcher, Dr. Carolyn M. Tucker, at (352) 392-0601, ext. 260.

Thank you for your time. We hope you will consider participating in this study.

Sincerely,

Dr. Karen L. Hall
Medical Director,
Family Practice Medical Group

APPENDIX G
STUDY QUESTIONNAIRE PACKET COVER LETTER

Dear Patient:

Thank you for your sustained interest in our research project. We are a Research Team, supervised by Dr. Carolyn M. Tucker, Distinguished Alumni Professor at the University of Florida. The purpose of this project is to determine ways to increase the level of cultural sensitivity in health care provided to patients. The other purpose of this project is to see if patients benefit from more culturally sensitive health care.

Participation in this study involves completing a set of questionnaires. One of these questionnaires includes a list of behaviors of health care providers and clinic personnel and a list of clinic characteristics that patients have told us indicate sensitivity to their culture. Although we do not believe that your completing this questionnaire or the other questionnaires will cause you any harm, you do have the right to skip any questions that you find offensive and you have the right to stop completing a questionnaire if it makes you feel uncomfortable.

You will be asked to complete these same questionnaires again in approximately five months. If you choose to complete the questionnaires again, you will again receive compensation for your time. You may decide later whether or not you would like to complete the questionnaires again.

Your participation in this research project is voluntary. If you experience any discomforts with completing these questionnaires, you may call Dr. Carolyn M. Tucker, at (352) 392-0601 ext. 260, and/or the University of Florida Institutional Review Board (IRB) Office at (352) 846-1494 to discuss your concerns.

Your information **will not** be shared with your doctor or other members of the health care staff at your clinic. Also, your name **will not** be placed on any of the questionnaires that you complete. Instead, the information from you will be assigned a code number. The list of names that identify these codes will be kept in a separate locked location from the information that you provide us with. The questionnaires that you provide us will be destroyed as soon as all information from you and other participants has been gathered. All this information will be locked in file cabinets in Dr. Tucker's lab in the psychology building at the University of Florida. All information from participants will be combined so that no one can identify your information. The information you give us is very important because it may help us improve the health care and support that you and other patients like you may receive from health care providers. In return for your participation in our study, you will be mailed a payment of \$20 within three (3) weeks of when we receive your completed questionnaires and 'payment release form'.

Please, in addition to completing the questionnaires, sign and return the completed 'Payment Release Form'. We need your name, address, and social security number requested on this form so that we can send you a check for \$20. Your signed Informed Consent Form (which you returned previously) and Payment Release Forms will be locked in a separate file cabinet from the locked file cabinet in which your completed questionnaires will be kept. This will be done to further protect your confidentiality.

In order to participate, **please complete the enclosed questionnaires and ‘Payment Release Form’, then return them by mail in the pre-paid reply envelope provided.** This should only take about an hour. If you need help completing the questionnaires, you may ask a family member or friend to read them to you; however, we only want your opinions to the questions. You may also call Dr. Carolyn M. Tucker at (352) 392-0601, Ext. 260 to set up an appointment to have a Research Assistant read the questionnaires to you at the health care clinic that you attend.

If you have any questions about this research project, please call a member of our research team at the (352) 392-0601 ext. 260. We are looking forward to your participation.

Sincerely,

Dr. Carolyn M. Tucker
Distinguished Alumni Professor
Professor of Psychology
Professor of Pediatrics
Professor of Community Health and Family Medicine

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BIOGRAPHICAL SKETCH

Lisa Ferdinand was born in Jamaica and raised in Trinidad and Tobago. She graduated with a Bachelor of Science degree in Psychology from McGill University in Montreal in 1997 and later obtained her Masters of Education in School Counseling from Boston University in 1998. Lisa then returned to Trinidad where she worked as a social worker in a children's home, and then as a consultant for a leading human resource consulting firm in the country. She also lectured and counseled part-time, served as a Board Member for an organization that helped at-risk children, and became involved in the Trinidad and Tobago Coalition against Domestic Violence.

Lisa returned to the United States in 2002 to pursue her doctoral degree in Counseling Psychology at the University of Florida. She received her Master of Science in Psychology in 2004 and successfully completed a clinical internship at the Georgia University Counseling Center in August 2007. Lisa's research program during her training has focused primarily on health promoting behaviors among culturally diverse adolescents, and the provision of culturally sensitive healthcare to low-income and culturally diverse primary care patients. However, she also has keen clinical and research interests in multicultural counseling, especially as it pertains to international students. Lisa is a member of the American Psychological Association, and continues to present at national and international conferences, and to publish on topics related to her research and clinical interests.

Lisa is currently employed as a Counseling Associate at the University of Florida Counseling Center. Upon completing her Ph.D. program, she intends to pursue licensure and seek a full-time academic or clinical faculty position.