ASSESSING THE ROLE OF CULTURAL DIFFERENCES ON HEALTH CARE RECEIVERS’ PERCEPTIONS OF HEALTH CARE PROVIDERS’ CULTURAL COMPETENCE IN HEALTH CARE INTERACTIONS

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COMPETENCE IN HEALTH CARE INTERACTIONS

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Abstract

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ASSESSING THE ROLE OF CULTURAL DIFFERENCES ON HEALTH CARE RECEIVERS’ PERCEPTIONS OF HEALTH CARE PROVIDERS’ CULTURAL COMPETENCE IN HEALTH CARE INTERACTIONS (435 pp.)

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This dissertation examines health care provider-receiver intercultural interaction processes and measures health care receivers’ experience of health care providers’ cultural competence. To this end, cultural competence has been conceptualized as a dynamic and complex process of being aware of and recognizing individual differences and differences across cultures. Communication accommodation theory, which assumes that communicators adapt their communicative acts to a given context, was used as a theoretical framework. Appalachian Ohio, a medically underserved region, was chosen as a context. The research was carried out in three sequential phases. First, scenarios demonstrating cultural difference or sameness between patient and physician and physicians’ cultural competence or incompetence in health care interactions were developed and pre-tested employing 175 undergraduate students. In the second phase, validated scenarios were used along with a survey questionnaire of 201 members of the public from Athens and Columbus, Ohio to measure public perception of cultural competence in health care interactions, which resulted in the development of a three-factor scale, the PPPCC. In the third phase, the PPPCC scale along with measures of ethnocentrism, fear of physicians, and health professionals’ CAT goals and strategies was
refined using 306 health care receivers from the patient base at Holzer Clinic in Athens, Jackson, and Gallipolis to develop a patient satisfaction instrument to measure physicians’ cultural competence. A five-factor scale emerged, the PCCPS.

This research found important connections among Appalachian patients’ perceptions of physicians’ cultural competence in health care and patients’ ethnocentric views, fear of physicians, and perceptions of physicians’ use of communication accommodation strategies of divergence and convergence. The findings indicate that research on cultural competence in health care should adopt a holistic definition of cultural competence. The findings also indicate that cultural competence in health care is one strategy for providing quality and effective care in intercultural, cross-cultural, and multicultural contexts. This dissertation research offers important directions to the design of cultural competence interventions for health care delivery and outcome. Further research should study unique cultural settings to expand cultural competence beyond cultural markers of race and ethnicity to include other social justice efforts.

Approved: ________________________________

Benjamin R. Bates

Assistant Professor, School of Communication Studies
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Table of Contents

Page

Abstract ............................................................................................................................... 4

Acknowledgments ........................................................................................................... 6

List of Tables .................................................................................................................... 13

Chapter One: Introduction ............................................................................................. 18

Statement of the Problem .............................................................................................. 18

Statement of Purpose .................................................................................................... 26

Rationale for the Study .................................................................................................. 27

Understanding Key Terms and Concepts ..................................................................... 35

Overview of the Dissertation ......................................................................................... 44

Chapter Summary .......................................................................................................... 44

Chapter Two: Review of Literature .................................................................................. 46

Health Communication and Culture ............................................................................. 47

Cultural Competence in Health Care .......................................................................... 53

Intercultural, Cross-Cultural, and Multicultural Health Communication Contexts..... 55

Communicating Health Between, Among, and Across Cultures .................................. 60

Communicating Health in Intercultural Contexts ....................................................... 61

Communicating Health in Cross-Cultural Contexts ................................................... 63

Communicating Health in Multicultural Contexts ...................................................... 65

Approaches to Cultural Competence in Health Care .................................................. 71
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limitations</td>
<td>142</td>
</tr>
<tr>
<td>Phase Two</td>
<td>143</td>
</tr>
<tr>
<td>Study Variables</td>
<td>144</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>144</td>
</tr>
<tr>
<td>Research Tool</td>
<td>147</td>
</tr>
<tr>
<td>Sampling</td>
<td>148</td>
</tr>
<tr>
<td>Data Collection</td>
<td>149</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>152</td>
</tr>
<tr>
<td>Results</td>
<td>152</td>
</tr>
<tr>
<td>Discussion</td>
<td>156</td>
</tr>
<tr>
<td>Limitations</td>
<td>159</td>
</tr>
<tr>
<td>Phase Three</td>
<td>160</td>
</tr>
<tr>
<td>Study Variables</td>
<td>161</td>
</tr>
<tr>
<td>Hypotheses and Research Question</td>
<td>161</td>
</tr>
<tr>
<td>Research Tool</td>
<td>165</td>
</tr>
<tr>
<td>Setting</td>
<td>167</td>
</tr>
<tr>
<td>Sampling</td>
<td>167</td>
</tr>
<tr>
<td>Data Collection</td>
<td>169</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>171</td>
</tr>
<tr>
<td>Results</td>
<td>172</td>
</tr>
<tr>
<td>Discussion</td>
<td>214</td>
</tr>
<tr>
<td>Limitations</td>
<td>217</td>
</tr>
</tbody>
</table>
Scale Development and Validity ................................................................. 218
Chapter Summary .......................................................................................... 222
Chapter Five: Conclusions, Implications, and Directions for Future Research .. 224
Conclusions ..................................................................................................... 224
Discussion of Research Question One .......................................................... 226
Discussion of Research Question Two ......................................................... 233
Discussion of Research Question Three ....................................................... 236
Discussion of Research Question Four ........................................................ 239
Discussion of Research Question Five ........................................................ 246
Implications ................................................................................................... 248
Implications for Research on Cultural Competence in Health Care ............... 249
Implications for Measuring Cultural Competence in Health Care .................. 250
Implications for Research on Patient Satisfaction ........................................ 252
Implications for Research on Culturally Competent Health Care and Race/Ethnicity .................................................................................................................... 253
Implications for Research on Patient-Centered Care ..................................... 255
Implications for Research on Provider and Patient Training in Communication Skills ................................................................................................................. 256
Implications for Theoretically Informed Work .............................................. 258
Implications for Cultural Competence in Health Care in the Appalachian Ohio Context ........................................................................................................... 261
Implications for Future Research ................................................................. 267
Limitations and Significance of the Dissertation

Limitations

Scholarly Significance

Policy Significance

Directions for Future Research

Summary of the Dissertation

References

Appendix A: Selected Definitions of Cultural Competence

Appendix B: Scenarios for Survey

Appendix C: Tables

Appendix D: Survey Questionnaire in Phase One

Appendix E: Survey Questionnaire in Phase Two

Appendix F: Survey Questionnaire in Phase Three

Appendix G: This appendix contains IRB for Phase One, Two, and Three

Appendix H: This appendix contains Permission Letter from Holzer Clinic and Research Award Letters
List of Tables

Table 1. Demographic Characteristics of Participants, Phase I ................................. 332
Table 2. Demographic Characteristics of Participants, Phase II ............................... 335
Table 3. Demographic Characteristics of Participants, Phase III ............................... 338
Table 4. Factor Loadings on the Public Perception of Physician’s Cultural Competence Scale, Phase II ................................................................................................................. 341
Table 5. Factor Loadings on the Physician’s Cultural Competence for Patient Satisfaction, Phase III ..................................................................................................... 344
Table 6. Intercorrelations between Measures of Cultural Competence and Patient Satisfaction, Phase II ....................................................................................................... 347
Table 7. Intercorrelations between Measures of Cultural Competence and Patient Satisfaction, Phase III ..................................................................................................... 348
Table 8. Summary of Hierarchical Regression Analysis for Variables Predicting Patient Satisfaction.................................................................................................................. 350
Table 9. Analysis of Variance for Patient Satisfaction of Persons with High Levels of Ethnocentrism as Compared to Persons with Low Levels of Ethnocentrism ............ 352
Table 10. Analysis of Variance for Patient Satisfaction of Persons with High Levels of Fear of Physician as Compared to Persons with Low Levels of Fear of Physician .... 353
Table 11. Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Macro as Compared to Physicians Perceived to Express Low Levels of PGCC-Macro

Table 12. Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Proxemics/Chronemics as Compared to Physicians Perceived to Express Low Levels of PGCC-Proxemics/Chronemics

Table 13. Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Language as Compared to Physicians Perceived to Express Low Levels of PGCC-Language

Table 14. Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PPCCC as Compared to Physicians Perceived to Express with Low Levels of PPCCC

Table 15. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Treating the Patient as an Equal”

Table 16. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Maintaining a Good Relationship with the Patient”
Table 17. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Treating the Patient as an Individual” ................................................................. 362

Table 18. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Asking Questions of the Patient” ............... 364

Table 19. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Reassuring the Patient” .................. 366

Table 20. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Showing Liking for the Patient” ......... 368

Table 21. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Reducing the Patient’s Anxiety” ....... 370

Table 22. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Expressing Himself/Herself Clearly to the Patient” ............................................................................................................................... 372
Table 23. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Checking to See if the Patient Understands Him/Her” ................................................................. 374

Table 24. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Handling Conversation Competently” ............................................................................................................. 376

Table 25. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Looking Comfortable with the Patient” .............................................................................................................................................. 378

Table 26. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Controlling Conversation” ............. 380

Table 27. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Deciding on Topics Talked about” ............ 382

Table 28. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Talking Down to Patient” ............... 384
Table 29. Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Intruding on Patient’s Privacy”... 386
Chapter One: Introduction

Statement of the Problem

The make up of the world population is changing as a result of people’s movement across borders. This movement is giving rise to ethnically, culturally, and linguistically diverse populations residing in many parts of the world. The impact of this diversity presents unique challenges to the practice of medicine. What happens when individual providers and health care organizations fail to address possible differences in the perceptions, occurrence, management, and outcomes of health problems among different cultural groups? The result may be miscommunication and reciprocal frustration ultimately leading to misdiagnosis and mistreatment. Chances are:

A 10-month-old infant [will end up] vomiting and on an IV in a hospital because a nurse with limited Spanish at a clinic hadn’t explained the proper dose of an iron supplement to the Spanish-speaking parents. The parents had given the baby a typical teaspoon of medicine- more than 12 times the indicated dose. (Fischman, 2006, p. 88)

The above incident indicates how the inability to communicate effectively because of cultural and linguistic barriers can result in poor health outcomes. Health care situations like this are not uncommon these days, especially in the U.S., since the population of the country is becoming increasingly diverse. As reported by the U.S. Census Bureau (2006), between 2000 and 2004, the White population increased by only 3.5%, whereas the African American population increased by 5.0%, the American Indian population and Alaska Native population increased by 6.0%, the Asian American
population increased by 16.4%, the Native Hawaiian and other Pacific Islander population increased by 9.3%, and the population of Hispanic or Latino origin increased by 17.0%. Likely continuation of this demographic trend will mean that by the year 2050 the White population will no longer be the majority population (Smelser, Wilson, & Mitchell, 2001). Indeed, these trends indicate that no ethnic group will constitute a majority of the population (Smelser, Wilson, & Mitchell, 2001). Betancourt (2004) argued that “culture plays a large role is shaping health related values, beliefs, and behavior” (p. 953). Hence, the growing ethnic minority population groups will bring unique needs to health care interactions that may result from cultural differences between care provider and receiver (Berger, 1998; Betancourt, 2003, 2004).

What happens, though, when individual providers and health care organizations do address differences in the perceptions, occurrence, management, and outcomes of health problems among different population groups? Chances are: “in the [hospital] rooms, [Chinese] patients [will] eat a lunch of congee, traditional warm watery rice porridge. It’s comfort food. Chinese don’t like to eat or drink anything cold when they are sick” (Fischman, 2006, p. 88). This example illustrates how hospitals, such as St. Vincent’s Hospital Manhattan in New York’s Chinatown are adapting health care to the unique cultural needs of their growing Chinese patient population (Fischman, 2006).

Although there may be important differences between ethnic groups, there is also diversity within each group. For example, while American values of equal rights for women stand in contrast with Confucian values of sexism and favoring the men, “Koreans are different from the Chinese and Japanese of previous immigrant generations
in that they adapt to American ways much more quickly” (Yamamoto, Silva, Justice, Chang, & Leong, 1993, p. 111). Banks (1989) identified these cultural differences as “intra-group variation” (p. 65). Hence, people who may share the same skin color can be seen to have varied cultural orientations resulting from distinct ethnic backgrounds, countries of origin, geographic locations, primary languages, and immigration statuses as well as differences in age, sex, religion, sexual orientation, employment status, disability, and so on (DHHS, 2001; 2003). Accordingly, I view culture as the integrated patterns of beliefs, values, assumptions, attitudes, history, norms, traditions, customs, lifestyles, and institutions espoused by a group of people, within a community, organization, or nation, who have a nationality, race, ethnicity, language, religion, and socio-economic status or have a combination of these. This comprehensive understanding of culture bears important implications for cultural competence in health care. Consider the following vignette:

Naomi, an Orthodox Jewish woman, was in labor with her third child. She had severe pains, which were alleviated only by back rubs between contractions. Her husband, Aaron, asked Marge, a nurse, to remain in the room to rub Naomi’s back. Because she had two other patients to care for, Marge began to instruct Aaron on how to massage his wife. To Marge’s surprise, he immediately interrupted her, explaining that he could not touch his wife because she was unclean. Marge, assuming he meant Naomi was sweaty from labor, suggested that he massage her through the sheets. In an annoyed tone, Aaron again explained
that he could not touch his wife because she was unclean. He then left the room.

(Galanti, 1991, p. 82)

This example helps illustrate the complex differences in the notion of “care” between Orthodox patients and typical American practice. As Galanti (1991) explained, uncleanliness has a spiritual connotation in Orthodox Jewish tradition. The above scenario speaks to the cultural variability that presents unique challenges to medical encounters (Gudykunst, 1997). Cultural differences affect individuals’ health behaviors and practices and their decisions to adhere or not to adhere to treatment protocols (Berger, 1998; Betancourt, Green, Carrillo, & Park, 2005; Turnbull & Mui, 1995).

Culture shapes people’s views of health and healing. Scholars have documented physician’s and patient’s use of explanatory models (Helman, 2000, Kleinman, 1980) of health and illness and worldviews that shape doctors’ and patients’ health perspectives (Du Pre’, 2000). Street (2003) considered a person’s model or worldview of health as having a predispositional influence on their communication in a medical encounter as the worldview or “model of health represents the person’s understanding of health, including beliefs about the cause of an illness, degree of personal control over health, and best ways to manage health problems” (p. 78). Rao (2002) argued, that when differences between physician and patient beliefs and values are unexplored, miscommunication and ineffective medical care may follow. For example, cultural differences in health beliefs may make it particularly difficult for health care providers and receivers to reach agreement on decisions about health care issues. For example, the Terri Schiavo controversy in Florida, in 2005, is a glaring example of an end-of-life critical case that
became an overly sensitive and hard to resolve public issue. In such cases, health care conflict follows when communication breaks down over a family’s “love and emotion” versus the “rationality of medical science” and when medical logics are able to override the family’s wishes.

Socio-economic factors such as poverty, educational background, employment status, transportation, housing, childcare, limited awareness of community resources and existing support within communities add more levels of complexity to cultural differences in health care encounters (Haas, Lee, Kaplan, Sonnebron, Phillips, & Liang, 2003; Saldana, 2001; Yu, Huang, & Singh, 2004). These socio-cultural and economic diversities between and among health care providers and receivers have important implications for health outcomes (van Ryn & Burke, 2000). Many studies have documented significant disparities in health status and access to medical care by race and ethnicity (Cooper-Patrick, Gallo, Gonzales, Powe, Nelson, & Ford, 1999; Doescher, Saver, Franks, Fiscella, 2000; Elster, Jarosik, VanGeest, & Fleming, 2003; Jacobs, Karavolos, Rathouz, Ferris, & Powell, 2005; Mayberry, Mili, & Ofili, 2000; Murray-Garcia, Selby, Schmittiel, Grumbach, & Quesenberry, 2000; Ngui, & Flores, 2006; Park, Kogan, Overpeck, & Casselbrant, 2002; Probst, Moore, Glover, & Samuels, 2004). Health disparities exist between the majority population and minority populations and may be persistent within such population groups (Betancourt, et al., 2005; Williams & Rucker, 2000).

Cline and McKenzie (1998) moved beyond overt cultural categorization to also include covert personal attributes that place health care providers and receivers on two
different ends of the health care spectrum. In their view, “patient’s dissimilarity with their physicians begins with the ‘patient role’ and the ‘physician role,’ roles so different from that of physician that the two might be said to be from different cultures” (p. 58). These cultural differences emerge from an asymmetrical relationship between the physician and the patient that allows physicians to dominate the interaction. Differences in cultural values and beliefs between the health care provider and the receiver account for many misunderstandings in health interactions (Cline & McKenzie, 1998). When such differences are not accommodated, poor health outcomes arise. For instance, Fadiman (1997) described the culture clash between the Merced Community Medical Center in California and a refugee family from Laos over the care of Lia Lee, a Hmong child diagnosed with epilepsy. Fadiman explained how the fundamentally different notions of disease that divided the Hmong sense of health and disease from the views of American scientific medicine eventually cost the life of Lia Lee. Although Lia’s health was in the best interest of both her parents and her doctors, miscommunication between the two cultures led to a tragedy and brings to attention the issues of medical ethics and cultural differences. Through this story, Fadiman exposed the problems, realities, and gaps of language, religion, and social customs in a medical setting. The author argued that health care providers can adapt to improve their ability to care for patients whose background is different from their own. The book underscored the value of time and commitment required to understand another culture’s perspective on health and illness and to interpret that understanding into the day-to-day practice of medicine.
Conflict in the health care system may also arise between and among health care receivers, families, health care professionals, health care facilities, and administrators (Moore & Kordick, 2006; Reid, 1998; Weitzman & Weitzman, 2003). Disagreements can arise as a result of treatment decisions, medical mistakes, caring for terminally ill patients, limited access to timely health care and needed resources, and the like. Such disagreements are not restricted to any particular health care context; rather, these differences become evident in the day-to-day practice of medicine when coupled with related socio-historical factors. For example, the Tuskegee Syphilis study and segregation caused African American people to mistrust the medical establishment (Thomas, 2000). The socio-historical factors also implicate other parts of the medical system, including, for example, decreased participation in research, organ donation, blood donation, and vaccination by African American people (Bates & Harris, 2004; Harter, Stephens, & Japp, 2000).

How then do the healthcare professionals and practitioners meet the health needs of a diverse population? An answer to this question begs an understanding of cultural competence in the health care system (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Hedrick, 1999). Studies in the last ten years or so have recognized that health care providers should learn to manage complex differences in communication styles, attitudes, behaviors, and worldviews in their everyday encounters with culturally different patients (Betancourt, et al., 2003; Betancourt, et al., 2005; Culhane-Pera, Reif, Egil, Baker, & Kassekert, 1997; DHHS, 2001; Like, Steiner, & Rubel, 1996).
An important point to note, however, is that there is a tendency in these studies to assign individual practitioners the primary responsibility to be culturally competent during health care interactions. Both development and delivery of culturally competent services are thought to hinge on the "sensitivity" of the providers to offer culturally sensitive and culturally appropriate care. Studies have underscored the importance of provider training for intercultural communication competence (Morales, Cunningham, Brown, Liu, & Hays, 1999; Skelton, Kai, & Loudon, 2001). Recognizing communication between health care professionals and patients as pivotal for cancer care, Behringer and Friedell (2006) argued that for health care professionals “an additional challenge is to communicate public cancer messages outside of traditional health visits as well as find ways to effectively integrate messages about screening and prevention into traditionally busy practices and brief health care encounters” (Behringer & Friedell, 2006, p. A113). In this sense, communication between health care provider and receiver is essential in establishing trust for effective health care delivery and outcome. Cline and McKenzie (1998) highlighted the medical field’s limited knowledge of the importance of communication in health care settings. They also indicated the availability of limited research in the field of health communication regarding the role of age, gender, and ethnic differences in doctor-patient interactions. Drawing on Lustig and Koester (1999), Rao (2002) argued that “the interaction between a physician and patient is inherently an intercultural encounter even when the two parties perceive they are from the same culture” (p. 310, emphasis in original). Physicians’ and patients’ understanding of issues of health and healing could be fundamentally different, and these understandings could
stem from individual beliefs and practices, thus accounting for differences in their communicative practices. Highlighting the gap in existing literature about the influence of socio-demographic characteristics on doctor-patient interaction, Cline and McKenzie (1998) urged health communication researchers to focus on the influence of physician’s characteristics along with the various characteristics of the patient on health care interactions.

**Statement of Purpose**

To respond to Cline and McKenzie’s call for research, the purpose of this dissertation is to examine and assess the influence, if any, of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions and the likely impact adaptations to these differences have on evaluations of the quality of health care. The growing diversity across the U.S. denotes the importance of studying cultural competence to address health care disparities. Stakeholders in managed care, government, and the academy have recognized that “organizational, systemic, and clinical facets are central” to further cultural competence in health care (Betancourt, et al., 2005, p. 503). In an effort to bridge the gap in the health communication literature in terms of studying cultural competence, Torres (2004) looked at how culturally different doctors and patients defined cultural competence through communicative and relationship-building practices. Focusing on a multicultural health care setting and using a phenomenological and interpretivist approach, Torres highlighted how different views, cultural expectations, and goal orientations led doctors and patients to negotiate and co-construct cultural competence. While it is important to study cultural
competence in the context of health care interaction using behavioral measures of communication, *perceptions* of the presence or absence of culturally-competent behaviors are also important to study, especially since “patient perception is now accepted as one of the fundamental outcomes of care” (Sweeney, Brooks, & Leahy, 2003, p. 163). Against such a backdrop, this dissertation research will study cultural competence in health care from a perception-based approach. The study aims to complement Torres’ behavioral measures of culturally competent communication in doctor and patient interaction as well as provide additional knowledge about cultural competence in health care. Findings of this study are expected to increase awareness of health care provider-receiver intercultural interaction processes and their understanding of cultural competence so as to promote better health care.

In the following, I provide a rationale for this dissertation where I explain the boundaries of the study. Next, I explain key terms and concepts to be used in this study. Finally, I will provide an overview of the dissertation.

Rationale for the Study

In today’s growing multicultural world, the health care provider-receiver relationship can be viewed as the intersection of cultures (Bochner, 1982; Cline & McKenzie, 1998; Rao, 2002). Studies have found that differences in communication skills (Cline, 1983), differences in age (Kreps, 1990), racial differences (Benkert, 2004; Canto, Allison, & Kiefe, 2000; Fuller, 2003), ethnic differences (Dalla-Vorgia, Katsouyanni, Garanis, Touloumi, Grogari, & Koutselinis, 1992), gender differences (Davis, 1993), linguistic differences (Blackford, Street, & Parsons, 1997; Blackford &
Street, 2000; Cioffi, 2003), differences in educational background (Baker, & Lightfoot, 1993), and differences in socio-economic status (Berry, Kim, & Minde, & Mok, 1987; Westermeyer, 1993) influence physician-patient interaction. Although studies highlight the importance of looking at provider-patient communication in relation to culture and socio-economic factors, Street (2003) argued that researchers should “also examine various health-related interactions that occur within a particular context” (p. 81). Little is known when it comes to studying the dynamic interplay of cultural differences and health care interactions in the context of distinct regions. One such understudied region is rural Appalachian Ohio.

Located in Southern Ohio, the 29 counties of Appalachian Ohio extend from Cincinnati eastbound to the border with West Virginia (Governor’s Office of Appalachia, 2003). Judged on the basis of various socio-economic indicators, people in Appalachian Ohio are subject to diminishing access to health, education, employment, and other socio-economic opportunities (Simpson, Isaac, Burger, Gerson, Gemmel, & Pheley, 2000). According to a U.S. Census report in 2000, there were only 33 registered hospitals and 1,665 physicians (MDs and DOs) to care for a total population of 1.5 million, a rate well below the national average (Governor’s Office of Appalachia, 2003).

The need for studying Appalachian Ohio culture as it interacts with health care cannot be exaggerated. People in this region suffer from high rates of poverty; they are deprived of improved opportunities in health care, education, and employment (Huang, Tucker, Bottorff, Lengerich, & Hall, 2002; Tessaro, Smith, & Rye, 2005). Nonetheless, this region possesses a rich cultural legacy, vast natural resources, and a potentially large
labor force that can be tapped for economic development (Governor’s Office of Appalachia, 2003). At the same time, Appalachia is wrought with health disparities. For example, people living in the 29 Appalachian Ohio counties are more susceptible to cancer and cancer related death than the rest of the residents of Ohio (American Cancer Society, 2003). Although people in Appalachia are culturally diverse tracing their roots to Native American, Irish, English, Scottish, and Germanic cultures (Beaver, 1984; Burkhardt, 1993; Gerrard, 1978; Raitz & Ulack, 1984), their health outcomes are comparable to other racially and ethnically diverse population groups (Corbie-Smith, Flagg, Doyle, & O’Brien, 2002; Institute of Medicine, 2002; Saha, Arbelaez, & Cooper, 2003; Schneider, Zaslavsky, & Epstein, 2002; van Ryan, 2002). Recognizing how the value orientations of one’s cultural group can shape individual health behavior, Denham (1999) and Denham and Rathbun (2005) argued that Appalachian culture influences health practices in the region. For example, in an ethnographic study of family health, Denham (1999) found that “culture, family traditions, and household context had strong relations to family health” (p. 152). Thus, people in the Appalachian region deserve consideration in health communication studies to shed light on health care provider-receiver interactions and the influence on culturally competent health care for this population.

Empirical research suggests that physician-patient relationships can be a contributing factor to health disparities (Giron, Manjon-Arce, Puerto-Barber, Sanchez-Garcia, & Gomez-Beneyto, 1998; Greenfield, Kaplan, Ware, Yano, & Frank, 1988; Hall, Roter, & Katz, 1988). These studies, however, did not look at the communicative
practices of health care. Other studies have found that effective physician-patient communication is of particular importance to quality health care (Gazda, Childers, & Walters, 1982; Meadows, 1991; Ruben, 1992; Thompson, 1996). Jackson and Duffy (1998) argued that “improved communication increases the efficiency of the health care system...satisfaction with health care, and the health of the general public” (p. ix).

Together, these studies suggest that interpersonal aspects of health care, such as healthcare provider-receiver relationships, have important implications for health outcomes. Nevertheless, in today’s multicultural society, culture adds yet another dimension to this dyad. In its 2003 report, the Institute of Medicine indicated that differences between physician’s and patient’s race and ethnicity can lead to health disparities. Many studies have documented racial/ethnic differences in doctor-patient relationships (Doescher, et al., 2000; Murray-Garcia et al., 2000; Whittle, Conigliaro, Good, & Joswiak, 1997). Few studies, though, have investigated patient’s beliefs about racism and preference for physician race in relation to satisfaction with care and health outcomes (Chen, Fryer, Phillips, Wilson, & Pathman, 2005; Gray, & Stoddard, 1997; Howard, Konrad, Stevens, & Porter, 2001; Saha, Taggart, Komaromy, & Bindman, 2000). As indicated by Street (1991), “very little research has examined how the patient’s perceptions of provider’s ethnicity affect communication in consultation” (p. 79, emphasis in original). Notably, studies are yet to examine the influence of cultural differences in health care provider and receiver interactions and providers’ and patients’ perceptions of cultural competence in health care interaction. Highlighting the importance of provider-patient communication in relation to ethnicity, Street (2003)
argued that “yet another way the cultural context may have an impact on communication in a consultation is with respect to ethnicity-related attitudes and stereotypes possessed by clinicians and patients” (p. 79).

Most of the studies mentioned above examining the role of race/ethnicity in physician-patient interactions have employed quantitative approaches and found an association between shared race/ethnicity and higher patient satisfaction and/or better health outcomes. Research has also combined multiple qualitative measures to study culturally competent communication in culturally diverse doctor-patient interaction (Torres, 2004). Some studies have combined quantitative data analysis with qualitative analysis to study medical encounters (Creswell, Fetters, & Ivankova, 2004; Roter & Frankel, 1992; Street & Millay, 2001). To a lesser extent, existing literature has focused on the role of ethnicity on physician-patient interactions in relation to communicative practices (Street, 2003a). These studies generally have focused on linear influences, emphasizing the physician’s role in determining the health care interaction (Feldman, Novack, & Gracely, 1998; van Ryn & Burke, 2000). Patients’ perceptions about culture, however, and, more importantly, their ethnicity as mediating variables in the health care provider-receiver relationship need to be taken into consideration when designing such research. Thus, it will be worthwhile to assess the role of cultural differences on health care receivers’ perception of health care providers’ cultural competence in health care interactions using rigorous quantitative measures. While research on cultural competence has paid more attention to bridge the gap between health care providers and ethnic minority groups, little attention has been given to study physicians and patients who are
both from the dominant culture. Physicians and patients from the same cultural group may share particular physical traits (skin color), “but differ substantially in their subcultural identifications [i.e., heritage, sex, role relationship]” (Perloff, Bonder, Ray, & Siminoff, 2006, p. 844). Hence studying unique cultural contexts bears important implications for expanding the scope of cultural competence in health care.

Studies have documented Appalachia “as a distinct geographical area and subgroup” possessing “its own cultural identity” (MacAvoy & Lippman, 2001, p. 221). This distinct identity has been attributed to the historical migration of people who came mainly from Great Britain and Germany as settlers in the Appalachian Mountains (Jones, 1998). Along with the people came their distinct beliefs and values, which include a high worth given to freedom, independence, and solitude (MacAvoy & Lippman, 2001). While Jones (1998) argued that the early mountaineers neglected formal education, Weller (1965) indicated that they were isolated from the mainstream of American life, thus allowing them to defend their cultural heritage. Weller further advanced the argument that folk culture is a strong marker of Appalachian people, especially those in rural areas who still retain many of the values that are characteristic of their rich heritage.

People in the Appalachian region are also set apart by their low income rates, high unemployment rates, high poverty rate, low literacy rate, and poor access to health care facilities (Bauer & Growick, 2003). Denham & Rathbun (2005) noted that “about 42% of the population residing in the geographic location of Appalachian lives in rural areas compared to 20% rural population in the rest of the nation” (p. 1). While cultural differences influence communication of health related issues, such as perceptions of
symptoms, diagnosis, and treatment (Osborne, 2000), these factors can be further complicated due to belonging to an underserved community, including limited access to education and transportation and elevated rates of poverty and unemployment (Saldana, 2001). Despite forming an important part of North America and containing major deposits of coal, the Appalachian region faces many social and health disparities. These include high rates of infant mortality, coronary heart disease, diabetes, and chronic lung diseases (Bauer & Growick, 2003; Denham & Rathbun, 2005; Governor’s Office of Appalachia, 2003). People in this area have limited access to public resources and services such as health insurance, childcare, and transportation (Bushy, 1998; Oberhauser, 1995). The region is characterized as a Medically Underserved Area (MUA) by the US Department of Health and Human Services (HRSA, n.d.).

Objectively, compelling grounds exist for studying the role of cultural differences on health care provider-receiver relationships and perceptions of cultural competence in an Appalachian Ohio cultural context. Poor socio-economic conditions, especially in rural Appalachia, have had an adverse impact on people’s health. Some scholars have studied health behaviors in relation to Appalachian culture and found elevated tobacco use by adolescent females (Denham, Meyer, Toborg & Mande, 2004), lesser practice of family health (Denham, 1999), increased cancer incidence (Lengerich, Tucker, Powell, Colsher, Lehman, Ward, Siedlecki, & Wyatt, 2005), and other negative health indicators. Interestingly, Reel (2001) in a study of childbearing among rural Appalachian adolescent women noted, “it is not clear why this predominantly white, rural area has different birth pattern from the rest of the nation” (p. 48.). Recognizing the uniqueness of Appalachian
culture, scholars have underscored the importance of teaching nursing students culturally competent care in the context of rural Appalachia (MacAvoy & Lippman, 2001). Denham and Rathbun (2005) argued that “culturally-specific materials appropriate for use with Appalachian or rural populations may be necessary for use with health concerns” to attain better health outcomes (p. 5). Studies have identified the rural Appalachian identity as being further complicated by issues of race, sexuality, and gender roles (Dees, 2006). Other studies found spirituality to be an important factor for women in rural Appalachia (Burkhardt, 1993).

The distinctiveness of Appalachian culture creates a puzzle and bears important implications for health care issues. In my knowledge, no studies have looked at medical encounters between culturally different care providers and receivers and examined patients’ perceptions of physicians’ cultural competence in health care in an Appalachian Ohio context. The region is home to a diverse racial and ethnic population (Governor’s Office of Appalachia, 2003). Records also indicate that Appalachian Ohio attracts physicians from different cultural backgrounds, including European, Asian, African, and Middle Eastern backgrounds (State of Ohio Medical Board, 2005). Therefore, it is important to study health care receivers’ perceptions of health care providers’ cultural competence in relation to their ethnic background. It is important to examine the influence of both providers’ and patients’ cultural differences in health care interaction because, as Betancourt (2003) argued, “it is not only the patient’s culture that matters; the providers ‘culture’ is equally important” (p. 560). While scholars have identified the Appalachian region as possessing a distinct culture (Weller, 1965) that has an impact
upon health behaviors and outcomes (Beaver, 1984; Denham, 1999; Hansen & Rersick, 1990; Leninger, 1991; MacAvoy & Lippman, 2001; Reel, 2001), the Appalachian Ohio region has received little attention from scholarly research endeavors in the area of culturally competent health care.

Against such a backdrop, this dissertation research examines the role of cultural differences in health care provider-receiver relationships in the context of Appalachian Ohio. Cline and McKenzie (1998) argued that “viewing gender, age, and ethnicity as cultural phenomena provides guidance for conducting programatic research into each area as a source of difference that influences interaction” (p. 72). Accordingly, in an Appalachian Ohio context, it will be worthwhile to examine the influence of both health care providers’ and receivers’ cultural/ethnic differences when they are joined in the same interaction (i.e., white/non-white health care receivers interacting with white/non-white health care providers and Appalachian/non-Appalachian health care receivers interacting with Appalachian/non-Appalachian health care providers) and study health care receivers’ perceptions of health care providers’ cultural competence in health care interactions.

Understanding Key Terms and Concepts

To perform this kind of study, it is necessary to conceptualize the key terms that will be used in this research. Concepts such as “culture,” “race,” “ethnicity,” “cultural competence,” “cultural difference,” “cultural diversity,” “cultural sensitivity,” “culturally and linguistically appropriate care,” and “ethnocentrism” have been widely used in the literature. Scholars and practitioners use, and often abuse, many different terms. The
varied terminologies may create confusion regarding these already fuzzy, abstract, and fluid concepts. For this dissertation research, I will conceptualize these terms with the recognition that I am providing a, not the, definition of some of these terms.

Cultural competence is gaining support as a powerful and necessary strategy for appropriately dealing with cultural differences (Committee on Quality Health Care in America, 2001; Smedley, Stith, & Nelson, 2003). The American Medical Association’s (AMA) Cultural Competence Compendium (Hedrick, 1999) was designed to help health care professionals effectively communicate with patients and provide patient-centered care. The AMA sought to enable physicians to provide individualized care that respects patients regardless of their culture. The U. S. Department of Health and Human Services’ Office of Minority Health (OMH) (2001) has also developed national standards for Culturally and Linguistically Appropriate Services (CLAS) in health care. The objective is to guarantee that the health care system provides equitable and effective treatment to all people in a culturally and linguistically appropriate manner. The standards are offered as guidelines for accreditation and credentialing agencies, to review providers who claim to provide culturally competent services, and to assure quality health care for diverse patient populations.

Although cultural competence has emerged as a movement in health care in the last decade (Betancourt, 2004; Brach & Fraser, 2000; Denboba, Bragdon, Epstein, Garthright, & Goldman, 1998), significant gaps exist in understanding cultural competence. According to OMH (2001), “The various definitions of cultural competence that are articulated by laws, organizations, and academics represent diverse perspectives
and address different needs” (p. 50). This variety is particularly evident when health policy makers, managed care administrators, academicians, and health professionals denote activities that seek to reduce cultural barriers to health care as cultural competence (Betancourt, et al., 2003; Cross, Dennis, Isaacs, & Bazron, 1989), as cross-cultural education (Institute of Medicine, 2002), as culturally and linguistically appropriate services (OMH, 2001), as cultural awareness (Goode, Sockalingam, Brwon, Jones, 2001), and/or as cultural sensitivity (Brislin, 1993; Dennis & Gaingreco, 1996; Hernandez & Isaacs, 1998; OMH, 2001). Although cultural competence is valued, lack of agreement on terms and definitions challenges efforts to provide culturally appropriate health care and may produce misperceptions of what cultural competence is. As Betancourt et al. (2003) argued, there is “an ongoing debate as to how to better define and operationalize this [cultural competence] critical, yet broad construct” (p.118).

To define cultural competence in health care and its key components, I begin by conceptualizing cultural competence in health care based on a review of selected definitions (see Appendix A).

The many definitions of cultural competence highlight the importance of culturally competent health care. However, “the result is a wide spectrum of ideas about what constitutes culturally competent health services, including significant differences with respect to target population, scope, and quality of services” (OMH, 2001, p. 25). For example, some definitions view cultural competence in health care as “a set of congruent behaviors, attitudes, and policies” (Cross, et al., 1989, p. iv) or as “procedures and activities” (Gallegos, 1982, p. 4), whereas other definitions consider cultural competence
in health care as “the ability to transform knowledge and cultural awareness into” effective health care delivery (McPhatter, 1997, p. 261) or as “devising [health] interventions ... to assure quality healthcare delivery to diverse patient populations” (Betancourt et al., 2003, p. 297). While a few definitions appear to be broad in vision, with an emphasis on culturally competent health care providers and organizations (Cross, at al., 1989; Department of Health and Human Services, 2003), others are narrow, with a focus on encouraging physicians to be culturally competent (Hedrick, 1999).

In other cases, other definitions of cultural competence in health care focus on the process of acquiring cultural competence. For instance, while Gallegos (1982) emphasized a two part process of obtaining “culturally relevant insights” and then applying those insights into the development of culturally appropriate “intervention strategies” (p. 4), HRSA (2002) defined cultural competence “simply as the level of knowledge-based skills for ‘effective clinical care’” (¶ 3). Still other definitions recognized the scope of cultural competence by calling attention to “understanding the importance of social and cultural influences on patient’s health beliefs and behaviors” (Betancourt et al., 2003, p. 297) and on “disease incidence and prevalence, and treatment efficacy” (Lavizzo-Mourey & Mackenzie, 1996, p. 919). Blending all these definitions, Goode & Dunne (2003) defined cultural competence as “a developmental process that evolves over an extended period. Both individuals and organizations are at various levels of awareness, knowledge and skills along the cultural competence continuum” (p. 6).

Although health policy makers, administrators, and academicians alike have recognized the significance of cultural competence as a framework to address health
disparities and to provide equitable health care among diverse population groups, there is no consensus on the definition of cultural competence nor agreement on what makes up a culturally competent health professional or organization. This lack of consensus attests to the complex, yet pervasive, character of cultural competence in health care. Nonetheless, the selected definitions represent important features of cultural competence in health care broadly applicable across individual and organizational levels. Six features characterize cultural competence in health care. These are that cultural competence in health care:

1. is a process;
2. includes the perspectives of health care providers and receivers;
3. promotes awareness and recognition of differences;
4. seeks to understand the dynamics of cross-cultural difference;
5. encourages the development of cultural knowledge; and,
6. results in adaptation to cultural plurality.

Drawing on the above discussion, I argue that cultural competence is more than simply valuing diversity. It is in fact a dynamic and complex interrelated process of being aware of and recognizing individual differences, being perceptive of differences across cultures. It is the ongoing development of cultural knowledge and learning to work across differences. In this sense, cultural competence is a lifelong developmental process, and many factors can affect the cultural competence continuum.

Nonetheless, I acknowledge the fact that there cannot be any universally accepted definition, nor can there be a conclusive definition of cultural competence in health care. Because cultural competence in health care is a work in progress and subject to context-
based interpretation, my six-part definition is a provisional and operational definition. Neuliep (2006) argued that “intercultural competence varies from situation to situation” (p. 442). As such, given the inherent complexity and variability of cultural systems, cultural competence in health care must be dynamic. It must be an ongoing process, not a goal. For example, Neuliep (2006) argued that “competence is something that is perceived about another person, rather than something an individual inherently possesses” (p. 442). Accordingly, culturally competent health care demands constant evaluation of the relationship between provider and receiver as it adapts to new circumstances and encounters unexpected events.

Neuliep (2006) defined intercultural communication competence as the adaptation of one’s own “verbal and non-verbal messages to the appropriate cultural context” (p. 441). He argued that intercultural competence demands adjusting and modifying communicative messages. Similarly, I argue that accommodation and adaptation are key elements of a dynamic cultural competence process in health care. Health care receivers must develop cultural self-awareness by becoming aware of their own cultural identity just as health care providers need to develop cultural knowledge of others by becoming aware of cultural demographics, kinship patterns, and so on in order to facilitate cultural adaptability. Moreover, this is a responsibility of both the parties involved in the process. Physicians and patients must be aware of their home cultures and the cultures of others. Learning about cultural diversity will endow both health care provider and receiver with awareness, knowledge, and skills for more effective communication and for culturally competent health care. It is important to know one’s own culture in relation to others as it
is reflected and experienced during intercultural or cross-cultural interactions (Rodriguez, 1998; Samovar, Porter, & Stefani, 1997). For culturally competent health care, becoming aware of one’s own cultural identity and the knowledge of cultural differences and how one usually responds to those differences can better help health care providers and receivers to accommodate and adapt to intercultural and cross-cultural interactions.

Any understanding of cultural competence in health care cannot be isolated from an understanding of related concepts such as health, communication, and culture. These concepts are difficult to define because of their elusive, broad, and fluid natures. The World Health Organization’s (WHO, 1946) definition of health as mental, physical, and social well-being can be a luxury for many, especially in the face of the challenges presented by the 21st century such as resource depletion, poverty, and the spread of infectious diseases. At the same time, this definition implies that health is a process and that health depends on the environment we live in. Health can be viewed as optimal functioning. In our effort to maintain homeostasis we rely on adaptation and growing mutual dependence on others (Ahmed, 2006). Communication becomes the central mechanism of adaptation, cooperation, and coordination in a community of cultures. In this sense, “we can loosely define health communication as the dynamic interaction of being in the world” (Ahmed, 2006, p. 8).

Culture is the integrated pattern of assumptions, values, reasoning, action, and communication of an individual, group, or organization (Samovar & Porter, 1991). Culture shapes how we explain and value our world. It provides us with the lens through which we make meaning. Culture should not be considered as something “exotic” or
belonging to the “other” (Said, 1978). Instead we should view culture as part of us and influencing us through socio-economic status, religion, gender, and sexual orientation. This means that we belong to, and are influenced by, multiple cultures that include, but go beyond, race and ethnicity. In this sense, for the purpose of this dissertation research, I will use cultural difference and cultural diversity synonymously to include dissimilarity in way of life, age, gender, language, education, life style, ethnicity, socio-economic status, and other factors. Cultural sensitivity in health care involves understanding and recognizing values, beliefs, and attitudes of providers and patients during health care interactions (Brislin, 1993; Bronner, 1994; Moore, 1992).

Competence is understood as the ability to function efficiently (Cross, et al., 1989; DHHS, 2003). Furthermore, “‘competence’ is associated with ‘culture’ to emphasize that being aware of or sensitive to the differences between cultures is not sufficient” (DHHS, 2003, p. 12). Accordingly, we can view cultural competence in health care as having the responsiveness, knowledge, capacity, and skills to respond to the unique needs of populations from different cultures. For effective and equitable health care, both individuals and organizations should be culturally competent and thus have the interpersonal and organizational skills to overcome communication barriers that may result from cultural differences. Therefore, cultural competence in health care depends on individuals (both providers and patients), working groups, agencies, organizations, and social institutions to ensure equitable health care. It entails understanding different cultural values, beliefs, and attitudes and it demands culturally appropriate, sensitive, and responsive knowledge, skills, and rules, regulations, infrastructure, and policies to
cultivate a health system that fosters effective health care in intercultural, cross-cultural, and multicultural situations.

The above understanding of cultural competence in health care departs from existing definitions by integrating the patient’s role in the health care provider-receiver dyad. This perception of cultural competence in health care, I argue, provides a context for further understanding the health care provider/receiver dynamic in health care interactions and aids in developing an awareness of the larger context in which the health care provider-receiver relationship fits.

Throughout the study, I will be using other terms such as race, ethnicity, and ethnocentrism. Ethnicity refers to a particular group who shares common heritage including “history, language, rituals, and preference for music and foods” (DHHS, 2003, p. 9). “Race” is not a biological construct based on simple observable physical characteristics, such as skin color, but is “widely used as a social category” that does not reliably or accurately differentiate people into groups (DHHS, 2003, p. 9). The contents of the category “race” are unclear, and there is little in the way of a shared or cohesive definition (Dubriwny, Bates, & Bevan, 2004). Because of its inaccuracy and lack of referential power, “race” is not a preferred term. Recognizing the social construction of the term race and the discrimination accompanying its abuse by powerful groups, Stringer (2006) argued, “because race is neither scientifically accurate nor socially positive, it is tempting to replace the term race with the term ethnic as a more accurate word, indicating shared systems of cultural beliefs, behaviors, and history” (p. 171, emphasis in original). Accordingly, in this dissertation, I will use the term “ethnicity.” I
will use the term “race” only in reference to other people’s work. McDaniel, Samovar, and Porter (2006) characterized culture as ethnocentric. They recognized “a strong sense of group identity” as giving rise to ethnocentrism or “the tendency to value or place one’s own culture in a superior position relative to other cultures” (p. 11). Hence, ethnocentrism in this study will refer to the assumption and feeling that one’s group is superior to other groups.

Overview of the Dissertation

To explore the interactions among these concepts in a health care setting, this dissertation is organized into six main sections. Having set the stage for examining cultural competence in health care interactions in this chapter, in chapter two, I delve further into the literature to summarize works pertinent to the current study. I also provide the theoretical foundation and frame the research questions in chapter two that guide this dissertation. In chapter three, I describe the methodological framework, data collection, and data analysis procedures for this research. In chapter four, I report the findings of this study followed by discussion. Finally, in chapter five, I draw conclusions from and implications of this dissertation and delineate steps for further research.

Chapter Summary

In chapter one, I highlighted the importance of looking at the function of cultural differences on health care provider-receiver interactions and the likely impact on evaluations of the quality of health care. More specifically, I proposed to investigate the potential role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. In doing so, this dissertation is
aimed at, first, promoting awareness of health care provider-receiver intercultural interaction processes and, second, contributing to measuring health care receivers’ experience of the health care providers’ cultural competence. The key terms (culture, race, ethnicity, cultural competence, cultural difference, cultural diversity, cultural sensitivity, culturally and linguistically appropriate care, and ethnocentrism) have been conceptualized to provide frames of references within which this dissertation has been carried out.

In chapter two, I review related literature and pose research questions for the study.
Chapter Two: Review of Literature

Culture is not just “add-on,” but an integral component of research in health communication. The growing literature on cultural competence in health care highlights the fact that health care providers should learn to manage complex differences in communication styles, attitudes, behaviors, and worldviews in their everyday encounters with culturally different patients. Little, however, is known about the dynamic interplay between health and culture that occurs in a variety of contexts, through diverse media, and via communication practices on multiple occasions. As the U.S. society becomes increasingly multicultural, cultural difference is a feature that will likely continue to be characteristic of physician-patient interaction. Accordingly, questions arise as such: What role does culture play in health communication; How does cultural competence affect health care delivery and outcomes; and, What theoretical concepts and methodological tools are useful in understanding and examining the cultural implications of health communication?

To address these questions, I have examined several relevant literatures. I begin with research that looks at the intersection between health communication and culture. Second, I briefly review extant literature on cultural competence in health care and third, I move into a discussion of literature that focuses on health communication in different cultural settings – intercultural, cross-cultural, and multicultural. Fourth, I examine existing approaches to cultural competence in health care. Fifth, I present communication research in the context of health care and, more particularly, communication accommodation theory as the theoretical basis for this study. Sixth, I review literature on
Appalachian culture and health issues, which sheds light on the importance of considering cultural competence in health care in the Appalachian Ohio context. Finally, using the reviewed literature, I pose research questions for this dissertation.

Health Communication and Culture

Health communication is the study of the interactions among and between the various participants in the health care process, the dissemination of health-related messages and messaging by individuals, groups, and/or mass media to other individuals, organizations, and/or the general public, and the interpretation of these messages (Jackson & Duffy, 1998; Ray & Donohew, 1990; Thomas, 2006). Thomas, Fine, and Ibrahim (2004) argued that “factors such as belief systems, religious and cultural values, life experiences, and group identity act as powerful filters” through which health information is communicated (p. 2050). Moreover, Luckmann and Nobles (2000) argued that:

Culture has a powerful impact on individuals, groups, and entire societies, influencing all aspects of human life. Cultures and subcultures provide strategies and methods for coping with life’s ever-changing challenges and demands. Finally, childrearing, economics, education, health beliefs, and healthcare are all dramatically influenced by culture and the values and beliefs that it engenders. (p. 23)

In this sense, health communication is always negotiated in relation to context, experience, and culture.
The systematic study of health communication dates back to 1970s (Thompson, Dorsey, Miler, & Parrot, 2003). There is also a substantial history of scholarly attempts to examine health communication in relation to culture (Betancourt, 2003; Betancourt, et al., 2005; Bigby, 2003; Cioffi, 2003; Galanti, 1991; Hayes-Bautista, 2003; Helman, 2000; Huff & Kline, 1999; Kreps & Kunimoto, 1994; Skelton, Kai, & Loudon, 2001). Including cultural competence as an essential part of effective health care and health communication has been more often recognized in the last decade (Betancourt, 2004). Unfortunately, the *Handbook of Health Communication* (Thompson et al., 2003), the most comprehensive outlet covering important areas of research in the field of health communication, does not have a separate chapter dealing with culture as a context for health communication. Throughout the *Handbook*, the reader can find sporadic and scattered reference to culture only. Notwithstanding this sparse treatment of culture in relation to health, Singh and McKay (1998) recognized that both verbal and non-verbal communication can give rise to cultural misunderstanding as all actors in health settings concurrently belong to more than one cultural group and are “involved in complex dynamic relationships with others from overlapping cultural traditions” (p. 403).

Moreover, health care providers, as a culturally different group from health care receivers, may add to the dynamic interplay of health and culture when interacting with patients and their families. Cross-cultural differences in health communication may arise from differences in language and communication style. For example, health care providers may speak too loudly to health care receivers; patients may make little eye-contact with physicians; and, health care receivers’ religious concerns with regard to
treatment issues and health care providers’ asking questions of the patients’ religious preferences may be disregarded. Health communication does not occur in mono-cultural contexts.

Research on health communication and culture tends to cut across issues of language, race, ethnicity, gender, and class because of the pervasive and permeating character of culture. The growing literature on health communication and culture, however, has often oversimplified the importance of culture as a framework for communicating health. This oversimplification of the importance of the cultural framework may limit culturally competent care because it cannot account for the complexity of these interactions. For example, Hurricane Katrina survivors represent ethnically and culturally diverse population groups posing unique challenges for their health care. When their diverse backgrounds resulting from geographic location, family composition, educational level, customs and traditions, gender, age, socio-economic status, religious beliefs, among other factors, intersect with post-disaster conditions, these individuals are put at greater public health risk. Recognizing the danger of treating the survivors as a composite group in disaster management, and thus ignoring their intra-group variation, Ahmed and Bates (2006) argued that “culturally competent mental health care for Katrina survivors demands an evaluation of the community composition and identification of specific cultural needs” to best address these challenges (p. 19).

Although Katrina survivors may appear to be particularly diverse as they include members of both majority and minority cultural groups, cultural variation is present within ethnic groups as well. For example, with regard to Asian Americans, Yamamoto,
Silva, Justice, Chang, and Leong (1993) argued that “Koreans and Chinese have distinct differences in behavior that are related to distinct cultural values” (p. 107). In a similar vein, Giger and Davidhizar (2004) cautioned that “Mexican Americans who have an Indian heritage may speak one of more than 50 Spanish dialects” (p. 225). These examples bring our attention to the fact that cultural difference transcends simple skin color.

In addition to being a complex of individual differences and group differences, cultural frameworks also involve complex interactions between communication and culture. Hall wrote that “culture is communication and communication is culture” (as cited in Gudykunst & Lee, 2002, p. 26). Gudykunst and Lee (2002) further elaborated, “communication is unique within each culture, and at the same time, there are systematic similarities and differences across cultures” (p. 26). For example, in their investigation of the application of Western model of family therapy to Japanese families, Tamura and Lau (1999) found a major difference between British and Japanese cultures that centers around value systems. While the Japanese families emphasized connectedness in relationships, the British families stressed separateness in relationships. Thus, there are some differences across cultures. With regard to people’s attitudes about advance care planning, Perkins, Geppert, Gonzales, Cortez, & Hazuda (2002), found both similarities and differences across ethnic groups in the U.S. For example, many Hispanics, Euro Americans, and African Americans believe that patients should be given control over their terminal care and that advance care planning can help guide that treatment. The study also found interethnic differences in health beliefs about these issues. For instance,
Euro Americans know more about “Advance Directives (ADs), documents in which patients express their treatment wishes for times of future incompetence,” than do Hispanics and African Americans (p. 48). While more Euro Americans had expressed specific wishes about terminal care to their physicians, more African Americans had expressed their wishes to their families. We cannot, therefore, assume that only group differences impact health communication, we must account for individual differences as well. For example, in his intercultural analysis of physician-patient communication, Rao (2002) found that although India is a collectivistic culture (i.e., fostering interdependence), its cultural diversity (i.e., language, religion, socioeconomic status) “played a significant role in how [physicians] communicated with their patients” (p. 314). Understanding these complex interactions between communication and culture is important for a better understanding of how health is communicated in different cultural contexts.

Culture has been identified as a significant variable in how people experience, perceive, construct, and understand health. For example, Lupton (1994) found that social construction of health in western societies provides a dominant understanding of medicine, health care, illness, and disease. Lupton argued that a shared interpretation of the medical encounter by persons of different cultures is confounded by disagreement, debate, power struggles, and emotional conflict among different cultural groups. Yet, this dominant construction of health is not the only one available. Helman (2000) explained that different cultural, social, and ethnic groups may differently understand the causes of ill health, the kinds of treatment they believe in, and to whom they would go had they...
been ill. Helman also argued that a better understanding of culture’s roles in health beliefs will allow providers to adapt to patients’ cultural needs. To explore this adaptation to the sociocultural aspects of health care, Cioffi (2003) focused on nurses’ experience of communicating with culturally and linguistically diverse (CLD) patients. Cioffi’s research shows that many nurses attempted to manage communication with CLD patients with the help of interpreters, bilingual health workers, and other strategies. Although most nurses showed they had empathy for CLD patients by taking issues of culture seriously, a few had negative attitudes to CLD patients because they expected CLD patients to adapt to the dominant culture by speaking English. Cioffi’s reproach, then, demonstrates that language is a cultural difference that matters in effective health care.

Case studies of cultural difficulty in health communication demonstrate that cultural difference includes factors beyond speaking different languages. Geist-Martin, Ray, and Sharf (2003), for example, used narratives from different cultural perspectives to reflect the complexities of health communication and to demonstrate that the cultural complexities of communicating health must go beyond finding translatable words for meaning to be shared. Using HIV/AIDS as a case study, Geist-Martin, Ray, and Sharf described five layers of meanings in physician-patient communication to provide “insight regarding the complex and multiple meanings that people bring to their relationships and to their conversations about AIDS” (p. 72). Because these may be differences in ideological, sociopolitical, institutional/professional, ethnocultural/familial, and interpersonal layers of meaning, accounting for semantic meaning is not enough. Likewise, Galanti (1991) covered cultural differences on issues as varied as nutrition,
religion, family support, and response to pain. Galanti’s case studies outline many levels of cultural differences that can cause conflicts and misunderstandings between health care providers and patients. These case studies underscore the importance of understanding and adapting to an individual’s individual and cultural differences to avoid conflict and misunderstanding by gaining knowledge of the individual’s cultural values, family structure, healthcare beliefs and practices, religious beliefs, diet, language and communication processes, and psychosocial interactions that may differ between and among cultures. The common theme across these studies is that understanding socio-cultural aspects of health and illness is integral to health related communication.

Therefore, providing culturally receptive health care to diverse patient populations is essential. In recent years, cultural competence has been advanced as an approach to reduce disparity and improve quality in health care.

Cultural Competence in Health Care

Cultural competence in health care is the adaptation towards recognizing cultural differences. Betancourt (2004) described cultural competence as an essential set of skills for successful medical practice. Although cultural competence can improve communication and help eliminate disparity in health care, Betancourt argued that cultural competence as adopting multilingualism and avoiding stereotyping is not the sole answer to improved health outcomes; cultural competence requires physicians to deliver quality health care to all patients, regardless of cultural origin. Similarly, Betancourt et al. (2005) argued that cultural competence is a potential strategy to provide quality health care regardless of race, ethnicity, and language if culture is construed broadly and not
delimited to different language components. Betancourt et al.’s interviews with experts in cultural competence from managed care, government, and the academy revealed several advantages of cultural competence. Cultural competence from the managed care perspective was both a business and a quality imperative in health care because, by promoting better health outcomes, managed care organizations can better control costs and provide effective care. Government perspectives saw cultural competence as a method to increase access to quality care for all patient populations and to reduce ethnic disparities in health care. Many academics viewed cultural competence as a necessary educational strategy to allow future health care workers to provide quality care to diverse populations. Betancourt et al.’s (2005) analysis reveals that different stakeholders are driven to advance cultural competence by multiple missions, goals, and spheres of influence.

As part of the cultural competence movement in the past decade, “by October 2005, more than 1,500 articles about cultural competence had been published in medical and nursing journals, over two-thirds of them since 2000” (Beach, Saha, & Cooper, 2006, p. 4). Although cultural competence is widely valued, important gaps exist in delivering culturally competent health care. Hayes-Bautista (2003) drew attention to the lack of understanding of America’s growing cultural diversity and the importance of culture to health. Hayes-Bautista found that few programs for improving cultural competence have been enacted and that little research on culturally competent healthcare system is available. A similar concern has been expressed by Betancourt (2006); he argued, “the challenge ahead is to determine what aspects of cultural competence will achieve” the
goals of improving quality and achieving equity in health care (p. 15). As such it appears that there is lack of systematic effort to study the associations among cultural competence, physician-patient communication, and health outcomes such as patient satisfaction (Perloff, Bonder, Ray, and Siminoff, 2006). Apart from the need to “carefully conceptualize and operationalize the concept of cultural competence,” it is also important to “determine whether there are a set of skills that create cultural competence for all groups of patients and whether there are micro elements that need to be learned for specific cultural groups” (Perloff, et al., 2006, p. 849). Although existing literature on cultural competence in health care focuses on health communication in different cultural settings, what exactly is understood by intercultural, cross-cultural, and multicultural communication in the context of health had not been fully recognized and explored.

Intercultural, Cross-Cultural, and Multicultural Health Communication Contexts

Kreps, Ellen, Bonaguro, and Query (1998) defined health communication as “a convergent discipline that connects and builds upon many ideas of inquiry” (p. 1). Accordingly, research on health communication and culture crosses disciplinary boundaries and includes the fields of communication, psychology, medical science, nursing, sociology, anthropology, and education, among others. Scholars have used a variety of research tools comprising survey, ethnographic, qualitative interview, rhetorical analytical, case study, focus group, and critical methods to examine issues of health communication in relation to culture. To present trends in cultural competence in health for culturally appropriate care, I performed a literature search through the Communication Institute for Online Scholarship, PubMed, Medline, the Center for
Healthy Families and Cultural Diversity (CHFCD), the Association of Asian Pacific Community Health organizations (AAPCHO), the Cross-Cultural Health Care Program (CCHP), and the Northwestern University Health Sciences Diversity Commission databases. Collectively, research on cultural competence in health communication adopts one of three perspectives on considering interactions involving more than one culture. This literature can be classified into those that consider intercultural health communication contexts, cross-cultural health communication contexts, and multicultural health communication contexts.

Although the growing literature on cultural competence in health care focuses on health communication in different cultural settings, the idea of “culture” and how different cultural milieus interact with health has been under-explored. Moreover, the bounds of intercultural, cross-cultural, and multicultural settings have been poorly drawn, thus ignoring important distinctions. If culture is not demarcated along these interrelated lines, the strategies proposed to adapt to culture may fail to meet the needs of different cultural encounters in the context of health care. Although many scholars treat health communication in “intercultural,” “cross-cultural,” and “multicultural” contexts synonymously, these contexts are not the same. Intercultural communication emphasizes the interpersonal interaction between members of different groups (Gudykunst, 2002). Cross-cultural communication compares how people communicate across cultures (Gudykunst, 2002). Multicultural communication focuses on the dynamics of how people from diverse cultural backgrounds manage communication when they come together in a given context (Kreps & Kunimoto, 1994). Although there are differences among these
areas, only a few studies are careful to employ a single term and to use that term consistently.

Health communication in an *intercultural* context involves interpersonal interactions between members of different groups in the provision of healthcare. Gropper’s (1996) work serves to alert healthcare providers to the dynamics of intercultural differences in healthcare delivery. Limited knowledge on differences across the cultures present in clinical encounters can lead to misunderstanding. Gropper wrote, “Every individual brings to interpersonal encounters a set of expectations as to how people should and will interact and what possible outcomes will result” (p.1). This intercultural understanding can help sensitize health care providers to their own cultural biases as they learn about the cultures of their clients. Ulrey and Amason (2001) examined how cultural sensitivity and effective intercultural communication can personally benefit health care providers by reducing their stress. In response to growing cultural diversity, the need for developing intercultural communication training programs has been emphasized. Ulrey and Amason argued that culturally sensitive health care providers are better communicators and thus, better providers.

Rao’s (2002) five year study developed an intercultural model of physician-patient communication. Recognizing differences between physician and patient beliefs and values, Rao underscored the importance of understanding the physician-patient communicative practices. Drawing on interviews with physicians from Argentina, Brazil, and India, Rao found that physicians in these countries had different understandings of cultural diversity. For example, in Argentina, physicians divided patients along education
and socioeconomic status lines, while Brazilian physicians focused primarily on traditional race, ethnicity, national origin, and socio-economic status. Physicians in India, on the other hand, divided patients along religious, language, socioeconomic status, and north-south differences. Accordingly, Rao argued that lack of awareness of these cultural differences could give rise to failed communication and, thus, ineffective medical care. Apart from urging a comprehensive understanding of culture, Rao (2002) emphasized that “physician-patient communication must be analyzed as an intercultural phenomena [sic]” (p. 317, emphasis in original).

Health communication in a cross-cultural context requires interactions between or among multiple people from different cultures in the provision of health care. Chesebro (1982) argued that the rhetorical dimension of illness is a symbolic link that is socially conditioned by the patients’, their families’ and friends’, and health care providers’ interactions with the patients. Different gender roles, childrearing practices, and family structures shape the illness experience in distinct socio-cultural systems and these cross-cultural differences must be understood to provide effective health care. Skelton, Kai, and Loudan (2001) pointed out important gaps in cross-cultural medical communication research emanating from the lack of understanding of individual cultures and attitudes towards cultural differences. These cross-cultural gaps are most clearly sustained by language barriers and lack of training in cross-cultural communication skills.

Betancourt (2003) highlighted the importance of these and other factors’ effects on clinical encounters. He recognized the differences in physicians’ and patients’ values, beliefs, and behaviors and examined how a lack of awareness of diverse socio-cultural
backgrounds can lead to “stereotyping, and, in the worst cases, biased or discriminatory treatment of patients” (p. 560). Cross-cultural curricula are needed in medical education to help health care providers in meeting the needs of the growing diverse populations, to abolish racial and ethnic inequality in medical care, and to improve provider-patient communication. In *Cross-Cultural Medicine*, Bigby (2003) and the authors who contributed to this edited text focused on the important role culture plays in physician-patient interaction. The book provided guidelines for increasing cultural awareness and encouraged physicians to perform clinical cultural assessments. Collectively, the authors concluded that culturally competent physicians may be better able to avoid miscommunication and ensure quality health care for patients who are immigrants and/or belong to minority groups.

Health communication in a *multicultural* context requires interactions between or among people from diverse cultural backgrounds that come together in a specific health communication setting to act together. Kreps and Kunimoto (1994) argued that any health care system is multicultural because it deals with numerous regional, ethnic, racial, socioeconomic, occupational, generational, and health-status orientations. They argued that increased intercultural sensitivity is a precondition to effective multicultural health communication. Hersleman (1996) argued that accuracy in doctor-patient communication is often challenged in a multicultural clinical context. Barriers to effective multicultural communication include sociocultural differences between doctor and patient such as class, status, roles, perceptions of health and illness, language difficulty, defensiveness among patients, psychosocial factors, and the doctor-patient relationship. Hersleman
concluded that both doctors and patients have a role in increasing communication efficacy in multicultural health care contexts. Both providers and patients have a role because, as Huff and Kline (1999) stated, culture is “a total or partial system of interrelationships of human behavior guided and influenced by the organization and the products of that behavior” (p. 3). Accordingly, they argued that health promotion for culturally diverse ethnic groups must be systematically addressed by influencing the health behaviors of different stakeholders at the individual, family, group, and community levels. They further argued that understanding the targeted cultural groups is required to promote health and prevent disease in a multicultural setting.

In summary, many scholars have focused on the role of culture in communicating health. Cultural competence and its influence on effective intercultural communication are regularly emphasized in the academic and applied literatures. Researchers have argued for a broader concept of culture in health related communication. These researchers have underscored the importance of intrapersonal and interpersonal communication for effective physician-patient communication. While some scholars found cross-cultural communication central to culturally appropriate healthcare, others have emphasized intercultural communication. Nevertheless, existing research has not focused on the possible interaction of the different cultural contexts – intercultural, cross-cultural, and multicultural – in communicating health.

**Communicating Health Between, Among, and Across Cultures**

Cultural background has important implications for how people communicate health. Yet, viewing cultures as distinct pieces of a mosaic composed of intercultural
tiles, cross-cultural tiles, and multicultural tiles can lead to misunderstanding and misuse if it leads to stereotyping and hasty generalization about different cultures. Helman (2000) cautioned that culture “must always be seen in its particular context” (p. 4, emphasis in original). “Context,” for Helman (2000), “is made up of historical, economic, social, political, and geographical elements,” which means that culture should not be considered in isolation from any of these elements (p. 4). Culture is not just a variable, but a context at the intercultural, cross-cultural, and multicultural levels. It is particularly important to expand cultural context to explain different stages of health’s interaction with culture. With these considerations in mind, intersections and disjunctions that exist between and among intercultural, cross-cultural, and multicultural contexts of health communication should be probed.

*Communicating Health in Intercultural Contexts*

Gudykunst and Mody (2002) described intercultural communication as involving “face-to-face communication between people from different national cultures” (p. ix). During medical encounters, it could be a very delicate process to reach some mutual understanding of the values, health beliefs, and world views of the provider and the receiver if these values, health beliefs, and world views are fundamentally different from each other (See Du Pré´, 2000). The challenges of this process are demonstrated by Ellis (2004) in his book *Communicating with the African Patient*. He wrote:

I want you to imagine my patient bringing one of his weavers down to see me at my busy clinic in the city of Pietermaritzburg… Everyone in the building has watches strapped to their wrists and clocks tick on every consulting room wall.
People here are working against – not with – Western chronological time:
measured and precisely apportioned. (p. 2)

The intricacies of communicating with patients from different cultural backgrounds
became more evident while Ellis (2004) wanted to know when a patient had become ill
and the patient replied “that he started to feel ill at inyanga kakholo, the moon of the
nesting yellow-billed kite” (p. 2). Had Ellis not understood the patient’s reference, in
particular, the different notion and expression of time, Ellis would have had difficulty
diagnosing and treating the patient. This example illustrates the importance of negotiating
meaning and understanding between culturally different doctors and patients in medical
consultations.

Collier (2006) argued that “national and ethnic cultures are the communication
systems that are created by persons who share the same nationality or ethnicity” (p. 54,
emphasis in original). As a communication system, culture can be viewed as the beliefs,
traditions, values, attitudes, and behaviors of particular social groups or organizations
contributing to the creation of national cultures and sub- and co-cultures. This perception
of culture illustrates the complexity of intercultural health communication when
providers are viewed as members of one co-culture and patients are viewed as members
of another co-culture. Provider-receiver interpersonal communication can shape and be
shaped by differences in socio-cultural background and organizational culture. Such
complexity is illustrated by the following excerpt:

Doc: Well, good morning Mr. Smith. How are you today?

Pat: Not too bad. How are you?
Doc: I’m fine, thanks. What can I do for you today?

Pat: Well, Dr. Jones I’ve been having this terrible pain in my back. It just, I can’t even…

Doc: Back pain. Exactly where is the pain?

Pat: Right here (pointing to the left side, lower back). (Cegala, 2005, p. 3)

The above segment of doctor-patient communication reveals a typical medical interview with a physician’s reliance on the biomedical approach undermining a patient-centered style that accommodates the patient’s active participation in the medical interview. Although the doctor warmly welcomed the patient, he immediately began to ask closed and biomedically focused questions, thus discouraging the patient from spontaneously and completely sharing illness experiences.

*Communicating Health in Cross-Cultural Contexts*

Gudykunst and Mody (2002) explained that cross-cultural communication involves “the comparisons of face-to face communications across cultures” (p. ix). Chesebro’s (1982) comparison of the different conceptions of illness held by Euro American and by Puerto Rican cultures provides an example of how distinct socio-cultural practices shape attitudes towards health across cultures. Chesebro explained that, while survival is emphasized in an American emergency room, where “patients want to live, not communicate…a cross cultural ‘shock’ can drastically change such notions” when “Puerto Rican families come into the emergency room with a member of the family who was ill” and display emotion (p. 330). This example brings our attention to two fundamentally different cross-cultural illness practices that are socially shaped by
everyday practices. Because Euro Americans seek individual treatment and Puerto Ricans arrive as families seeking treatment, Chesebro argued, “The native Puerto Rican’s conception of illness seems to lead to a form of collective support for the ill. The mainland American’s conception of illness seems to lead to a form of social rejection of the ill” (p. 329).

Although Chesebro’s narrative appears to fix all Puerto Ricans as collectivist and all Euro-Americans as individualistic, cross-cultural acts of communication challenge the view that culture is static or pure. As Benhabib (2002) argued, cultures are continually evolving as sense is made of the historical and cultural experiences of self and other. Although Chesebro expressed a sense of ‘culture shock,’ health care providers should sensitize themselves to “the socio-cultural dimensions underlying a patient’s health values, beliefs, and behaviors” if a “successful clinical encounter” is to occur (Betancourt, 2003, p. 560). Hofstede (1983; 1991) classified culture into four dimensions: individualism–collectivism (individualistic cultures stress individuals goals, whereas collectivistic cultures stress group goals); power-distance (accepting unequal power distribution); uncertainty-avoidance (formal rules to avoid uncertainty); and masculinity-femininity (division of roles between the sexes). Using Hofstede’s dimensions of cultural variability to study patient-physician relationships in contemporary Japan, Ishikawa and Yamazaki (2005) found that four basic characteristics of Japanese culture, i.e. collectivism, high context, masculinity, and Confucianism, were characteristic of patient-physician relationship in Japan. There were however, exceptions to this trend. The concept of cultural variability implies that a person's communication patterns can vary
within cultural norms because of personality orientations, individual values, and self
construals (Gudykunst and Matsumoto, 1996). Hence, recognizing the norms of a
patient's culture, then better understanding the individual’s personal communication
patterns, and, finally, proceeding to discuss diagnosis and treatment issues can lead to
more effective cross-cultural communication in health care.

*Communicating Health in Multicultural Contexts*

According to Kreps and Kunimoto (1994), “The term *multicultural* recognizes the
complex influences of multiple cultural orientations on behavior and illustrates the
multicultural nature of human communication” (p. 4, emphasis in original). The
challenges to modern health care systems presented by cultural differences extend
beyond nationalities to include differences in demographics and professional training,
among others. Such challenges are illustrated by Kreps and Kunimoto (1994) when they
wrote:

Within a typical health care team, each member has his own agenda for treatment.
The surgeon is likely to focus on planning surgical procedures, the psychiatrist
may be concerned with psychiatric evaluation and intervention, the nurse may be
concerned with promoting client comfort and patient management, the physical
therapist may be concerned with long-term rehabilitation strategies, the social
worker may be concerned with helping the client adapt to his or her social
environment, while the client is likely to be most concerned with receiving
effective, timely, painless, and inexpensive treatment. (p. 7)
The description above reveals the different cultural perspectives and orientations to providing health care that may result from a lack of recognition for different cultural perspectives and sensitivity to different orientations in multicultural health care settings.

In her study of nurses’ experience of communicating with culturally and linguistically diverse (CLD) patients in a multicultural care setting, Cioffi (2003) found “the culture of nurses” to have “an influence on the interpretation of patient behavior as well as their responses to patients” (p. 305). This particular situation exemplifies a clash of cultures involving nurses’ culture vs. patients’ culture and Euro American culture vs. Chinese culture. The many complexities of the communication process are evident from the nurses’ interviews. Cioffi (2003) reported, “I find that a lot of times they’ll [nurses will] say ‘Do you speak Chinese?’…There can be a problem because Malaysian Chinese is different from Hong Kong Chinese” (p. 303). This example identifies intra-group variations in language use arising out of the existence of different types of dialects. The frustration could be mutual as nurses said, “it is very hard when you don’t speak their language. It’s frustrating for the patient and it’s frustrating for you” (Cioffi, 2003, pp. 303-304). This example refers to the communicative problem when health care providers and receivers do not share the same language. Language discrepancies between health care providers and receivers can create miscommunication, thus affect diagnosis and treatment.

The different dynamics of intercultural, cross-cultural, and multicultural contexts when applied to health situations can have important communicative implications. The pattern of communication at the intercultural level is dyadic. In a health context, this
interpersonal communication could take place between health care provider and receiver. For example, the health care provider can be considered representing a culture of medicine and the health care receiver as representing a lay culture, regardless of whether the two groups hail from the same nation or different ones. As Cline and McKenzie (1998) noted, “The meeting of doctor and patient is the meeting of individuals with discernibly different ‘life patterns’ that arguably can be construed as different cultures” (p. 58).

Interaction at the cross-cultural level in a health care setting can occur between and among health care providers and receivers. Interaction between the health care provider and the receiver across cultures is shaped by their respective socio-cultural conditions. For example, when a health care provider and a receiver are representatives of different nationalities, their interaction can be viewed as a cluster of different health values, beliefs, and behaviors communicated at the interpersonal level within the provider and the receiver’s respective cultures. Kreps and Kunimoto (1994) viewed such interactions as “group communication [building] on both intrapersonal and interpersonal interactions” (pp. 13-14).

On the multicultural level, health can be communicated on different planes, including intrapersonal communication, interpersonal communication, and group communication. For example, in a clinical setting different healthcare providers and receivers can interact both interculturally and cross-culturally. This can be viewed as an intraorganizational health interaction. Given the multicultural makeup of today’s society,
we also witness inter-organizational health interaction that adds additional layers to the communicative process.

The purpose of the above areas of inquiry has been to spotlight the complex, versatile, and fluid nature of culture(s) that permeate health beliefs, attitudes, and behaviors between, among, and across people, nations, and organizations. Intercultural, cross-cultural, and multicultural contexts of health communication are distinct, yet interconnected. To illustrate, intercultural communication builds on cross-cultural communication, and multicultural communication builds on both intercultural and cross-cultural communication. As indicated by Betancourt (2003), “Sociocultural differences between patient and physician influence communication and clinical decision making” (p. 560). Viewing culture as both a variable and as a context bears important implications for cultural competence in health care. Promoting understanding of the workings of the three cultural contexts – intercultural, cross-cultural, and multicultural – is especially important to ensure culturally competent health care.

Individual health practices are determined in large part by their cultural backgrounds and contexts. These cultural contexts also shape group and organizational dynamics. What happens, however, to health communication when people misconstrue and misconceive cultural likeness and difference and when intercultural, cross-cultural, and multicultural settings go unexamined? Ann Fadiman’s book, The Spirit Catches You and You Fall Down (1997), provides a tragic answer to this question. It provides “an in-depth account of the experience of Laotian immigrants seeking health care for their child within the American medical system” (Street, 2003a, p. 78). A critical analysis of
Fadiman’s book shows the importance of understanding culture as a context for communicating health effectively. *The Spirit Catches You* embodies the fundamental differences in medicine and health care that become apparent when two cultures with different languages, religions, social customs, and family values meet head-on.

The very title of the book is a literal translation of *quag dab peg*, “the Hmong phrase describing a seizure” (Fadiman, 1997, p. 20). In Hmong culture, epilepsy is viewed as a “sacred disease” of supernatural origin, but in Western medicine, epilepsy is attributed to the failure of cerebral neurons. Understanding this difference in worldviews was critical in assessing Lia’s parents’ non-compliance with American medical practices, a result of their dilemma between natural concerns for their daughter’s health and reluctance to interfere with their supernatural beliefs.

The Hmong and the Western doctors had their own outlooks, which, when they met at the border, resulted in futile care for Lia. Fadiman (1997) quoted Lia’s father who explained:

Sometimes the soul goes away but the doctors don’t believe it. I would like you to tell the doctors to believe in our neeb [healing spirit].... The doctors can fix some sicknesses that involve the body and blood, but for us Hmong, some people get sick because of their soul, so they need spiritual things. With Lia it was good to do a little medicine and a little neeb, but not too much medicine because the medicine cuts the neeb’s effect. If we did a little of each she didn’t get sick as much, but the doctors wouldn’t let us give just a little medicine because they didn’t understand about the soul. (p. 100)
For the Hmong, disease is primarily spiritual. By marking a division between body and soul, Western medicine holds that disease is first and foremost biological. Fadiman described the course of events following from this fundamental difference in worldviews. As Street (2003a) explained, “What the family perceived as spirits capturing the child’s soul, the doctors understood as epilepsy. What the doctor saw as the necessary diagnostic tests, the family saw as foolish uses of technology that have nothing to do with the soul” (p. 78).

The language barrier was a pronounced hurdle that compounded the conflicting health belief systems of the Hmong and of Western medicine. Fadiman (1997) quoted Dr. Dan Murphy who said, “The language barrier was the most obvious problem, but not the most important. The biggest problem was the cultural barrier. There is a tremendous difference between dealing with the Hmong and dealing with anyone else. An infinite difference” (p. 91, emphasis in original).

The inability to communicate across this infinite difference resulted in enduring frustration by physicians and non-compliance by Lia’s parents. Lia’s case demonstrates the fundamental clash of Hmong cultural beliefs with medical science, which was compounded by confusion and conflict. The miscommunication and reciprocal frustration led to misdiagnosis, mistreatment, and, eventually, the brain-death of Lia. This tragedy occurred despite the well-intended efforts of Lia’s doctors and the extraordinary love of her parents because of a rift between opposing cultures that arguably, could have been negotiated. Lia’s ailing body became the stage for miscommunication: interculturally (between Lia’s parents and her doctors), cross-culturally (between the Hmong culture and
the traditions of American medicine), and multiculturally (Among the Hmong
community, Lia’s family and friends, and the medical community, Lia’s physicians, other
medical staff, and social workers, in Merced, California). Lack of understanding of socio-
cultural differences resulted in poor intercultural communication across cultures in a
multicultural health setting.

How can cultural competence make a difference to patients, health care
delivery, and health outcomes? How can we make sure that we no more hear about
another “Lia Lee?” Although there is research (e.g., Chong, 2002; Waxler-Morrison,
Anderson, & Richardson, 1990) on dealing with patients from specific cultural groups,
currently there is no systematic effort to provide a coherent understanding of
intercultural, cross-cultural, and multicultural settings as multiple bases for health
communication. Culturally effective health communication demands that the optimal
contexts be identified. While it is important to be aware of cultural differences and
develop cultural knowledge, promoting understanding of the intricate workings of
intercultural, cross-cultural, and multicultural contexts is equally important. Cultural
competence in health care can steer through the various cultural contexts to include either
personal, group, or organizational interventions to bridge the barriers to communication
and provide culturally appropriate health care. In the following section, I review existing
literature on cultural competence initiatives in health care.

Approaches to Cultural Competence in Health Care

Studies have been conducted to conceptualize and measure cultural competence in
the context of health care (HRSA, 2001). From a theoretical point of view, Cross et al.
developed the cultural competence continuum for mental health professionals. This continuum assumes that cultural competence is achievable in six stages: cultural destructiveness, incapacity, blindness, pre-competence, competence, and proficiency. In the cultural destructiveness stage, health care professionals and organizations pursue ethnocentric views and consider cultural differences to be a problem. Accordingly, health care professionals and organizations are likely to discount health care policies and standards that account for cultural needs of racial and ethnic minority populations. An example of cultural destructiveness could involve using minority individuals in medical experiments without their knowledge (DHHS, 2003). In the cultural incapacity stage, health care professionals and organizations are incapable of helping culturally different people. Although the health care professionals’ and organizations’ lack of cultural knowledge and inability to work with diverse populations may not be planned, such incapacity likely stem from the belief “in the superiority of their own racial or ethnic group and [the assumption of] a paternalistic posture toward ‘lesser’ groups” (DHHS, 2003, p. 13). In the cultural blindness stage, health care professionals and organizations do not believe in differences based on skin color or culture. Thus, they view all people as the same. Health care professionals’ and organizations’ self-perceived unbiasedness actually keeps them from addressing the cultural needs of diverse communities (DHHS, 2003). In the cultural pre-competence stage, health care professionals and organizations make some efforts to serve minority groups. They even engage people from the cultures that they serve. However, health care professionals and organizations also run the risk of feeling “that they have done all that is necessary” by minimally engaging with cultural
differences (DHHS, 2003, p. 13). In the cultural competence stage, health care professionals and organizations recognize and value cultural differences. They also continue to develop their cultural knowledge. In the cultural proficiency stage, health care professionals and organizations embrace cultural diversity and “seek to add to the knowledge base of culturally competent practice by conducting research, developing new therapeutic approaches based on culture, and publishing and disseminating the results of demonstration projects” (DHHS, 2003, p. 14). This view of cultural competence, passing through each of these six stages is a necessary condition for health care professionals and organizations to advance along the cultural competence continuum.

Campinha-Bacote (1999), on the other hand, viewed cultural competence as a continuous process that involves health care providers attempting to become culturally competent. Campinha-Bacote described five components of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. The process of becoming culturally competent in health care involves health care providers being conscious of cultural differences, internalizing cultural knowledge, being capable of addressing cultural needs, actively seeking out cultural interactions, and striving for cultural diversity.

Scholars have also developed methodological tools to help health care providers achieve the goal of cultural competence (HRSA, 2001). In one such effort, Carballeria (1997) developed a model for health care providers to deliver culturally competent health care. It is known as the LIVE (Like, Inquire, Visit, and Experience) and LEARN (Listen, Evaluate, Acknowledge, Recommend, and Negotiate) model. This model assumes that
health care providers’ possible cross-cultural attitudes may vary from viewing own
culture superior to that of the patient’s, to being incapable of managing cultural
differences, to considering basic human values and treating all alike, to being culturally
sensitive, and culturally competent. As a probable reaction, Carballeria (1997) argued,
culturally different clients may exhibit resistance to being accommodative and adaptive.
Recognizing provider-patient interaction as cross-cultural exchange, Carballeria (1997)
argued that the LIVE & LEARN model “respects client centrality, avoids stereotyping,
and leads to the adoption of mutually acceptable objectives - and measures - for behavior change” (p. 12).

Leininger (1993) developed the Sunrise Model for health care providers to help
assess patients along dimensions of cultural values, socio-economic conditions, religious
beliefs, and political factors. Leininger argued, health care providers can tailor treatment
to patient-specific information and become more culturally sensitive. Davidhizar and
Giger (1998) also developed a model for health care providers to assess culturally diverse
patients that accounts for communication, time, space, and social organization, among
other related factors.

Scholarly attempts to measure cultural competence have resulted in developing
assessment tools, standards, and guidelines (HRSA, 2001). The Culturally and
Linguistically Appropriate Services (CLAS) developed by the DHHS’s OMH (2001) has
set national standards for what constitutes cultural and linguistic competence in health
care service delivery. The National Center for Cultural Competence (NCCC) has
developed a set of measurable criteria to help health care providers and organizations
determine the degree to which they are culturally competent (Goode, Jones, & Mason, 2002; NCCC, n.d.). These self-assessment tools also serve to increase awareness and sensitivity to the importance of cultural competence in health care delivery. Other efforts to measure cultural competence include development of self-assessment questionnaires designed to assess cultural competence training needs of health care professionals (Mason, 1996).

Studies have recognized differences in people’s understanding of health and illness issues guided by their different cultural orientations (Hampson, Glasgow, & Toobert, 1990; Kleinman, 1988). In a more recent endeavor, Torres (2004) made the first attempt to study how cultural competence is enacted through the communicative practices of doctors and culturally diverse patients. Drawing on observations of and qualitative interviews with doctors and patients, Torres found that doctors’ conception of a culturally competent medical encounter involved patients being knowledgeable about their conditions, taking active roles in their care, and being direct in their communication with the doctors. Patients’ conceptions of culturally competent medical encounters, however, differed based on their ethnicity. For example, patients from Caucasian backgrounds expected an equal relationship with their doctors, while patients from other ethnic groups expected a paternalistic relationship with their doctors. Perceptual measures for cultural competence are just as important as is an understanding of behavioral components of culturally competent communication (Street, 2003a). To measure physician’s culturally competent communication behaviors, Thom and Tirado (2006) developed a patient-reported measure. They validated this patient-reported
measure of physician cultural competence in a group of ethnically diverse and mostly lower income primary care patients with diabetes and/or hypertension and their physicians. Torres’s (2004) study looked at doctor and patient understanding of cultural competence in medical encounters and Thom and Tirado’s (2006) study examined patients’ reports of providers’ culturally competent behaviors. Such studies provide important information for understanding and measuring culturally competent health care behaviors. They are, however, limited when discussing patients’ perceptions.

Perloff et al. (2006) argued that culturally sensitive doctor-patient communication have important implications for health care outcomes. It is important to note that while studies have underscored the importance of culturally competent care for quality health care, “little is known about how to accurately measure it” (Ngo-Metzger, Telfair, Sorkin, Weidmer, Weech-Maldonado, Hurtado, & Hays, 2006, p. 1). Moreover, existing measures of cultural competence in health care pay less attention to outcome/impact measures (HRSA, 2001). Patients’ experiences of health care and their perceptions of doctors’ communicative practices, and the overall health care received, are central considerations about health care outcomes (Ngo-Metzger, et al., 2006; Sweeney, Brooks, & Leahy, 2003). Accordingly, Ngo-Metzger et al. (2006) argued for the integration of patients’ perspectives into existing measures of cultural competence for quality health care. Although the above discussion on measures of cultural competence in health care brings to attention the availability of standards, guidelines, and tools “in assessing cultural competence in various health care delivery settings, the literature containing tested and validated measures of cultural competence is limited” (HRSA, 2001, p. 42).
Accordingly, Perloff et al. (2006) urged health communication researchers to continue to systematically study issues of cultural competence in health care.

**Communication Accommodation Theory to Study Cultural Competence in Health Care**

In the last 35 years, students and scholars in communication have studied health issues to help understand and improve health care. Although the field of health communication is fragmentated, Thompson (1994) explained that the field has begun a “movement” towards theory building (p. 715). Recognizing the importance of theoretically informed work, Babrow and Mattson (2003) argued that “theoretical sense-making processes and practices not only construct understandings but justify belief in or perception of the reasonableness of the emerging, elaborated constructions” (p. 37).

Studies have underscored the direct link between health care provider-receiver communicative patterns and health behaviors and outcomes (Betancourt, 2003; Betancourt, Carrillo, & Green, 1999; Hall, 1993; Howell, Koren & Tinsley, 1990; King, 1991; Korsch & Negrete, 1972; Langer, 1999; Liptak, Hulka, & Cassel, 1977; Ong, DeHaes, Hoos, & Lammes, 1995; Pendleton, 1982; Roter, 1989; Roter & Flores, 2000; Stewart, 1995; Street, 2001; Stewart, Brown, Boon, Galajda, Meredith, & Sangster, 1999; Street, 1989; Street & Wiemann, 1987; Thompson, 1994; Woolley, Kane, Hughes, & Wright, 1978). Yet, little is known about the dynamic interplay of culture and communication in health care provider and receiver interaction, in general, and implications of such interaction for culturally competent care, in particular. Evidently, cultural differences between provider and patient in understanding health, illness, and treatment issues affect the quality of care (Street, 2003a). Although Street (2003a)
acknowledged the line of research on provider-patient communication, he expressed his concern for the lack of effort “to develop and test theoretical models of the processes underlying these interactions” (p. 63).

Over a decade ago, Thompson (1994) noted that “most of the research on interpersonal communication in health care is still atheoretical” (p. 716) and, that after 13 years, “we are still not close to a theory of health communication” (Thompson and Parrott, 2002, p. 709). Nonetheless, research on interpersonal communication in health care in the last 25 years has witnessed sustained efforts towards “theoretical offerings” (Thompson and Parrott, 2002, p. 709). For example, from a dyadic perspective, Street (1991) has employed accommodation theory to study provider-patient communication. Thompson (1994) argued that using theoretical perspectives, such as accommodation, “not only can help overcome the lack of a dyadic focus but will provide conceptual underpinnings to allow researchers to integrate and build findings” (p. 716). In this section, I review relevant studies within the field of communication that explain communication accommodation theory and thus provide a foundation for this dissertation research.

Thompson and Parrott (2002) argued that “researchers should be encouraged to continue the movement toward studies that will provide a more dyadic, transactional understanding of interpersonal communication in health care” (p. 710). Studies have recognized the influence of personality characteristics, acquired through culture and expressed in social interactions, on doctor-patient relationships (Perloff et al., 2006; Watson & Gallois, 1998). For example, in the Hmong culture, parents are considered to
be superior in terms of conveying deep and unconditional love for the children. This unconditional love, translated as signs of over protectiveness, come into conflict with Western health practices (Fadiman, 1997). Watson and Gallois (1998) further elaborated that “the behavior of health professionals and patients is strongly governed by norms attached to the roles of each” (p. 344). These roles are expected behaviors, rights, and responsibilities attached to a given social position. In simple terms, the health professional’s role is to provide care and the patient’s role is to receive care. As such, an imbalance of power becomes an essential feature of health care provider-receiver interpersonal interactions (Beisecker, 1990; Cline & McKenzie, 1998; Dryden & Giles, 1987; Fisher & Groce, 1990; Ford, Fallowfield, & Lewis, 1996; Kleck, 1968; Millar & Millar; 1976; Street & Buller, 1987). Studies have found that this asymmetrical relationship between the physician and the patient influences communication patterns and results in physician dominance over patients (Makoul, Arntson, & Schofield, 1995; O’Hair, 1989), physician distance from patients (Suchman, Markakis, Beckman, & Frankel, 1997; West, 1984a), and physician disconfirmation of patients (Cline, 1983). Cultural differences, such as ethnicity, gender, socio-demographic characteristics, between physicians and patients add another layer to the power imbalance between these two groups (Cline & McKenzie, 1998; West, 1984b). However, studies have not paid much attention to health care receivers’ perception of health care providers’ cultural competence in health care interactions.

Hecht and Krieger (2006) observed that there is a lack of theoretically informed studies of cultural competence. While Street (1991) and Watson and Gallois (1998) have
promoted communication accommodation theory as a way to model health care provider and receiver interaction, Hecht and Krieger (2006) used communication accommodation theory to frame a culturally appropriate school-based substance abuse prevention program. The principle of cultural grounding was used to put culture at the center of substance use prevention message design instead of adding it in message development. Hecht and Krieger (2006) argued that appropriate health messages should accommodate the cultural and linguistic practices of the target audience. They suggested that “the appropriate degree of accommodation for health messages delivered in multicultural contexts is inclusion, not exclusion” (p. 316). For example, a multicultural approach to substance abuse prevention allowed the inclusion of different ethnic groups without targeting individual ethnic groups exclusively, an adaptation that Hecht and Krieger (2006) credited to the accommodation principles of communication accommodation theory. Studies as these offer valuable insights on theoretically informed work for cultural competence in health communication inquiry. Because of these insights, communication accommodation theory can provide a useful framework for this dissertation.

In the 1970s, Howard Giles and his colleagues (Street & Giles, 1982) advanced speech accommodation theory “to account for speech convergence, maintenance, and divergence, as well as other speech strategies (such as complementarity and competitiveness) in various communication contexts” (p. 205). Speech accommodation theory was originally a sociopsychological model. It now is widely used in education, linguistics, communication studies, and social psychology (Giles, Coupland, & Coupland,
The theory assumes that communicators will make the effort to adjust their speech styles to accommodate their interactors and improve communication “with respect to one another as a means of expressing values, attitudes, and intentions” (Street and Giles, 1982, p. 205). Speech accommodation theory has been widely used to study interactions in intercultural contexts (Beebe & Giles, 1984; Gallois, Giles, Jones, Cargile, & Ota, 1995; Giles & Smith, 1979) and in interpersonal contexts (Robertson, & Murachver, 2003; Street, & Giles, 1982).

Because it assumed a broader focus on social interactions rather than on simple terms of speech, speech accommodation theory later came to be known as communication accommodation theory (Gallois, Ogay, & Giles, 2005; Giles, Coupland, & Coupland, 1991). Giles & Ogay (2007) described Communication Accommodation Theory (CAT) as providing “a wide-ranging framework aimed at predicting and explaining many of the adjustments individuals make to create, maintain, or decrease social distance in interaction” (p. 293). In other words, people adjust their communicative acts in relation to others in a given context. For instance, when a person is conversing with an international visitor, they tend to speak more slowly than normal and thus adjust their speech downward to the other’s level of ability. Hecht & Krieger (2006) argued that communication accommodation theory assumes that “when difference is experienced in communication, accommodation or adjustment often occurs based on the identities of the people involved” (p. 302). Both personal identities and social identities as members of particular groups can shape communicative interactions. Hence, communication accommodation theory not only addresses differences in interpersonal communication
issues, but also provides explanation for how differences function at the intergroup level (Giles & Ogay, 2007; Watson & Gallois, 1998). For example, in a health care context, while communication between a patient and a physician is driven by their personal identities, their communicative interaction is also shaped by their social identities as the patient and the doctor, respectively.

Communication accommodation theory offers two fundamental assumptions. First, “interactants have motivations for adapting their communication relative to their perceptions of the communicative styles of interlocutors” (Street, 1991, p. 134). In this sense, a communicator’s perceptions of and responses to others are influenced by the way the other acts (Watson & Gallois, 1998). For example, during a medical consultation, doctors are likely to offer more support to patients who are prone to express concerns. Second, “interactants form impressions and evaluations of partners with respect to their expectations for a partner’s communicative style relative to their own style” (p. 134). This means that communicators evaluate others based on their assumption of and preference for communicative behavior (Watson & Gallois, 1998). For example, minority patients are more inclined to visit physicians of their own ethnicity because they assume that the physician will communicate in a way similar to the patient. Communication accommodation theory allows us to view people more than just being mere objects, but rather as individuals engaging in interactive aspects of communication. Because it accounts for people’s values, attitudes, feelings, perceptions, and motives, an accommodation perspective may help inform interpretation of people’s communicative practices in relation to others in certain contexts.
From a communication accommodation perspective, any isolated encounter between two communicators should be traced back to “the socio-historical context in which the interaction is embedded” (Giles & Ogay, 2007, p. 294). For example, Sunaoshi (2005) identified an association between historical factors and contextual factors and the power dynamics between Japanese and American factory workers in the U.S that shaped and influenced the process and outcome of interaction between these two groups. Perspective such as these offer important insights when interpreting medical encounters between culturally different physicians and patients. An accommodation perspective allows the examination of intergroup encounters in which interactions between individuals are shaped by their social category memberships (Giles & Ogay, 2007). For example, some studies found that doctors tend to converge more to the communicative behaviors of middle-aged patients than to those of adolescent and younger patients (Street, 1991). Communicators’ differing levels of accommodation are “based on stereotypes about outgroup members as well as on the prevailing social and situational norms” (Giles & Ogay, 2007, p. 294). For example, Street (1992) found that patients have a tendency to ask more questions of and offer more opinions to physicians who tend to use more partnership-building behavior. To signal and facilitate behavioral adjustments during social interactions, communicators are most likely to use the accommodation strategies of convergence and divergence (Giles & Ogay, 2007).

Communication accommodation theory, therefore, assumes that communicators are constantly moving toward and away from others to accommodate communicative behaviors that are contingent upon roles, perceptions, expectations, goals, motivations,
status, and the environment. Communicators adopt different communication strategies to identify with, or to dissociate from, the communication practices of others. For example, communicators often adapt their speech style when communicating with children by using a softer tone, easy to understand words, and even becoming more animated as opposed to when they communicate with adults. Likewise, McCann and Giles (2006) found that communicative practices vary when communicators interact with elderly people. The communicator tends to adopt language strategies showing more respect. In an examination of gender differences in health care provider–patient communication, Street (2002) found that female doctors tend to engage in more patient-centered behaviors and be more attentive to social and emotional aspects of health than do male doctors.

Almost all relationships involve accommodation. Communicators never communicate the same way with parents, significant others, friends, peers, and strangers. In a work setting, communicators do not interact the same way with the boss as they do with co-workers or subordinates. Communication inherently involves accommodation.

There are three ways that communicators enact accommodation. Two strategies, “convergence” and “divergence,” have been studied extensively (Giles, Coupland, & Coupland, 1991; Giles & Ogay, 2007). Street (1991) postulated a third accommodation strategy, “complementarity,” in the context of doctor-patient interactions. Complementarity is manifested in the interactants’ mutual “attempt to maintain their social differences communicatively” (Street, 1991, p. 135). In this case, people establish a tacit understanding that each will attempt to maintain their perceived level of differences. Recognizing the role of authority and power in doctor-patient relationships,
Street (1991) argued that such interactions likely feature communicative complementarity. For example, Cline and McKenzie (1998) viewed the physician-patient relationship as one of power imbalance where the physician is in charge of taking care of the patient’s health. This imbalance creates a difference that puts the patient in a subservient position and allows the “physician and patient to meet in a context that emphasizes difference that influences the resulting discourse” (p. 59). An example of such accommodative behavior could be a physician interrupting a patient during history taking and the patient maintaining the communicative differences by allowing the interruption. Complementarity as an accommodation strategy is favorably perceived if both the communicators anticipate and choose to maintain communicative differences (Street, 1991). Complementarity, however, can also result in “dissatisfying interpersonal communication” (Hecht and Kreiger, 2006, p. 302) if an interactant maintains the expected communicative difference because of his or her perceived powerlessness (Street, 1991).

Divergence is manifested in the interactant’s adaptation of “behavior opposite to that of a partner” (Street, 1991, p. 135, emphasis in original). In divergent accommodation, people magnify and extend their differences to separate themselves from others. When disagreements about health care decisions arise between the physician and the patient, the physician may diverge to reinforce “control over patients in the interaction” (Street, 1991, p. 145). Such divergence could take the form of the doctor’s use of medical terminologies with the patient, a communicative act that Fisher and Groce (1990) viewed as functioning to “silence the patient” (p. 226-227, cited in Cline &
McKenzie, 1998). One motive for divergence is to maintain distinctiveness between the powerful societal group (physicians) and the weaker group (patients). Such adaptive behavior may be more common among people with strong ethnic identities. In their study of code-switching in an intercultural context, Lawson and Sachdev (2000) found that Tunisians were more likely to diverge when addressed in French by speakers. They do so, Lawson and Sachdev claim, to emphasize the value of their ethnic identity being distinct from the French colonizers.

Convergence is manifested in the interactants’ accommodative “behaviors representing affiliation and involvement in the interaction” (Street, 1991, p. 137). This means that people will be willing to communicate when they identify a mutual interest and will converge when both benefit by reducing difference. Another reason for convergence is the aspiration for acceptance and recognition. For instance, during job interviews, candidates tend to dress more professionally than usual and show that they converge toward the organization’s ideals. Convergence could be a common communication strategy among expatriates as well, since it expresses the desire to fit into a new culture. In doctor-patient interactions, Street (1991) identified communicative convergence as being subject to both parties recognizing “the importance of communicating effectively, exchanging information accurately, and fostering rapport” (p. 137). This accommodation strategy could result in satisfaction when both the physician and the patient are able to meet the interaction expectations identified (Street, 1991).

In addition to the kind of accommodation strategy employed, Giles and Powesland (1975) offered conceptual distinctions in terms whether these strategies are
employed to converge or diverge upward or downward. As explained by Giles, Coupland, and Coupland (1991), “adopting the prestigious dialect of an interviewer is an example of upward convergence, and shifting to street language in certain minority communities is an example of downward convergence” (p. 11). In other contexts, Giles and Ogay (2007) illustrated upward divergence as “the adoption of a swifter speech rate and more cultured accent with someone nonstandard-sounding” and downward divergence as “the emphasis of one’s low-prestige minority heritage” (p. 295). In the health care context, a physician may use more sophisticated vocabulary (converge upward) when delivering news of death to a family, yet use simple terms (converge downward) in delivering the news of a newborn to a family. Studies found that doctors’ decision-making style is more participatory with more educated patients (Kaplan, Gandek, Greenfield, Rogers, & Ware, 1995). In this case, when a doctor communicates, the doctor’s less participatory interaction with the less educated patients may reflect upward divergence. In their study of race, gender, and partnership building in patient-physician relationships, Cooper-Patrick et al. (1999) found that African-American patients rate their physician visits as less participatory than do White patients. In this case the physicians’ interactions with African American patients may reflect downward divergence.

Street (1991) identified accommodative behaviors as “a product of interactants’ motivations, perceptions, of their own and partners’ communicative styles, and situational-relational exigencies” (p. 136). Depending on an individual’s motivation and purposes, and his or her different goals in an interaction, individuals may produce various
emerging accommodative responses concurrently (Giles & Smith, 1979; Street, 1986; Street, 1991). Street (1991) attributed these variations to issues of age, sex, education, and socio-economic status, among others, and, thereby, underscored the importance of understanding these contributors to varied accommodative responses. For example, Green, Adelman, Charoin, and Friedmann (1989) found elderly patients to be more passive than younger patients in their interaction with physicians. The same study found that physicians use more biomedically focused questions with older patients than they would do with younger patients. Hence, in specific interactions, physician and patient may display different accommodative behaviors.

Giles and Ogay (2007) argued that, “although language remains a central focus of the theory,” other communicative behaviors “can also be understood from a CAT perspective” (p. 294). Broadly, theoretical application of communication accommodation includes communication between different cultural and linguistic groups, communication in different contexts, and communication through media (Giles and Ogay, 2007). More specifically, researchers have applied communication accommodation theory to study accommodation in the media (Bell, 1984; 1991; Crook & Booth, 1997), in courtroom interactions (Linell, 1991), in therapy (Ferrara, 1991), in interethnic accommodation (Gallois & Callan, 1991), in communication between people of different cultures and genders in organizations and health care systems (Coupland & Giles, 1988; Giles, Coupland, & Coupland, 1991), and in communication between police officers and civilians (Giles, Fortman, Dailey, Barker, Hajek, Anderson, & Rule, 2006). Most specific for this dissertation, Street (1991) argued that communication accommodation is a useful
theoretical perspective for studying doctor-patient interaction and to examine the outcomes of these interactions.

Although communication accommodation theory is useful, it has elicited some scholarly criticism. Scholars have argued that conversations are too complex to be reduced simply to the processes of convergence and divergence (Burgoon, Dillman, & Stern, 1993). The other criticism against CAT is that the theory appears to rely too heavily on a rational way of communicating (Burgoon, Dillman, & Stern, 1993). That is, people will either diverge or converge in their communicative practices to accomplish a communicative goal. Nevertheless, scholars have applied communication accommodation theory in different cultural settings. The theory is heuristic, and its core principles of convergence and divergence make it fairly easy to understand, underscoring the simplicity of the theory. A CAT framework helps an understanding of a culture and of cultural diversity around us as it works across cultures, contexts, time, and space.

Communication accommodation theory, therefore, provides a useful framework that will allows for predicting and explaining the different adaptations and adjustments physicians and patients may make to produce, sustain, or reduce social distance in medical encounters. Communication accommodation is a pragmatic theory that helps explain the different ways interactors communicate in differing communication situations. As Giles and Ogay (2007) argued, “CAT - with its attention to macrocontextual forces, interpersonal and intergroup dynamics, motives, and social consequences - can handle these (and other) intricacies” (p. 306). Communication accommodation theory offers a useful framework for examining adaptations and
maladaptations to intercultural, cross-cultural, and multicultural communication interactions in health care settings. Moreover, the different strategies of accommodation will be particularly informative to exploring health care receivers’ perception of health care providers’ accommodativeness in shaping culturally competent health care.

Thus far, I have discussed the importance of focusing on health communication in intercultural, cross-cultural, and multicultural settings to better understand issues of cultural competence in health care. After an examination of the existing approaches to cultural competence in health care, I have described communication accommodation theory as a theoretical foundation for this dissertation. In the following, I introduce available literature on Appalachian culture and health issues and identify Appalachian Ohio as an important context to study cultural competence in health care.

Studying Cultural Competence in Health Care in the Appalachian Ohio Context

Appalachia is a 200,000-square mile region of the United States. Appalachia encompasses all of West Virginia and parts of 12 other states (Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia). Appalachia extends more than a thousand miles from southern New York to northern Mississippi (Appalachian Regional Commission, n.d.). In the 410 counties of the Appalachian region, “sixty percent of the population live in metropolitan counties, twenty-five percent live in counties adjacent to metropolitan counties, while the balance [fifteen percent] of the population live in more remote, rural locations” (Halverson, Ma, & Harner, 2004, p. iii). When compared to other parts of the U.S., Appalachia is an economically marginalized region. Relatively higher
unemployment rates, lower educational attainment, lower regional incomes, lower investment in human capital, and more limited access to social and health services characterize Appalachia, and, in particular, Southeast Ohio (ARC, n.d.; Bauer & Growick, 2003; Denham, 2005). Barnett, Elmes, Braham, Halverson, Lee, and Loftus (1998) found that non-metropolitan areas in the Appalachian region have less diversified economies, lower per capita incomes, and more limited access to medical care than do Appalachian metropolitan areas. Because of these socioeconomic diversities within Appalachia, residents of areas with limited access to social, economic, and medical care resources are more likely to experience adverse health outcomes (Halverson, Ma, & Harner, 2004).

Appalachia “is primarily viewed as the geographic region associated with the Appalachian Mountains and its residents” (Denham, 2005, p. 2). People in Appalachia come from different backgrounds, including Native American, Irish, English, Scotch, German, and Polish backgrounds, among others. The mountains also factor into the Appalachian identity. The mountains entail both uniqueness and stereotype. The mountains kept Appalachia isolated from the rest of the U.S., separating Appalachians from other people's involvement in their lives and allowing the Appalachians to assume a distinctive culture (Weller, 1965).

To understand Appalachian culture, the adverse socio-economic conditions in the region, and the resulting health disparities, it is important to take into account the history of the region. People in Appalachia have suffered from dependence on extractive industries such as oil, coal, mining, and timber. Because these industries did not invest in
human capital, yet did extract the resources and enjoyed many years of prosperity, Appalachia has been both exploited and underdeveloped (Gaventa, 1980, 1984; Weller, 1965). Eventually, the non-sustainable industries left the isolated and distressed areas behind, allowing poverty to penetrate deep into Appalachia. Apparently, “Appalachia” has become identical with poverty and ignorance and a place where yesterday’s people live (Weller, 1965). This identification has contributed to the portrayal of Appalachia as a subculture of the U.S. and attribution of certain values and characteristics to the Appalachians (MacAvoy & Lippman, 2001; Weller, 1965).

Weller (1965) identified six personality traits of the Appalachian mountaineers, including individualism, traditionalism, fatalism, seeker of action, the psychology of fear, and person orientation. Weller argued that, for a mountaineer, the idea of individualism entails being independent and self-reliant. As Weller (1965) explained:

These people reverted to a system of private justice based on the personal relationships common to the clan. They thus developed a general ideology of leveling - a system that gave equal status to all and that recognized no authority other than the force of an individual. (p. 11)

Traditionally, Appalachians maintain a low-profile and prefer to manage their own problems (Behringer and Friedell, 2006, p. A113).

Valuing traditionalism, the mountain people are bound to their past where values are held firm. Weller (1965) argued that a mountaineer “is contented with just getting along. Satisfied when his survival goals are achieved, the mountaineer seldom looks beyond them” (p. 35). This view is shared by Bauer and Growick (2003), who wrote, “In
Appalachian America, professional labels and titles generally do not mean as much as how the person acts and relates to other individuals” (p. 20).

Weller (1965) described the fatalism of the mountain people as more of a religious and emotional condition. He argued that the mountaineers faced hardship and poverty on a daily basis. This deprived condition made them accept a fatalistic outlook, which does not allow much room for questioning and complaining, but ensures compliance. This fatalistic stance finds expression in statements such as “‘if that’s the way God wants it, I reckon that’s the way it’ll be. We just have to take what the Lord sends us. He knows best’” (Weller, 1965, pp. 37-38).

Weller (1965) described the mountain people in Appalachia being prone to seeking action in their everyday life situation. He pointed out that since “educational pursuits are routine, the action seeker tends to reject them,” as being inactive. On the other hand, “coal mining is action” (p. 41). Weller described this “action seeking” characteristic of the mountain people more as a tendency that also reflects Appalachian values of family and education. For example, Bauer & Growick (2003) noted that for Appalachians, “blue-collar jobs are not only acceptable, but at times are highly encouraged in lieu of seeking higher education if the education would remove the individual from the family unit and geographical era” (p. 20).

Even though fearlessness is being portrayed as a typical personality trait for the Appalachian mountaineers, Weller (1965) argued that “the mountain society is filled with apprehension” (p. 44). For Weller, this fear allows the mountaineer children to be obedient and emotionally dependent, to have strong family ties, and yet, to some extent,
remain insecure. This *psychology of fear* is also observed by Bauer and Growick (2003) who pointed out that Appalachian “parents want their children to be successful, but at the same time, they feel uncomfortable when they see their children facing futures that are very different from their own” (p. 20).

Weller (1965) described the mountaineers as *person-oriented* individuals who are sensitive, who value relationships, and who tend to reject materialism. This person orientation speaks to the strong value that Appalachians place on establishing and maintaining personal relationships. As Bauer and Growick (2003) explained, “family comes before educational goals…Many families encourage their sons and daughters to follow their footsteps, even if that means going on public assistance” (p. 20).

Although these six traits apply to demonstrate many of the Appalachian mountaineers, Weller (1965) argued that it is problematic to consider Appalachia a homogenous region. He noted that “there is middle class as well as a professional class in the mountains, and both have much the same characteristics as these classes anywhere else” (p. 5). Weller (1965) cautioned that he did not intend to describe a homogenous picture of the mountaineers. He also admitted that many of these characteristics also fit many non-Appalachian Americans. In his words, “I am portraying some general tendencies of behavior in the mountaineer, including what I feel to be some basic differences between his [mountaineer] subculture and that of middle class America” (p. 7).

Because of its geographic make-up, Appalachia is a diverse region encompassing many different cultures. However, many studies suggest that some common values hold
In her study of mountain identity, Keefe (2000) argued that “mountaineers clearly conceptualize themselves as a people (albeit socially diverse) with a common culture and identity” (p. 4). According to Keefe (2000), since cultural identity and social class identity are not mutually exclusive concepts, both must be taken into consideration for a more complete understanding of a cultural group. The sense of mountain identity as being self-reliant, trustworthy, and interpersonally-oriented with moral standings and deep-rooted heritage that Keefe reported in her study did not differ from Weller’s (1965) understanding of the mountaineer. Although the Appalachian people are very diverse along the urban-rural spectrum, they are bound together with a common heritage and common values. Appalachians are a group of people who take pride in being self-reliant and having strong family values. For instance, when asked to share the meaning of ‘mountain people,’ participants in Keefe’s (2000) study responded, “That’s us,” “I just think it’s a compliment,” and “We’re proud of it” (p. 7). These responses point to a feeling of pride shared among the people in Appalachia. While cautioning readers of the danger of treating cultural difference as insufficiency, Keefe (2005) argued that “Traditional Appalachian culture is not necessarily inferior to mainstream American culture but is simply an equally good and rational way of life which must be understood on its own terms” (p. 13).

Appalachians are independent and self-reliant and they expect others to respect their freedom. For example, Bauer and Growick (2003) explained that many Appalachian farmers with disabilities “will not ask for services, because it takes them away from the farm and their family” (p. 20). Appalachians have a strong association with the
geographical area that they live, they seem to be very close to nature, and have a deep sense of spirituality and belief in God (Bauer & Growick, 2003; Burkhardt, 1993). They also provide mutual aid to others in the region. At the same time, Appalachians also have a strong sense of mistrust of anyone who is new or a stranger (Bauer & Growick, 2003). Although they display friendliness, mountain people as a whole are resistant to change, slow to accept outsiders, and are very reluctant to accept authority (Bauer & Growick, 2003; Jones, 1998; Weller, 1965). As argued by Weller (1965), “No hierarchy, authorities, or experts were allowed to form in this society; no pressure from outside was allowed to gain entrance” (p. 11). Because they attempted to avoid outsiders and outside influence for many years, the mountaineers were isolated from mainstream America and Appalachia’s rich cultural heritage was preserved (MacAvoy & Lippman, 2001; Weller, 1965). This unique Appalachian cultural identity speaks to the determination and strength of the people who survived the exploitations of oil, coal, mining, and timber industries.

Another distinguishing feature that makes people in Appalachia unique is Appalachian English, also known as Appalachian folk speech, Scottish-flavored Elizabethan English, or Southern mountain dialect (Dial, 1969; Mencken, 1963; Neuliep, 2006). The distinctive feature of the dialect is related to the early settlers’ languages, mainly Scottish, English, and German (Dial, 1969). Although Appalachian people are considered a distinct culture of the U.S., there are differences, within the Appalachian culture.

People in Appalachia can be classified into four distinctive cultural groups (Appalachian Regional Ministry, n.d.). The first group is composed of descendants of the early settlers. This group usually owns land, runs businesses, and/or becomes involved
with politics. This group of people tends to be independent, self-reliant, and hard working and to have strong and stable family ties (ARM, n.d.). People in the second group are hard working too, but they work at the coal mine, in the logging industry, or at the factory. Typically, these people have little education, fewer vocational skills, fewer choices of vocation, larger families, and less wealth than those in the first group (ARM, n.d.). The third group consists of professionals who, with their families, have moved to Appalachia due to the profession. Members of this group include bankers, lawyers, teachers, and ministers and are usually not readily accepted by the native Appalachians (ARM, n.d.). The fourth group is composed of people who grew up in the mountains and migrated out for job-related reasons and returned to Appalachia. Many of these people find it difficult to adjust to the lifestyle they left as a young person (ARM, n.d.).

Isserman (1996) studied the Appalachian economy thirty years after the formation of the Appalachian Regional Commission (ARC, n.d.). According to his report, although Appalachia has a weak economic base, the region is not stagnating but growing in employment and earnings. Parts of Appalachia, however, have never recovered from the diminishing employment opportunities in heavy manufacturing and mining. These parts of Appalachia could not attract or generate their share of the nation's higher-paying, growing industries and their good jobs; thus, Appalachia, as a region, is still lagging in these areas. Isserman (1996) described these parts of Appalachia as defying “the new definition of a growing, competitive, and modern Appalachia as readily as they defined the old image of an underdeveloped, lagging, isolated region” (p. 23). Finally, he argued
for a focus on variations within Appalachia for a more accurate portrayal of the region that is dynamic and growing, while still containing some of the poorest areas in the U.S.

Isserman’s argument for more accurate portrayals of Appalachia is present in several critiques of the media. Although Weller (1965) argued that “the greatest challenge of Appalachia, and the most difficult, is it people” (p. 7), media play a role in producing stereotypes of Appalachian culture. Caudill (1965) explained that the Appalachian mountaineer has been portrayed “as a sort of gallant knight, backward, illiterate, primitively housed and clad, but a nobleman all the same” (p. xi). Recognizing the implications of media portrayal of the Appalachian culture, Gainer (1975) explained:

There is a widespread belief among people whose knowledge of the mountain people has been gained from fiction, pictures and stories in the press, and programs on radio and television, that the part of the United States called “Appalachia” is a region of poverty, depression, loneliness, and ignorance, whose inhabitants are called “hillbillies.” (p. xiv)

The media depiction of the Appalachian “hillbilly” is a degenerate character who wears dirty, shabby clothes, is shoeless, has poor grammatical ability, and is opposed to using modern conveniences (Bauer and Growick, 2003; Gainer, 1975). Examples of such popular television shows, movies, and comic strips include the Beverly Hillbillies, the Andy Griffith Show, the Waltons, Deliverance, and Li’l Abner. Scholars have raised concerns over such rigid and systematic media representation of Appalachian stereotypes (Bauer and Growick, 2003; Newcome, 1980). Bauer and Growick (2003) cautioned that health care professionals must be cognizant of the fact that popular culture has a
propensity to stigmatize Appalachians. In these media outlets, Appalachian people are shown as hopeless but proud, distressed but hard-working, noble first generation frontier people but illiterate and degenerate. As such, Appalachia is frequently viewed by many as rural and poor, or as “the other America.”

Appalachia is a diverse region with a variety of cultures, landscapes, and economic experiences. The Central Appalachian region, although rich in cultural heritage, continues to be defined by low incomes, inadequate housing, substandard education, and poor health. As described by Weller (1965):

Progress has come to many parts of Appalachia in the past generation, and at an increasingly rapid pace. Many cities in the area have witnessed industries moving in, new colleges, hospitals, and health centers being built and used, cultural advantages being developed and appreciated. Yet as this has been happening, the rest of the nation has been moving forward at an even greater pace. (p. 24)

Despite these relative advancements, Appalachia continues to suffer low per capita income, insufficient housing, high poverty rates, poor health, low educational levels, and low employment opportunities. Spotlighting the prevalence of localized health disparities in Appalachia, Halverson, Ma, and Harner (2004) argued for an understanding of local knowledge of conditions that impose limitations on health behavior, delivery, and outcome.

Studies have documented higher rates of cancer morbidity and mortality among people in Central Appalachian (Lengerich et al., 2004; Lengerich et al., 2005) and more particularly, higher than average rates of cervical cancer morbidity and mortality among
people in Appalachian Ohio (Katz, Wewers, Single, & Paskett, 2007). While socio-economic factors, such as lack of infrastructure and insurance, contributed to these higher rates, other socio-cultural determinants, such as family traditions, household context, social norms regarding tobacco use, perceptions of cancer as a disease, and stigma attached to patients with cancer were found to play important roles on health behaviors and health outcomes (Elnicki, Morris, & Shokcor, 1995; Katz, Wewers, Single, & Paskett, 2007; Schoenberg, Hopenhayn, Christian, Knight, & Rubio, 2005; Shell & Tudiver, 2004; Yabroff, Lawrence, King, Mangan, Washington, Yi, Kerner, & Mandelblatt, 2005; Walker, Lucas, & Crespo, 1994).

The NIH (n.d.) has defined health disparities as “differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States” (¶ 6). Not all segments of the U.S. population have fully realized improved health outcomes (DHHS, 1990; 2000). Differences in social, cultural, behavioral, genetic, and environmental factors contribute to inequalities in health care services among subgroups of the population and among geographic locations. Studies have documented disparities in health resulting from significant disparities between people of different genders, races, ethnicities, socioeconomic statuses, and geographic locations (Eberhardt & Pamuk, 2004; Hartley, 2004; NIH, n.d.). As discussed in chapter one, the Appalachian region, especially Central Appalachia - Southeast Ohio, West Virginia, and Eastern Kentucky - is a Medically Underserved Area (MUA) (Finerman, Blanchard-Horan, Jowers, & Brittman, 2003; Lengerich et al., 2005; Lengerich, Wyatt, Rubio, Beaulieu, Coyne, Flesher, Ward, &
Brown, 2004; Pope, Hancock, & Sills, 2006). MUAs are identified by shortages of primary health care services, high poverty levels, a large population over age 65, a high infant mortality rate, and cultural and/or linguistic access barriers to primary medical care services (HRSA, n.d.). A hard economic climate poses challenges to important health care services, particularly in rural Appalachian areas (Ludke, Westhoff, & Flood, 1992; Wells, Lee, McClure, Baronner, & Davis, 2004). As put forward by Bauer and Growick (2003), “Living in rural Appalachia has its minority features by virtue of geography, unemployment rates, lack of medical service, and limited economic growth” (p. 18). They further argued that the rural Appalachian way of life is unique and differs from the rest of America.

Halverson, Ma, and Harner (2004) provide evidence for identifying Appalachia as a geographic and demographic health disparity population. Mortality rates for the leading causes of death and illness (heart disease, cancers, stroke, lung cancer, and accidental) are higher throughout Appalachia relative to the comparable non-Appalachian U.S. population. Yet, the study also found a high degree of within-Appalachia variability in both mortality and hospitalization rates. The authors argued that the reasons for health outcome disparities are greatly variable and highly localized. These disparities are often attributable to differences in socioeconomic characteristics, behavioral risk profiles, and available medical care resources. There is a considerable difference among age, gender, and ethnic groups. For instance, while high rates of all-cause hospitalization seem to cluster, particularly for the elderly populations in the Central Appalachian counties, high cancer death rates are prevalent among elderly white women, mainly in Eastern
Kentucky, Southern West Virginia, and Southeastern Ohio in addition to Southwestern Pennsylvania and Southern New York.

Rural, underdeveloped regions are likely to have poorer public health infrastructure, lesser availability of healthy foods, poorer facilities for leisure-time physical activity, poorer medical care, and lesser public health education resources (Halverson, Ma, and Harner, 2004). In a community health assessment for rural Appalachian Ohio, Denham and Rathbun (2005) observed that the HRSA has identified Athens, Hocking, Pike, and Vinton Counties as Health Professional Shortage Areas (HPSA) for primary and mental health care. It is important to note that, among these four counties, Hocking County is a designated dental shortage area. Denham and Rathbun (2005) explained that HPSA measures for primary medical care include being a rational service area for primary medical care delivery, having a population to primary care physician ratio of 3500:1 or higher, and having limited access to primary health care professional due to access barriers such as an excessive distance and/or over-utilization of services.

Katz et al. (2007) found that people in Appalachian Ohio experience increased cervical cancer incidence and mortality rates. Inability to pay for prescription drugs, lack of health insurance, physical distance, terrain, lack of public or private means of transportation, fear, embarrassment, and privacy issues were identified as significant barriers to adequate medical care in much of rural Appalachia (Halverson, Ma, and Harner, 2004). Studies have documented greater use of tobacco in Appalachian Ohio relative to the rest of the U.S. (Denham, Meyer, & Toborg, 2004; Wewers, Katz, Fickle,
and Paskett, 2006). Wewers et al. (2006) found that increased prevalence of risky behaviors (smoking, poor nutrition, lack of physical exercise, risky sexual behaviors), lack of preventive cancer care, and limited access to health care contributed to disparities in cancer morbidity and mortality among Appalachian Ohio adults. The authors underscored the importance of studying the role of social and contextual variables, such as the environment, neighborhood, community, and culture, which contribute to such risky health practices. Halverson, Ma, and Harner (2004) identified a growing awareness of public health research of the link between these contextual circumstances and behavioral risks with poor health outcomes.

Murray, Kulkarni, Michaud, Tomijima, Bulzacchelli, Iandiorio and Ezzati (2006), found continuous health inequalities between distinct subgroups of the U.S. population. Among other interventions, the authors identified the eradication of physical, behavioral, and cultural barriers to health care as an important public health strategy to reduce health disparities between population subgroups. As Behringer and Friedell (2006) put forward, “facts about health in the mountains of Appalachia have been slow to emerge” (p. A113). Behringer and Friedell (2006) reviewed what they called “a new wave of studies that explore community-based explanations for Appalachian cancer issues by gathering and considering community perspectives on health and illness” (p. A113). They found that people in Appalachia are unaware of different types of cancer and of publicly supported cancer screening programs and are confused about differences among cancer screening procedures. Behringer and Friedell (2006) argued that health care professionals need to be cognizant of the importance of religion in Appalachian culture to better address cancer
issues for the Appalachian people. Studies have identified Central Appalachia as a region that experiences excess morbidity and mortality rates, more adverse socioeconomic conditions, higher prevalence of behavioral risk factors, and limited access to medical care that make it a medically underserved and health disparity population (Behringer & Friedell, 2006; Denham & Rathbun, 2005; Elnicki, Morris, & Shokcor, 1995; Halverson, Ma, & Harner, 2004; Katz et al., 2007; Lengerich et al., 2004; Lengerich et al., 2005; Schoenberg et al., 2005; Shell & Tudiver, 2004; Walker, Lucas, & Crespo, 1994; Wewers, Katz, Fickle, & Paskett, 2006; Yabroff, et al., 2005). These health disparities are further subject to geographic, socio-economic, socio-cultural, and demographic variations (Halverson, Ma, & Harner, 2004). Studies have found that health behaviors and health outcomes in an Appalachian context are attributable to existing cultural variations (Beaver, 1986; Behringer & Friedell, 2006; Denham, 1999; Hansen & Rersick, 1990; Katz et al., 2007; Leninger, 1991; MacAvoy & Lippman, 2001; Reel, 2001).

In an effort to help facilitate culturally appropriate health care in the Appalachian context, Keefe (2005) argued for the development of a culturally competent model that includes reflexivity, acquiring cultural knowledge, respect for local knowledge, and community diversity. Through case studies, the authors in Keefe’s volume provide specific cultural knowledge to help health professionals provide effective care and cater to regional variations without being insensitive. Katz et al. (2007) studied county-level socio-cultural environments for planning a cervical cancer prevention program and developing effective strategies to address cancer-related health behaviors in Appalachian Ohio. In a similar vein, Wewers et al., (2006) argued that “future behavioral interventions
to reduce cancer disparities must address these issues within the cultural context of Ohio Appalachia” (p. 6). Halverson, Ma, and Harner (2004) argued for tapping into local responses "to identify how [local knowledge of conditions] combine and intersect at the local level to influence local health outcomes” (p. xxii). Nevertheless, Appalachian Ohio as a unique culture has received little attention from scholarly research endeavors in general, and research on culturally competent health care in particular.

Underscoring the important role geographic location, health care systems, and cultural practices play in cancer issues in the Appalachia, Behringer and Friedell (2006) posited that “little attention has been paid to culturally defined geographic areas” as an attribute of poor health outcomes (p. A113). Although Denham’s (1996, 1999, 2003) family health model provides insights into how family health is defined and practiced within family households and community settings in an Appalachian Ohio context, in my knowledge, studies have not yet examined the role of cultural differences in health care provider-receiver relationships in the context of Appalachian Ohio. Street (2003a) posited that medical encounters “have direct implications for both subjective and objective dimensions of health and well-being” (p. 82). He underscored the importance of adopting a contextual approach to the examination of health care interactions. Recognizing a unique Appalachian culture, Behringer and Friedell (2006) explained that poor provider-patient communication is an obstacle to health care delivery and, therefore, effective provider-patient communication is essential in establishing trust between health care providers and receivers. Similarly, I argue that studying provider-patient interaction in a cultural context bears important implications for the medically underserved population of
Appalachian Ohio. Caudill (1965) argued that “the Appalachian mountaineers have been discovered and forgotten many times” (p. xi). Being a graduate student of Ohio University, which is located at the heart of Appalachian Ohio, I consciously recognize the need to connect to people and to community through an active scholarly agenda. Accordingly, my dissertation investigates health care receivers’ perception of health care providers’ cultural competence in health care interaction in an Appalachian Ohio context.

Conclusion

The above review is not exhaustive but representative. It provides a background for the dissertation research and identifies its importance. In summary, the review of the literature shows the complexity of studying health communication in cultural context. Communicating health in today’s growing multicultural societies can be challenging. Health is not practiced in isolation; instead, health is a communicative practice involving two or more agents continually creating, recreating, negotiating, and renegotiating healthiness. This social production of health is culturally contested across values, beliefs, traditions, and customs along with social, economic, and political realities. Studies of health communication and culture suggest that socio-cultural systems shape illness experiences. Studies document that socio-cultural differences between physician and patient influence health care. Studies also show that effective communication between doctors and patients is crucial to promoting health within different cultural settings. There has, however, been little focus on studying health care provider-receiver interactions as “transactional” (Cline & McKenzie, 1998, p. 73). That is, studies have not been attentive to the interpersonal nature of cultural competence. Moreover, these issues have not yet
been studied in an Appalachian Ohio context where socio-cultural differences between patients and providers are especially likely to emerge. Against such a backdrop, this dissertation research examines the role cultural differences on health care receivers’ perception of health care providers’ cultural competence in health care interactions. Towards this end, I will use communication accommodation theory as a framework together with Appalachian Ohio as a cultural context.

Based on the contributions and limitations of existing literature, I pose the following research questions to help guide this dissertation research:

RQ1: What role, if any, do cultural differences play in health care provider and receiver interactions in an Appalachian Ohio context?

RQ2: Do health care receivers perceive health care as currently practiced to be culturally competent and, if so, how?

RQ3: Do health care receivers’ cultural differences make a difference in their perception of health care providers’ treatment of them, and, if so, how?

RQ4: Do health care receivers perceive that health care providers adapt their communicative styles to accommodate health care receivers, and, if so, how?

RQ5: Do health care receivers’ ethnocentric views make a difference in their satisfaction with health care providers, and, if so, how?

It is important to note that the dissertation research will consist of three phases. The research questions will be answered through the three phases of data collection and analysis. I will pose specific hypotheses to help answer the research questions. Although research questions are often used to “explore” and hypotheses are used to test “specific”
predictions, extant literature on cultural competence in health care provides enough evidence to offer predictions “with the preponderance of literature defining the concepts and identifying research questions” to be asked (Goode, Dunne, & Bronheim, 2006, p. ii) There is very little empirical research on cultural competence in health care. Nevertheless, there has been a great deal of conceptual and theoretical studies that make strong claims that cultural competence interventions work (Goode, Dunne, & Bronheim, 2006; HRSA, 2001; Nishimi, 2006; Wu & Martinez, 2006). The HRSA (2001) report argued that “in order to further refine and develop a measurement profile of cultural competence, the field must move beyond conceptualizing cultural competence to applying and testing actual measures of cultural competence in real-world settings” (p. 43). This dissertation aims to respond to this need for empirical validation of the conceptual and theoretical claims, an action that will be carried out in three sequential phases.

Phases one and two will offer hypotheses specific to those phases to help build instrumentation for phase three. In phase three, I will offer specific hypotheses to allow me to answer the research questions. The research questions I have posed are well-thought-out and focused so that they will lead me directly to hypotheses. Strong hypotheses will provide important insights into the research questions. Answers to these questions will increase our understanding of the dynamic interplay of health, communication, and culture in an Appalachian Ohio context. These answers will shed light on the extent to which cultural differences play a role in the context of Appalachian Ohio and help understand health care receivers’ perception of health care providers’
accommodativeness in shaping culturally competent health care. The answers will also help stakeholders to better understand the needs of Appalachian Ohio residents in receiving culturally competent health care.

Chapter Summary

In chapter two, I looked at research at the intersection of health communication and culture. While doing so, I recognized the importance of understanding issues of cultural competence in health care. Second, I reviewed literature that informs issues of cultural competence in health care. Third, I explored literature focusing on health communication in intercultural, cross-cultural, and multicultural settings to show how these different cultural contexts are related in the context of health care delivery and outcome. I also discussed the possible implications for ignoring and misinterpreting these distinct, yet interconnected, cultural contexts for health communication. Fourth, I reviewed existing approaches to cultural competence in health care and underscored the need to systematically study cultural competence in unique contexts. Fifth, I discussed communication research in the context of health care with a focus on communication accommodation theory to highlight of the importance of theoretically informed work on cultural competence in health care. In doing so, I argued for using communication accommodation theory as a framework for this dissertation. Next, I explored literature on Appalachian culture and health issues. I identified Appalachian Ohio as a unique cultural context and a medically underserved area where the study of cultural competence can make a difference to patients, health care delivery, and health outcomes. Last, based on
the trends and gaps in the literature reviewed, I posed research questions to guide this
dissertation.

In the next chapter, I describe the research design to carry out this study.
Chapter Three: Research Design

Research is a systematic process of inquiry that requires careful planning and implementation (Best & Kahn, 1993). Research design, in which researchers set forth their plans for the research to be carried out, is an important step in this process. A pragmatic design helps the researcher to foresee and avoid pitfalls, save time in the long run, and produce a quality finished product (Ragin, 1994).

This chapter will describe the methodological approach taken in this study. I begin with my assumptions about reality, knowledge, and values and discuss how these beliefs relate to the methodological choice that I make. Then, I present the research design, its strengths, and potential challenges. Last, I briefly outline the three phases of data collection and analysis for the dissertation research.

Paradigm Perspectives

A paradigm can be defined as a shared set of assumptions, concepts, values, and practices that help individuals explain the world (Denzin & Lincoln, 2000; Guba, 1990). Every researcher brings to the table ontological, epistemological, and axiological beliefs that guide the researcher’s intellectual curiosity and research agenda (Guba & Lincoln, 1994). I view research as both a way of knowing and being. For me, research is a way of participating in an ongoing dialogue between self and subject-matter. This dialogue can be realized through our interaction with others and our environment so that we can “be responsive to the nuances of particular empirical questions and the idiosyncrasies of specific stakeholder needs” (Patton, 2002, p. 585).
The pragmatist philosophy advocates the use of whatever approach or mixture of approaches works best in a real world situation (Rocco, Bliss, Gallagher, & Perez-Prado, 2003). The main concern of the researcher is finding a practical solution for a specific research problem rather than any a priori commitment to a pre-selected methodology. As a researcher, I look forward to a set of ongoing research questions and topics about which I am curious and passionate. My primary concern in a given study is the research problem itself. Instead of being only caught up with the kind of outcome that may be measured, I would also be cognizant of the setting in which a study is to be conducted and the meaning produced in the process of research, in relation to culture, and through communication (Court, 2004). In short, research should be problem-driven, not method driven.

Methodological Framework

Existing literature on cultural competence in health care has mostly focused on the impact of attempting to improve communication between health care providers and patients when cultural factors are involved. Further work is needed to raise awareness about cultural competence interventions for health care delivery and health outcome and to evaluate and assess such initiatives. Although some efforts have been made to develop instruments to help health care professionals and organizations assess their cultural competence, less effort has been put into measuring healthcare receivers’ perceptions of health care professionals’ and organizations’ cultural competence. This dissertation research examines the function of cultural differences on health care provider-receiver interactions and the likely impact adaptations to these differences have on evaluations of
the quality of health care. Johnson and Onwuegbuzie (2004) claimed that “researchers should mindfully create designs that effectively answer their research questions” (p. 20).

Given the complex interconnections of health, communication, and culture, the methodological tools deemed useful in examining the cultural implications of health communication largely depend on the kinds of questions a researcher would pose. The aim of this dissertation is to promote awareness of health care provider-receiver intercultural interaction processes and to contribute to measuring health care receivers’ experience of health care providers’ cultural competence. More specifically, I want to develop and validate a patient satisfaction instrument to measure physicians’ cultural competence in health care. Measurement is the process of recording observations about people, objects, and events as part of a research effort (DeVellis, 2003). According to DeVellis (2003), measurements are an essential aspect of social science research. He held that measures are, “in a sense, quantitative metaphors for the underlying concepts” the researcher investigates (p. 160). Therefore, to guide the dissertation research process, I will rely on quantitative methods of inquiry, which will enable the assessment of cultural competence “by means of a carefully constructed and validated scale” (DeVellis, 2003, p. 9).

It is important to note that researchers can be creative and build a more specific and complex design and not be limited by any prescribed model. Accordingly, in this dissertation research, I employed a 3-phase sequential investigation. In the context of health promotion program evaluation, Valente (2002) argued that formative research presents information on the research problem, the audience, the barriers to the research,
and the research opportunities. In view of investigating “social phenomena without expectations,” I began the project by taking into account public perceptions (Schutt, 2001, p. 12). I sought to understand the public’s norms and expectations of who is in and who is out of their culture. I also intended to explore existing conditions and underlying dynamics of cultural competence in health care from peoples’ perception. In the three sequential phases, I tested specific hypotheses to answer the research questions posed in chapter two. In the following, I provide a rationale for the methods employed in the study and I describe the data collection and analysis procedures.

Rationale

Existing literature has found that Appalachia is a region with slow economic growth, health disparities, and a unique culture (Bauer & Growick, 2003; Burkhardt, 1993; Hochstrasser, & Gairola, 1991). Studies have found that persons with lower socio-economic status or who live in an Appalachian culture experience lower quality of care, less care overall, and higher rates of early morbidity and mortality than do people of non-Appalachian origin and culture (Amonkar & Madhavan, 2002; Burkhardt, 1993; Lengerich et al., 2005; Reel, 2001; Shell & Tudiver, 2004). Little is known about the intersection of health and culture in health care provider-receiver interactions in an Appalachian Ohio context. Studying the perceptions of provider-receiver interactions will not only shed light on the complex links between health communication and culture in an Appalachian Ohio cultural context, it will also contribute to understanding cultural competence in unique contexts more generally. In this dissertation, I am interested in
studying cultural competence in health care interactions from the perspectives of health care receivers.

According to DeVellis (2003), “measurement instruments that are collections of items combined into a composite score, and intended to reveal levels of theoretical variables not readily available by direct means, are often referred to as *scales*” (pp. 8-9). In this dissertation, I am interested to know from health care receivers’ perspectives, what function cultural difference plays in the quality of health care interaction between the provider and the receiver. An examination of this issue will rely on a quantitative approach that involves “the collection of *numerical* data in order to explain, predict, and/or control phenomena of interest” (Gay, 1996, p. 11-12, emphasis in original). For example, it may be difficult to measure how a complex and abstract variable (e.g., cultural difference), influences health care receivers’ perceptions of health care providers’ awareness of individual differences and differences across cultures in health care interaction, which are, in themselves, abstract variables. A quantitative approach can provide objective and usable information for understanding cultural competence in health care from patients’ perspectives. More particularly, scaling involves the development of an instrument to measure unobservable and abstract constructs, (DeVellis, 2003). Thus, measurement scales will be an appropriate tool for this dissertation to assess the role of cultural differences on health care receivers’ perception of health care providers’ cultural competence in health care interactions.
Data Collection and Analysis

In a research study, data collection and analysis procedures must be sound regardless of the type of method used. The researcher must ensure that he or she collects “the richest possible data. Rich data mean, ideally, a wide and diverse range of information collected over a relatively prolonged period of time” (Lofland & Lofland, 1995, p. 16, emphasis in original). Accordingly, for this dissertation research, I performed data collection and analyses with careful planning in three subsequent phases. Although I will explain data collection procedures in greater detail for each phase in chapter four, I outline them here briefly.

The data collection for the dissertation research included surveys of general people and health care receivers. The survey method is one of the most widely used measurements in social science research (Best & Kahn, 1993; Hayman, 1968; Schutt, 2001). The survey elicits people’s perceptions about issues and, often, time it is “the only means through which opinions, attitudes, or suggestions…can be obtained” (Hayman, 1968, p. 66). Since this dissertation examines perceptions of health care providers’ cultural competence from health care receivers’ perspectives, the survey method best served the purpose as it involves measurement procedures that ask questions of respondents and allow them to actively provide information about themselves. Moreover, the survey method has allowed me to gather descriptive data “from a relative large number of cases at a particular time” (Best & Kahn, 1993, p. 107). By using surveys, I can pilot messages and instruments and validate and refine the instruments to assess physicians’ cultural competence in health care interaction. In this study, I am not looking
for a person’s individual characteristics; instead I am interested in using the survey responses in aggregate form. Hence, the survey method has been best suited for this dissertation research as I am concerned with “the generalized statistics that result when the data are abstracted from a number of individual cases” (Best & Kahn, 1993, p. 107). The survey method can yield potentially generalizable results, thus allowing me to make predictions based on recurring experiences.

After deciding that the survey method was most appropriate for this dissertation, I spent considerable amount of time planning the surveys (Best & Kahn, 1993; Hayman, 1968). To investigate the potential role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions, the surveys demanded factual information (e.g., demographic questions) and sought to measure both attitudes (e.g., health care receivers’ ethnocentrism) and opinions (e.g., health care receivers’ satisfaction with health care providers). I decided to obtain these and other information by using the questionnaire, a paper and pencil tool that the respondent completes. Hayman (1968) argued that “the greatest advantages of the questionnaire are its relatively low cost and its ability to secure information from large numbers of widely distributed persons in a short time” (p. 67). After selecting the type of survey for the dissertation, I decided to use a structured response format that is easier for the respondent to fill out and that helps the researcher gather and summarize responses more competently (Best & Kahn, 1993; Hayman, 1968).

Recognizing that surveys are misperceived as simple tabulation of numbers, Best and Kahn (1993) cautioned that the survey entails “careful analysis and interpretation of
the data gathered, and logical and skillful reporting of the findings” (p. 108). To facilitate proper construction and administration of the survey questionnaire, I chose to use closed-ended questions that “are easy to score and to quantify” (Hayman, 1968, p. 69). More specifically, I used Likert-type scales, one of the most popular methods of measuring beliefs, attitudes, and opinions. Likert-type scales consist of items that are “presented as a declarative sentence, followed by response opinions that indicate varying degrees of agreement with or endorsement of the statement” (DeVellis, 2003, p. 79). Throughout all three phases, I used original items and drew and adapted from existing reliable and validated patient satisfaction and cultural sensitivity survey items to create a survey instrument for this dissertation. By including additional variables, such as ethnocentrism, communication accommodation, and fear of physicians, that are unique to this study to operationalize cultural competence in health care, this study will also be able to more carefully analyze and interpret the data.

This dissertation aims for comprehensive coverage, an advantage that survey research entails. Hayman (1968) argued that, survey questionnaires can elicit information from a large part of the target population. However, it is easy for people to disregard the questionnaire, thus contributing to a lower completion rate (Hayman, 1968). Some people simply refuse to respond to surveys because of time. In such cases, a closed-ended survey questionnaire “would probably be desirable for reasons of respondent motivation” (Hayman, 1968, p. 69). With a view to facilitate this process, I formulated a closed-ended survey questionnaire that “is easy to fill out, takes little time, keeps the respondent on the subject, is relatively objective, and is fairly easy to tabulate” in each phase (Best & Kahn,
I argue that this method of writing questionnaires allows the researcher to
gauge people’s perceptions on a given topic, allows respondents time to fill out a survey,
and increases the likelihood of their participation. I also posit that this procedure conveys
a positive message to participants that their views are valued, thus eliciting sincere and
more useful responses.

The research design includes appropriate methods for collecting and analyzing the
data to respond effectively to the research problem. For example, a factorial design is
economical (multiple experiments can be conducted at once) and easier to control
(multiple factors can account for intervening variables). A factorial design allows me to
test if and how independent variables interact to influence a dependent variable (Keppel
& Wickens, 2004). One of the objectives of this dissertation is to find out whether health
care receivers’ ethnocentric views make a difference in their satisfaction with health care
providers and if health care receivers’ ethnicity makes a difference in health care
providers’ treatment of them. A simple factorial design will better serve this purpose
because it is both parsimonious and because it allows the intervening variables, in this
case ethnocentrism, fear of physicians, and ethnicity, to be observed, accounted for, and
controlled for to examine their interactions with perceptions of culturally competent
health care.

The research design will address issues of reliability, “the degree of consistency
that the instrument or procedure demonstrates,” and validity, the “quality of a data-
gathering instrument or procedure that enables it to measure what it is supposed to
measure” (Best and Kahn, 1993, p. 208) by conducting data collection and analyses in
three phases to answer the research questions posed. This dissertation research employs a three-phase sequential investigation in which each phase builds on previous stages. Carrying out the study in three phases will enable me to determine if the results are consistent over time and if the study can be reproduced using the same or similar research instrument. This consistency will indicate the study’s reliability. Conducting the dissertation research in three phases also allows me to determine the quality and accuracy of the measurements. This quality and accuracy will indicate the study’s validity. The first phase of the dissertation begins the process by collecting quantitative survey data to test scenarios of physicians’ cultural competence and incompetence in health care interactions. In the second phase, I analyze the data from the first phase and use the information to build and pilot test a patient satisfaction survey instrument. In the third phase, I validate the survey instrument by assessing the role of culture on health care receivers’ perception of health care providers’ cultural competence in health care interactions.

Phase One

The first phase of this dissertation research employed a simple 2x2 between-subjects factorial design to create scenarios demonstrating cultural difference or sameness between health care provider and receiver (factor one) and health care providers’ cultural competence or incompetence (factor two). Best and Kahn (1993) argued that a factorial design is essential to a study with more than one independent variable. Accordingly, a study with two or more categorical explanatory variables leading to a numerical outcome variable is known as factorial design. A factorial design is economical as it allows the
researcher to combine a series of independent studies effectively into one. Recognizing
the advantage of the factorial design, Zar (1974) argued that “one may economize with
respect to time, effort, and often money” (p. 163). A factorial design also accounts for
potential intervening variables and helps find out how independent variables interact to
influence dependent variables (Mertler & Vannatta, 2005). Other reasons to use a
factorial design include its advantage in estimating the overall main factor effects and in
determining the significant interaction between different factors (Best and Kahn, 1993).

In the case of this dissertation, a factorial design will allow me to measure cultural
difference or sameness between physician and patient. By allowing this sameness and
difference to be accounted for and to be controlled for, factorial design will allow me to
observe its interaction with the cultural competence or incompetence of the physician as
it influences patient satisfaction with health care. I will use a simple factorial design that
best suits this dissertation research because such a design is parsimonious, reduces the
number of analyses to be performed, and, thus reduces the likelihood of Type I error, “the
error of rejecting the null hypothesis when it is correct” (Pyrczak, 2001, p. 82). The
research process for this phase is discussed in detail in chapter four.

Phase Two

The second phase of this dissertation employed factor analysis featuring principal
compONENT extraction and varimax rotation with Kaiser normalization to develop a global
cultural competence and a patient-centered cultural competence scale based on the valid
scenarios from phase one. Factors are a set of unobservable variables that help measure a
common underlying construct (Mertler & Vannatta, 2005). Factor analysis “is essentially
a process by which the number of variables is reduced by determining which variables ‘cluster’ together, and factors are the groupings of variables that are measuring some common entity or construct” (Mertler & Vannatta, 2005, p. 249). For example, encouraging patients to ask questions, showing concerns for patients and developing good relationships with patients could be combined into a single factor called physicians’ attention to relationship needs (Watson & Gallois, 1998). A factor analysis, then, would let me find out the number of factors that explain cultural competence in health care interactions. Principal component analysis is a factor extraction technique that transforms an original set of dependent (possibly correlated) variables into a substantially smaller set of uncorrelated variables (DeVellis, 2003). The principal component analysis “yields one or more composite variables that capture much of the information originally contained in a larger set of items” (DeVellis, 2003, p. 128). This smaller set of uncorrelated variables is called components. This factor extraction technique will allow me to draw out an appropriate number of factors to examine cultural competence in health care interactions because the goal of principal component analysis “is to extract the maximum variance from a data set, resulting in a few orthogonal (uncorrelated) components” (Mertler & Vannatta, 2005, p. 250). The research process for this phase is discussed in detail in chapter four.

Phase Three

The third phase of this dissertation employed Analysis of Variance (ANOVA). ANOVA is a technique used to determine the statistical significance of the differences among the mean scores of two or more groups on one or more variables (Mertler &
Vannatta, 2005; Pyrczak, year, 2001). Using ANOVA will enable me to estimate the effect of individual factors together with their interactions in a single test. Accordingly, the number of replications required to estimate treatment effects (independent variables that researchers can manipulate) accurately will be reduced (Best and Kahn, 1993). For example, in the third phase, I examined the relationship between one independent variable (ethnocentrism) and one dependent variable (patient satisfaction). To this end, I used a one-way analysis of variance, which allowed me to test for significant differences between the mean scores of each condition: i.e., persons with high levels of ethnocentrism were compared to persons with low levels of ethnocentrism to see if there was a difference in the mean levels of patient satisfaction in each group. This study also used multiple regression that “identifies the best combination of predictors [independent variables] of the dependent variable” (Mertler & Vannatta, 2005, p. 14). For example, in this dissertation, I used age, sex, education, income and other independent variables to predict the dependent variable, patient satisfaction with health care. Multiple regression also lets me use ethnocentrism, perceived cultural competence, fear of physicians, and other variables as predictors of patient satisfaction as an outcome. More specifically, I will use hierarchical regression, which “attempts to improve standard regression estimates by adding a second-stage ‘prior’ regression to an ordinary model” (p. 612). Using a hierarchical regression, I can decide not only how many predictors to employ but also the order in which they will be employed. In short, multiple regression allows for both prediction and control. The research process for this phase is discussed in detail in chapter four.
Rationale/Reflections

Not to reiterate but to accentuate, I do not have any *a priori* commitment to using a particular method to any given study. Given that the focus of this dissertation is the assessment of health care receivers’ perception of health care providers’ cultural competence in health care interactions, a quantitative approach is best suited to measure such perceptions. As such this dissertation research is exploratory in nature and a quantitative approach can help generate hypothesis to be tested about the problem to be studied (Schutt, 2001). Rocco et al. (2003) wrote, “The research design should be selected as the most appropriate to address the research questions” (p. 26), and, should quantitative method not be the most appropriate approach, I would not use it. For example, this dissertation aims to investigate the function of cultural differences in health care provider and receiver interactions. More specifically, it seeks to find out from the health care receivers’ perspective whether health care providers are practicing culturally competent care. Because this research investigates whether health care receivers’ cultural differences make a difference in their perception of health care providers’ treatment of them, it attempts to examine if health care receivers perceive that health care providers adapt their communicative styles to accommodate health care receivers. The study wants to explore if health care receivers’ ethnocentric views make a difference in their satisfaction with health care providers. A quantitative research design best helps answer these queries because it allows me to generate hypotheses about health care provider-receivers interactions. A quantitative research design also enables me to make predictions about patient satisfaction. Quantitative research is often iterative. I will be able to
replicate or repeat the study on populations and subpopulations later. As such, through testing, refinement, and evaluation of evidence, theories, and hypotheses, and with statistical advances, I can contribute to measuring health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. In addition, this design is most responsive to real-world constraints of cost and time placed upon this particular dissertation research.

Throughout the research design, I have taken advantage of member checking to reduce researcher bias (Gall, Borg & Gall, 1996; Lincoln & Guba, 1985). Geertz (1988) explained the presence of the researcher in the text as a matter of signature, or “the establishment of an authorial presence within a text” (p. 9). This signature can be obtained by sharing study findings with the participants to verify true representation. Clandinin and Conelly (2000) emphasized the importance of balancing participants’ and researchers’ signatures to avoid subjectivity. I attempted to address this issue of subjectivity by inviting participants to comment directly on the survey about questions, wordings, and topics throughout the data collection. Although this signature is less legible, it is, nonetheless, present. Being cognizant of these aspects of research, I also attempted to balance these signatures with member validation (Lindlof & Taylor, 2002). This balance was maintained by soliciting expert evaluations of the survey questionnaire (DeVellis, 2003). Physicians and health administrators have reviewed the survey item pool. These member checks or validation will work towards reducing possible researcher bias and help improve the trustworthiness and genuineness of the perceptions presented in the study.
Important to designing this dissertation research has been the feasibility of the data collection. It was necessary that the sample size be selected economically and participants be available (Blake, 1989; Borkan, 2004; Lindlof & Taylor, 2002; Stange & Zyzanski, 1989). Throughout the study, I have attempted to execute a clear, simple, and thorough research design within my capacity to help expand and enhance the findings of this dissertation study.

Chapter Summary

In chapter three, I explained my paradigmatic understandings of research that shaped my methodological framework. I shared my belief that research should be guided by the set of questions to be answered. I also argued that the decision to use particular research methods should be determined by the kind of problem to be investigated. To evaluate (the role of) cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions in an Appalachian Ohio context, I began by developing a patient satisfaction survey instrument. The first two phases comprised formative research for scale development to help assess public perceptions of physicians’ cultural competence in health care interactions. The third phase implemented the newly developed instruments alongside previously validated measures to assess patient perceptions of physicians’ cultural competence in health care interactions as they interact with ethnocentrism and fear of physicians. Along that line, I provided an explanation of and rationale for a quantitative approach to examine the role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. I also explicated that survey methods
would best serve the data collection for this dissertation research. Then, I briefly
delineated that the dissertation research would be carried out in three phases with the first
two phases being devoted to scale development for assessing health care receivers’
perceptions of health care providers’ cultural competence in health care interactions to
help validate the scale in the third phase.

In chapter four, I report and discuss the formative research for this dissertation,
undertaken in the first two phases of data collection and analysis. I also report and discuss
the third phase of data collection and analysis for the dissertation research.
Chapter Four: Findings of the Study

This chapter reports and discusses the three-phase sequential investigation undertaken to examine the role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. I explain the research methods that were employed in each three phases to answer the research questions posed in chapter two. More particularly, I describe the research tools, sample population, data collection and analysis procedures, and results of each three phases. I also discuss the results and limitations of each phase.

In the first phase, I developed scenarios demonstrating cultural difference or sameness between patient and provider and physicians’ cultural competence or incompetence in health care interactions based on the evidence documented in the literature. These scenarios were pre-tested for readability and believability. In the second phase, I used the validated scenarios along with a survey questionnaire and administered it to members of the public to elicit public understanding of cultural competence in health care interactions. Results obtained from the second phase helped refine items to develop a patient satisfaction instrument for use in the third phase of the dissertation to measure physicians’ cultural competence in health care interactions.

Phase One

Literature has documented the importance of cultural competence for effective and appropriate health care delivery. Accordingly, much effort has been made to develop standards and self-assessment tools for health care providers and organizations to deliver and measure culturally competent care. However, little attention has been paid to
measuring physicians’ cultural competence in health care settings from health care receivers’ perspectives. This phase of the formative research for the dissertation was a first step towards developing an outcome/impact measure, a patient satisfaction instrument, and, thus, contributing to testing and validating measures of physicians’ cultural competence in health care delivery settings. With regard to health promotion program evaluation, Valente (2002) argued that formative research helps with identifying “needs in a way understood by the audience” (p. 57). In the case of this dissertation, I proceeded with formative research to assess awareness of cultural competence in health care for obtaining feedback and rethinking assumptions to eventually help me “move beyond conceptualizing cultural competence to applying and testing actual measures of cultural competence in real-world settings” (HRSA, 2001, p. 43).

Scenario Development

A scenario is the description of a situation, a state of affairs, circumstance, or setting regarding, in the case of the dissertation, cultural competence and incompetence in health care. A scenario can be as short as a sentence or as long as a paragraph. I developed scenarios of physicians’ cultural competence and incompetence in health care and pre-tested these scenarios to help understand culturally competent health care needs from the perspectives of people. These scenarios were used to help people visualize issues of culture, health communication, and the physician-patient relationship. The purpose of this phase of the dissertation was to pilot test the scenarios, a process which can be used to check if the scenarios met my initial assumptions and the requirements for the development of a patient satisfaction instrument to assess cultural competence in
health care. The testing of the scenarios allowed me to check if the scenarios were believable, realistic, and readable prior to implementation in the second phase of the study. Testing also allowed me to assess participants’ perceptions of cultural difference or similarity with the physician and with the patient. This pilot testing also helped gather feedback to refine content for items to be used in the public perception-based survey in the second phase of the dissertation.

While writing the scenarios, I kept my dissertation project goal, to investigate the potential role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions, in mind. Based on the evidence documented in the literature, four scenarios demonstrating either cultural difference or sameness between a health care provider and a receiver and either a health care providers’ cultural competence or cultural incompetence were created to provide grounding for the patient satisfaction survey instrument (see Appendix B). A 2 (cultural difference or sameness between health care provider and receiver) (factor one) x 2 (health care providers’ cultural competence or incompetence) (factor two) between-subjects factorial design was employed. The scenarios were tested for: (a) the respondent’s perception that the physician comes from a similar or different culture as the respondent (e.g., “This physician is like me,” “This physician shares my cultural values,” etc.); (b) the respondent’s perception that the patient comes from a similar or different culture as the respondent (e.g., “This patient is like me,” “This patient shares my cultural values,” etc.); and, (c) the respondent’s perception of the “quality” of the scenario (i.e., “This scenario is believable,” “Situations like this happen in a physician’s office, “I found this
message easy to read,” “I understood what was happening in this situation”) (see Appendix D). DeVellis (2003) argued that “likert scaling is widely used in instruments measuring opinions, beliefs, and attitudes” (p. 79). Accordingly, all scenarios were evaluated with a five-point Likert-type scale with a higher score indicating higher disagreement (1 = “Strongly agree” to 5 = Strongly disagree”). Undergraduate students enrolled in summer classes at Ohio University in the United States were invited to participate in the study to help test the scenarios.

Hypotheses

I offer three hypotheses to help test the scenarios for cultural competence and incompetence in health care.

Effective scenario development to assess people’s perception requires a balance between the completeness of the scenario for the concepts of interest and ensuring that the detail is comprehensible and not overwhelming for the readers. To this end, I intended to ensure consistency within a scenario and consistency across the scenarios. For example, to demonstrate cultural similarity or differences between health care provider and receiver across the scenarios, I used proper names and identified countries of origin. To demonstrate health care providers’ cultural competence or incompetence across the scenarios, I used health care providers’ ability and inability to account for health care receivers’ needs and preferences. Because I attempted to maintain consistency in designing the scenarios, I expected that people would find all the four scenarios equally readable and believable. As such, I hypothesize the following:
H1.1: The four scenarios will be judged to be equally readable and believable by participants.

The physicians in scenarios one and two are set apart from the physicians in scenarios three and four through the use of specific names as ethnic markers. I expect that participants in this phase of the study, because of their homogenous ethnic identity (i.e., most of the participants are European descent) will identify less with the physicians in scenarios one and two than they will with the physicians in scenarios three and four. As such, I hypothesize the following:

H1.2: Participants will judge the physicians in scenarios one and two to be less like themselves than the physicians in scenarios three and four.

The patients in scenarios three and four are set apart from the patients in scenarios one and two through the use of specific names as ethnic markers. I expect that participants in this phase of the study, because of their homogenous ethnic identity will identify more with the patients in scenarios one and two than they will with the patients in scenarios three and four. As such, I hypothesize the following:

H1.3: Participants will judge the patients in scenarios three and four to be less like themselves than the patients in scenarios one and two.

Research Tool

To assess people’s perceptions of culturally competent and incompetent health care interaction scenarios, the phase-one study employed a scenario-based 18-item paper-and-pencil self-administered survey questionnaire. As mentioned before, the scenarios were developed based on the information found in the literature regarding the role that
culture plays in health communication. In scenario one, for example, the first two sentences introduce the main characters (Mr. Taylor and Dr. Gupta) and their background information (the patient with a European last name and a female doctor from Nepal, respectively). The rest of the scenario describes and explains what and how events and actions follow, but does not explicitly specify whether it is a culturally competent or incompetent health care interaction. This nonspecificity allows participants to respond to the accompanying set of questions based on their own experiences rather than having their responses predetermined by placing “right” answers in the scenario (Hayman, 1968).

All scenarios were written to demonstrate obvious cultural differences and sameness between the physician and the patient through the use of proper names and identifying countries of origin. These differences among the scenarios are based on the perceptual components, symbolic value, and dynamic nature of culture (McDaniel, Samovar, & Porter, 2006). In particular, surnames tend to serve as very clear cultural markers (Diene, 2004; King, Ballereau, Schurer, & Jobling, 2006), and research participants in the first phase may identify more or less with a physician or patient based on being marked by names as members of similar or different cultures. Stating countries of origin performs a similar function.

The scenarios were written to demonstrate different cultural contexts – intercultural, cross-cultural, and multicultural contexts – in health care. The scenarios also illustrate the various accommodative responses in health care interactions. In scenario one, Dr. Gupta from Nepal is written so as to negotiate her role as a “doctor”
and attempt to *converge* toward her patient by her communicative style (Street, 1991). She does this by not interrupting the patient and by avoiding bio-medically focused questions in order to meet the needs of Mr. Taylor. In scenario two, Dr. Ashraf is written so that he takes charge of the health care situation while the patient, Mrs. William, played a passive role. Thus, scenario two shows a *complementary* strategy of communication accommodation (Street, 1991). In the third scenario, Dr. Smith is written to be conscious of and to acknowledge the cultural values of Mr. Castillo. She makes the effort to *converge* by adapting her treatment to the unique needs of her patient (Street, 1991). In the fourth scenario, Dr. Best is written to be unaware of the language barrier between him and his patient, Mrs. Singh. In this scenario Dr. Best *diverges* from the patient by ignoring cultural differences and by stereotyping the patient (Street, 1991).

It is important to note that scenarios one, two, and four demonstrate obvious cultural differences (through the use of surname and countries of origin) between the physician and the patient. On the other hand, scenario three could imply that the physician and the patient have the same cultural background. There could be two reasons for such identification: first, nowhere is there any mention of country of origin of the physician and the patient; second, both surnames are common in North America. These subtle differences among the scenarios bring our attention to the symbolic value and culture meaning of identification and to the dynamic nature of perception. After all, “name” could be a very clear cultural marker which the research participants in the first phase might have used as a means to identify more or less with the physician and/or the patient.
The questionnaire consisted of ten closed-ended questions, as well as a number of demographic questions. The survey focused on three key sets of survey questions: perceived likeness of and cultural similarity to the physician, perceived likeness of and cultural similarity to the patient, and the readability and believability of the scenario (see Appendix D). Each series of questions was developed to assess the participants’ perceptions of culturally competent and incompetent scenarios in health care. While formulating the survey questions and response choices, I wanted to “reduce the risk of completely missing fence-sitters and floaters” (Schutt, 2001, p. 220). Fence-sitters are respondents who do not take sides on an issue. Floaters are respondents who are forced to provide an opinion when they really know nothing. These fence-sitters and floaters can skew the survey results if they have no neutral alternative, or other explicit response options, such as “don’t know” and “no opinion,” but must choose between substantive responses (Schutt, 2001). Accordingly, I included a neutral category (“not sure”) in the middle of the substantive response choices to accommodate respondents who did not have a strong opinion on an issue or who lacked knowledge on an issue. The survey also controlled for priming and order effects that influence respondents’ response to the questions (Schutt, 2001). Four versions of the survey were created to control for the measurement of each different scenario. Pre-testing indicated that it took about ten minutes to complete the survey (questionnaire for the survey is attached as Appendix D).

**Sampling**

This first phase of the dissertation research project was conducted on the Athens campus of Ohio University during July and August, 2006. I employed a convenience
sample of undergraduate students enrolled in communication courses “mainly for reasons of cost and expediency” (Gay, 1996, p. 126). This convenience sample of undergraduate students was recruited from summer quarter 2006 course offerings. These records do not name the students, but list instructors and aggregate course enrollment. I chose participants from communication courses because students from across the university enroll in these courses, thus reducing sampling bias (Gay, 1996). The ethnic homogeneity of Ohio University allowed for a clear operationalization of cultural difference. As most of the population could be expected to be white/European American, they would see some of the actors in the scenarios (i.e., Dr. Gupta, Dr. Ashraf, Mr. Castillo, and Mrs. Singh) as being unlike them and other actors (i.e., Mr. Taylor, Mrs. William, Dr. Smith, and Dr. Best) as being like them.

The study was approved by the University Institutional Review Board at Ohio University (see Appendix G). Participants older than eighteen years of age were recruited. No other inclusion or exclusion criteria were used. Each participant made an informed decision to participate in the research study; individuals had the option to not participate in the study. Participants were reminded of the voluntary nature of participation in the study and the fact that they could withdraw or stop taking the survey at any time. Each member of the sample population, excluding those who decided to not participate, had an equal chance of being recruited to complete a survey. Those who participated in the survey received bonus points in their communication course as an incentive for their participation. Those who did not participate in the survey were offered an alternative comparable assignment to obtain the credit.
Data Collection

Participants for this phase of the study were recruited in the following manner. I obtained permission from the Director of the School of Communication Studies to use the records of summer 2005-06 academic year undergraduate level communication courses to choose participants for the study. I then contacted individual instructors and briefly described the study’s purpose, risks, and benefits of participation, compensation, guarantee of confidentiality, and the survey questionnaire to be used. Some of the instructors wanted me to administer the survey in their classrooms during class time. In such cases, I went to the classrooms and provided participants a brief description of the study before having them complete the survey. I explained that their identity would remain confidential, that there would be no anticipated risks or discomforts associated with the surveys, and that no financial compensation accrued. Each participant was given informed consent forms with complete disclosure of the research and was encouraged to provide consent for participation (a copy of the consent form is attached as Appendix D). I was present to answer questions and to help clarify any confusion that the students might have had before completing the survey. Other instructors, those who agreed to administer the survey in their classes, were carefully briefed about the content and the purpose of the study and received detailed instructions regarding survey procedures. Sample selection continued until the sample size reached 175. After screening for completeness and missing values, all the cases produced usable information for the analyses.
Data Analysis

I kept the identity of the participants confidential. The raw data was shared only with the faculty advisor for research purposes. I will not make any identifiable references to the participants, but present data in aggregate form only. The survey data was analyzed using the Statistical Package for the Social Sciences (SPSS for Windows 11.5, 2003). Reliability analysis and one way ANOVA were employed to measure the scenarios that featured examples of cultural competence and cultural incompetence in physician-patient interactions. The findings would help assess perceived similarity between the physician and the patient and the readability and believability of the scenarios. P - values < 0.05 were considered significant. A 95% confidence interval was used in the ANOVA.

Results

This phase of the study involved 175 survey respondents yielding a response rate of 100%. Among them, 50.9 % were male and 49.1% were female. The age ranged from 18 - 48 ($M = 21.4; SD = 3.5$). The majority of the participants self-identified as European-American/white (85.7%), while 5.7% self-identified as African-American/Black, 1.1% as Native American, 1.1% as Hispanic, 2.3% as Asian American, 0.6% as Hawaiian/Pacific Islander, and 4.6% as Other. Participants in this “other” category are likely to be people who are non-Americans, people of two or more racial background, or people who do not identify themselves with any of the given substantive response choices. Although European-Americans predominated, these numbers are reflective of the demographic profile of the undergraduate population of the research site. Full background characteristics of the participants surveyed in the first phase are presented in Table C1.
With a view to “whatever it is measuring, it does consistently” (Best & Kahn, 1993, p. 208), I wanted to draw together people’s perceptions and reactions to the scenarios developed. Thus, I used Chronbach’s (1951) alpha as a common estimate of internal consistency of items in a scale. The reliability estimates were 0.75, 0.81, and 0.68 for the perceived likeness of and cultural similarity to the physician, the perceived likeness of and cultural similarity to the patient, and the believability and readability of the scenarios, respectively.

One-way ANOVA “tests the significance of group differences between two or more means as it analyzes variation between and within each group” (Mertler & Vannatta, 2005, p. 15). Thus, I used a one-way ANOVA to determine whether significant differences in people’s perceptions of likeness of and cultural similarity to the physician, likeness of and cultural similarity to the patient, and the readability and believability of the scenario existed among the four scenarios of cultural competence and incompetence in health care interactions.

H1.1 predicted that the four scenarios would be judged to be equally readable and believable by participants. However, the findings show that participants did not find scenario three to be as believable (scenario one \( M = 1.99, SD = 0.58 \); scenario two \( M = 1.88, SD = 0.74 \); scenario three \( M = 2.55, SD = 0.77, p \leq 0.03 \); scenario four \( M = 2.13, SD = 0.64 \)) as scenarios one, two, and four. The participants did not find the message of scenario three as easy to read (scenario one \( M = 2.06, SD = 0.62 \); scenario two \( M = 2.08, SD = 0.70 \); scenario three \( M = 2.27, SD = 0.91, p \leq 0.61 \); scenario four \( M = 1.87, SD = 0.67 \)) as the other scenarios.
Because participants found scenario three significantly less readable and believable, it was dropped from further analysis. Retaining scenario three would create non-comparable groups in the second phase of the dissertation research. Moreover, even after removing scenario three, the remaining scenarios (one, two, and four) retain the potential cultural differences between the respondent to the scenario and the characters in the scenario and display the three major communication accommodation strategies of convergence (scenario one), complementing (scenario two), and divergence (scenario four) in health care interactions.

H1.2 predicted that participants would judge the physicians (Dr. Gupta and Dr. Ashraf) in scenarios one and two to be less like themselves than the physician (Dr. Best) in scenario four. This hypothesis was confirmed; the findings show that participants found the physician in scenario four to be more like them (scenario one $M = 2.63$, $SD = 0.48$; scenario two; $M = 2.89$, $SD = 0.53$; scenario four $M = 3.36$, $SD = 0.65$, $p = < .05$) than they found the physicians in scenarios one and two to be.

H1.3 predicted that participants would judge the patient (Mrs. Singh) in scenario four to be less like themselves than the patients (Mr. Taylor and Mrs. Williams) in scenarios one and two. This hypothesis was confirmed; the findings show that participants found the patients in scenarios one and two to be more like them (scenario one $M = 2.69$, $SD = 0.54$; scenario two; $M = 2.90$, $SD = 0.54$; scenario four $M = 3.68$, $SD = 0.62$, $p = < .05$) than the patient in scenario four.
Discussion

The first phase of the formative research for the dissertation found that people seem to perceive the four scenarios of cultural competence and incompetence in health care as internally reliable. Cronbach’s alpha of 0.68 for readability and believability of the scenario was accepted as “a first time measure of a concept” (Ulrey & Patricia, 2001, p. 458). Other studies of instrument development and validation have also considered a “moderate alpha level” between 0.60 and 0.70 as acceptable in the early phases of research (e.g., Hart, Stevenson, Montgomery, Muldrew & Chakravarthy, 2005; Lackman, Nieto, & Gliem, 1997; Parrot, Silk, Dillow, Krieger, Harris, & Condit, 2005). The participants, however, did not find all the scenarios to be equally readable and believable (see Appendix B for a comparison of the different scenarios).

The primary objective of this phase of the dissertation research was to gather insights about people’s perceptions of culturally competent and incompetent health care interactions to help develop scenarios to be used in later development of a patient satisfaction instrument to assess physicians’ cultural competence in health care interactions. In the context of development communication, Mody (1991) advocated for an audience participation approach and argued that, “no matter how talented the media producers and campaign designers, if the campaign does not resonate with the audience and meet their needs, it will not be effective” (p. 49). Because scenario three was judged less believable and less readable than the standards, it did not resonate with the audience. The differences between the scenarios that did resonate, however, are useful for scale development.
The findings of this phase demonstrate that the participants saw significant differences between scenarios one, two and, four in their identification with physicians and patients. Recognizing the merit of formative research for health promotion program evaluation, Valente (2002) argued that the researcher must ensure that “the messages created are appropriate for the need identified” (p. 57). Accordingly, to best develop the instruments to assess physicians’ cultural competence in health care in phase two, I eliminated the third scenario and decided to use scenario one, two, and four only.

Limitations

The study sample was limited to one educational institution, in one geographic location, thus limiting the scope for generalization. Nonetheless, the overall study is delimited to one particular region, Appalachian Ohio, and the Ohio University Athens campus in the Athens County is largely representative of the target population. Although the population is also representative of the ethnic and sex make-up of the larger Appalachian Ohio population, the age and educational background of Ohio University students are representative only of the college population, as the population of Appalachian Ohio is older and less well-educated than the Ohio University population. It is possible that socio-cultural factors will affect individuals’ perceptions of health care and health practice. However, this sample of young adults is an important sub-population as they will be the next generation of health care receivers and providers. In addition, the measure of the quality of the scenarios of cultural competence and incompetence in health care interactions was not reliable as desired. More pre-tests would help create
more consistent scenarios, but the scenarios, as written, are satisfactory for the purposes of this dissertation.

Phase Two

The second phase of formative research for the dissertation project involved developing scales to assess public perceptions of physicians’ cultural competence in health care interactions. Recognizing the advantages offered by formative research in terms of pilot-testing evaluation instruments, Valente (2003) argued that “it is wise to conduct considerable formative research and may even be unethical not to do so” (p. 57). Accordingly, the purpose of this phase was to develop scales to assess public perceptions of physicians’ cultural competence in health care interactions. In his study of public understanding of genetics, Bates (2005) found that the public uses public culture to make sense of complex issues like genetics. Bates (2005) argued that “the public must be treated as a complex body that is able to interpret messages about genetic science” (p. 61). Lay understanding of specialized topics in the medical field has been emphasized by other researchers. Dubriwny, Bates, and Bevan (2004) identified the significance of lay understanding of race to “successfully communicate research findings to the lay public” (p. 195). In a similar vein, with the growing interest in public understanding of health issues, I decided to use the scenarios of cultural competence and incompetence in health care interactions developed and tested in the first phase along with a questionnaire to survey culturally diverse members of the public. The goal was to elicit public understanding of cultural competence in health care provider and receiver interactions and refine items to develop survey instruments to be used in the third phase of the
dissertation research to assess patient perceptions of physicians’ cultural competence in health care interactions. As with Bates’s (2005) and Dubriwny, Bates, and Bevan’s (2004) studies on public understanding of genetics, developing a measure with pre-testing with the public will allow me to better encapsulate the complex phenomenon of public perceptions of cultural competence and incompetence in health care interactions and, later, to better communicate the findings of this research to the public.

Study Variables

The dependent variable in this phase was satisfaction with the direct clinical encounter. This variable was measured with Likert-type scale with values 1 = “excellent,” 2 = “very good,” 3 = “good,” 4 = “fair,” and 5 = “poor” (see Appendix E).

The independent variables for the study included culturally competent physician behaviors and ethnocentric cultural views. Each variable was measured using Likert-type responses formatted on a five-point scale, where 1 = “strongly agree,” 2 = “agree,” 3 = “not sure,” 4 = “disagree,” and 5 = “strongly disagree” (see, Appendix E).

The demographic variables included information on age, sex, racial/ethnic background, level of education, yearly household income, health insurance, and number of physician visits in the past year.

Hypotheses

I posit four hypotheses to help refine items to develop survey instruments for use in the third phase of the dissertation research to assess patient perceptions of physicians’ cultural competence in health care interactions.
Wade and Bernstein (1991) found that patients of counselors with cultural sensitivity training are more satisfied with care. As indicated in chapter two, many scholars believe that cultural awareness and physician adaptation should lead to better health care. Accordingly, I expect that patients’ perceptions of physicians’ adaptation toward understanding cultural difference will be associated with participants’ expression of greater satisfaction with the direct clinical encounter. As such, I hypothesize the following:

H2.1: Perceptions of culturally competent physician behavior and perceived satisfaction with direct clinical encounter will be positively correlated.

The Visit Specific Quality (VSQ-9) survey, which includes items related to pre-interaction convenience and direct physician encounter, is used by many researchers and health care organizations as a measure of patient satisfaction with health care (Barr, 2004; Jackson, Chamberlin, & Kroenke, 2001; Maurray-Garcia, et al., 2000; Ware & Hays, 1988). I expect that the quality of pre-interaction experience (e.g., “Getting through to the office by phone”) will have an impact on how people perceive health care interaction with the physician (“The personal manner of the doctor”). All the items in the survey should be equally rated as a composite measure of patient satisfaction with clinical encounter. As such, I hypothesize the following:
H2.2: Participants will report equal ratings of items related to pre-
interaction convenience and direct physician encounter as a composite
measure of patient satisfaction with clinical encounter.

Perloff, et al. (2006) argued that physician-patient communication
influences and is influenced by expectations of, beliefs about, and attitude one
interactant has towards the other (see also Ashton, Haidet, Paterniti, Collins,
Gordon, O'Malley, Petersen, Sharf, Suarez-Almazor, Wray, & Street, 2003;
Street, 2003a). These expectations, beliefs, and attitudes likely form perceptions
of health outcomes, including satisfaction. Accordingly, I expect that participants’
perception of the quality of interpersonal interactions with the physician will have
an impact on how they perceive overall health care interactions. As such, I
hypothesize the following:

H2.3: Participants’ overall visit experience will be positively correlated
with their satisfaction with direct physician encounter.

According to Gudykunst (1952), during intercultural interactions, culture
acts as the filter through which communication passes. He regarded all
intercultural exchanges as ethnocentric. Many other scholars have also observed
ethnocentrism as an intrinsic communicative practice (Lewis, 1985; Lustig &
Koester, 1999; Neuliep, 2006; Segal, 1979; Sumner, 1906). Accordingly, I expect
that participants will have a general tendency to exhibit ethnocentric cultural
views. As such, I hypothesize the following:
H2.4: Participants will display a tendency to strongly identify with ethnocentric cultural statements.

Research Tool

To assess public perceptions of cultural competence in health care provider-receiver interactions, a 57-item (including 8 demographic questions) paper-and-pencil self-administered survey questionnaire was developed. The questionnaire included 23 original items. These questions were informed by existing literature on cultural competence and communication accommodation theory. The questions were also centered on the scenarios of cultural competence and incompetence in health care interactions validated during the first phase. For example, based on their reading of a given scenario, participants were asked if the physician attended to the relationship needs (e.g., “This doctor asks the patient who makes important decisions in his/her family.”) and emotional needs (e.g., “This doctor tries to understand the patient’s feelings.”) of the patient. It is important to note that not all the questions reflect explicit assumptions of cultural competence or incompetence in the health care interaction scenario provided. To explore implicit assumptions participants hold regarding culturally competent or incompetent physician behaviors, participants were allowed to “read into” the scenarios and fill in their assumptions (Hayman, 1968).

Additional items were drawn and adapted from four previously tested and validated measures. The first was a composite, 9-item patient satisfaction instrument that measures the “Visit Specific Quality” (VSQ) of a clinical encounter. The VSQ - 9 survey has been previously validated (alpha = .90 - .93) (Yancy, MacPherson, Hanusa, Switzer,
Arnold, Buranowsky, & Kappor, 2001). The second was a 15-item subset of Hood’s (1982) ethnocentrism scale (alpha = 0.82), an instrument designed to measure the tendency of persons to use their own cultural values to judge others. The third was a 3-item measure for cultural sensitivity between patient and provider (alpha = 0.68) (Ulrey and Amason, 2001). The last was a 6-item measure for general effective intercultural communication (alpha = 0.85) (Redmond and Bunyi, 1993). The survey consisted of closed-ended questions. All questions were evaluated with a five-point Likert-type scale, with higher scores indicating higher levels of intercultural incompetence or dissatisfaction (1 = “strongly agree” to 5 = strongly disagree” or 1 = “excellent” to 5 = “poor”). Participants would read the scenario and then evaluate the physician’s behavior on several dimensions related to cultural competence. Three versions of the survey were created to control for the measurement of each different scenario. Pre-testing indicated that it took about 20 minutes to complete the survey (questionnaire for the survey is attached as Appendix E).

Sampling

This second phase of the dissertation project was conducted in Columbus and Athens, Ohio during August and September, 2006. I planned to invite a substantial population from the Plaza International store (a population consisting primarily of sojourner individuals of Asian and Middle Eastern descent) and Wal-Mart (a population consisting primarily of domestic-born European Americans and African Americans) in Columbus, Ohio to participate in the study to help test the instrument.
The study was approved by the University Institutional Review Board at Ohio University (see Appendix G). Participants older than eighteen years of age were recruited. No other inclusion or exclusion criteria were used. Individuals had the option to not participate in the study and participants were reminded of the fact that they could withdraw or stop taking the survey at any time. Each individual (except those who did not want to participate) had the same possibility to be recruited to complete a survey. Individuals who participated in the survey received a $4 gift certificate for completing the questionnaire. Each participant was provided a copy of the consent form, which was reviewed for them so that participants could obtain a clear and precise description of the nature of their possible involvement in the study. Participants were reminded of the voluntary nature of their participation. Once they decided to participate, they were asked to complete the consent form prior to the survey.

Data Collection

Data collection for this phase of the dissertation research was facilitated by funding obtained from the 2006 School of Communication Studies at Ohio University Summer Research Award. I received $850 in expense reimbursement toward the research work (see Appendix H). Participants for this phase of the study were recruited through stratified purposive sampling (Patton, 1990). The goal was to select particular subgroups based on their ethnic background. Although originally I planned to invite a substantial (n = 100) population from Wal-Mart in Columbus, Ohio to participate in the study, I encountered some obstacles. When contacted, the Wal-Mart manager informed me about their no-solicitation policy. I then met with the manager of Kroger store in Athens, Ohio
and he was very willing to give me space to help support my research. When asked, he stated that he felt any Kroger store would provide the same support. Therefore, I attempted to recruit participants through Kroger stores in Columbus, Ohio. Unfortunately, no Kroger store among the five stores contacted in Columbus agreed to allow me collect data in their store premises because of their no-solicitation policy. I realized that businesses in campus-based cities are more supportive towards the college student. To obtain a large enough sample size, I then decided to use a combination of intercept survey methods (Miller, Wilder, Stillman, & Becker, 1997) and snowball sampling (Patton, 1990) to recruit study participants. By intercepting people in the street, at a public library, at a church, at gas stations, and at international grocery stores and by using personal networks, a total of 77 participants were recruited from Columbus, Ohio yielding a response rate of 77%. Given the low response rate, after consulting with the faculty advisor, I decided to collect more data (n = 130) from Athens, Ohio. In this case, a total of 124 participants (95% response rate) were recruited by intercepting people in College Green, Alden library, a local mosque, and a local apartment complex and by using personal networks. After screening for completeness and missing values, all the cases produced usable information for the final analyses. In the case of both Athens and Columbus, I also relied on referrals from initial volunteers to generate additional participants to meet the desired sample population. This sampling technique can lower search costs and minimize bias while maintaining privacy and confidentiality. Also known as snowball sampling or chain referral sampling, this method is useful in
researching sensitive topics such as perceptions based on ethnicity (Penrod, Preston, Cain, & Starks, 2003).

For the intercept survey method, I first introduced myself and then said, “I am conducting a study for my dissertation project on doctor-patient communication. Your kind participation in the study will help me develop a patient satisfaction survey. You will read a brief story and respond to a number of questions related to and separate from the story. All the information will be kept confidential. There is a $4 gift card in appreciation of your participation. The survey will take about 15 minutes of your time.” In both Columbus and Athens, I would begin with a brief description of the study. I then provided a copy of the consent form and reviewed it with the participants so that they obtained a clear and precise description of the nature of their possible involvement in the study (a copy of the consent form is attached as Appendix E). I explained to the participants that their identity would remain confidential and that there were no known risks or discomforts associated with the surveys. I also reminded them that participation was voluntary. When they decided to participate, I asked them to complete the consent form prior to the survey. When needed, I answered questions and helped clarify any confusion that the participations had before the survey was completed. In cases where personal networks agreed to administer the survey at their convenience, they were carefully briefed about the content and the purpose of the study and received detailed instructions regarding survey procedures.

Participants read the survey and then evaluated the physician’s behavior on several dimensions. Based on a given scenario of cultural competence or incompetence in
health care interactions, the participants were asked to rate 23 items related to the physician’s behaviors. Based on their satisfaction with physicians, the participants were asked to rate 11 items related to pre-interaction convenience, the direct physician encounter, and interaction with nursing and non-nursing staff members (see Appendix E).

Data Analysis

The identity of the participants was kept confidential. I shared the raw data only with the faculty advisor for research purposes. No identifiable references will be made to the participants, and data will be presented in aggregate form only. The survey data was analyzed using Statistical Package for the Social Sciences (SPSS for Windows 11.5, 2003). Hayton, Allen, & Scarpello (2004) argued that “exploratory factor analysis (EFA) is particularly appropriate for scale development” (p. 192). Accordingly, an exploratory factor analysis was employed to assess emergent scales and subscales from the survey items to develop a reliable instrument (Eigenvalues > 1.0, inter-item correlations > 0.60) for assessing public perceptions of physicians’ cultural competence in health care interactions.

Results

This phase of the study involved 201 survey respondents. Among them, 50.2% were male and 49.8% were female. The age ranged from 19-80 ($M = 35.8; SD = 11.9$). A plurality of the participants self-identified as European-American/White (47.3%), while 10.9% self-identified as African-American/Black, 8.0% as Asian American, 2.0% as Hispanic, and 33.8% as Other. This high representation of persons of “other” descent likely reflects the participant’s decision to identify, for example, as Indian or Kenyan
rather than as Asian-American or African American. Thus, a significant proportion of the sample is of international background rather than domestically-born in the United States. Full background characteristics of the participants surveyed in the second phase are presented in Table C2.

The survey items (49) were analyzed through factor analysis and reliability procedures. The factor analysis employed Principal Component Analysis with Varimax rotation. The Barlet test of sphericity suggested that the data met assumptions necessary for factor analysis ($x^2 = 5088.48$ (190), $p < .001$). Based on the Scree Plot (a visual test of identifying factors) and Kaiser’s (1960) Eigenvalue scores (the most widely used criterion to retain factors) for the rotated factor matrix, a three-factor solution emerged as the most parsimonious measure for public perception of physician’s cultural competence (PPPCC) (see Table C4). The first factor contained 16 items related to the physician’s global cultural competence, the second factor contained 4 items related to physician’s patient-centered cultural competence, and the third factor contained 5 items related to patient satisfaction with the direct clinical encounter (see Appendix E). A liberal 60/40 criteria was used for factor loadings. When an item correlated with two or more components, the item was assigned to the component with which it had higher correlation. The three factors collectively accounted for 42.40% of the variance in the scale. The sub-scale that explained the greatest percentage of variance was the physician’s global cultural competence (27%), and, then, the physician’s patient-centered cultural competence (11%), and, last, patient satisfaction with the direct clinical encounter (4.6%).
Items comprising each factor were analyzed for reliability. Using Chronbach’s (1951) alpha, reliability estimates were 0.96, 0.87, and 0.90 for the physician’s global cultural competence, the physician’s patient-centered cultural competence, and patient satisfaction with the direct clinical encounter factors, respectively. All questions for each retained factor were analyzed to determine an overall reliability estimate for the three factors; that procedure resulted in an alpha level of 0.94. Analysis of individual items suggested that no item needed to be deleted from individual factors or the overall scale to improve reliability further.

Finally, Pearson’s correlations were computed for each pairwise combination of factors on the PPPCC scale. Results are reported in Table C6. There was a strong association between the physicians’ global cultural competence and the physician’s patient-centered cultural competence. Some association was found between the physician’s patient-centered cultural competence and patient satisfaction with the direct clinical encounter. However, no association was found between physicians’ global cultural competence and patient satisfaction with the direct clinical encounter.

H2.1 predicted that perceptions of physicians’ culturally competent behaviors and direct clinical encounter would be correlated. Pearson’s correlations indicate that physicians’ global cultural competence and physicians’ patient-centered cultural competence together are not positively associated with patient satisfaction with the direct clinical encounter. The correlation of physician’s global cultural competence ($M = 3.83, SD = 0.90)$ and patient satisfaction with the direct clinical encounter ($M = 2.51, SD. = 0.86$) was not statistically significant $r (180) = .145, p = .052$. However, the correlation of
physician’s patient-centered cultural competence ($M = 3.10$, $SD = 1.03$) and patient satisfaction with the direct clinical encounter ($M = 2.51$, $SD = 0.86$) was statistically significant, $r (195) = .162$, $p = 0.05$.

H2.2 predicted that participants would report equal ratings of items related to pre-interaction convenience and the direct physician encounter as a composite measure of patient satisfaction with clinical encounter. However, findings show that satisfaction with the direct physician encounter emerged as a distinct scale from the composite VSQ-9 patient satisfaction measure to form a separate measure of patient satisfaction with the direct clinical encounter (alpha = 0.91). The pre-interaction VSQ items did not emerge as a distinct scale and inter-item correlations for the pre-interaction were below acceptable levels. Participants did not perceive pre-interaction convenience to be related to satisfaction with physician interaction.

H2.3 predicted that participants’ overall visit experience would correlate with their direct physician encounter experience. Results show that participants do associate the direct physician encounter experience with overall visit satisfaction (0.72 with time spent, 0.67 with satisfaction with explanations, 0.72 with technical competence, and 0.67 with manner overall physician manner). Accordingly, participants’ satisfaction with the overall visit can be reliably combined with perceptions of the direct physician encounter to form a measure of patient satisfaction with the direct clinical encounter.

H2.4 predicted that participants would have a tendency to strongly identify with ethnocentric cultural statements. However, results show that the 15-item ethnocentrism questions did not form a distinct or reliable scale to measure people’s ethnocentric views.
Discussion

In the second phase of the formative research for the dissertation, a three-factor survey instrument emerged as a measure for public perception of physician’s cultural competence (PPPCC). The two original measures are Physician’s Global Cultural Competence (PGCC) and Physician’s Patient-Centered Cultural Competence (PPCCC). The PGCC (alpha = 0.96) includes items which reflect perceptions of the doctor’s awareness and recognition of patients’ cultural difference (e.g., “This doctor wants to know about the patient’s language preference”), perceptions of the physician’s understanding of the dynamics of cross-cultural differences (e.g., “This doctor asks the patient if he/she would feel discomfort if the doctor touches him/her during physical exam”), and perceptions of the physician’s development of cultural knowledge (e.g., “This doctor wants to know about the patient’s cultural background”). The PPCCC (alpha = 0.87) includes items which reflect perceptions of the doctor’s adaptation to patient’s cultural plurality (e.g., “This doctor tries to understand the patient’s emotions,” “This doctor wants to know the patient’s viewpoint on illness”).

The third factor that emerged was a 5-item (questions 5 - 9) subset of the composite 9-item satisfaction scale (VSQ-9) (alpha = 0.91) that measures patient satisfaction with the direct clinical encounter (see Appendix D). Although I added two visit specific questions to the VSQ-9 scale (“Interaction with nursing staff” and “Interaction with non-nursing staff (receptionist)”) to include other actors in the health care process, neither of them met inter-item correlation criteria for inclusion in the PGCC or PPCCC measures, nor could they be combined with already reliable and validated
scales. The pre-interaction convenience items (questions 1 – 4: “Length of time waiting to get an appointment,” “Convenience of the location of the doctor’s office,” “Getting through to the office by phone,” “Length of time waiting at the office,” see Appendix E) did not meet reliability norms to emerge as a separate factor (alpha = 0.63) and one item (“Getting through to the office by phone”) did not factor with the other pre-interaction convenience items (see Appendix E). In a study of racial/ethnic differences in patient satisfaction, Barr (2004), used confirmatory factor analysis and found that a 4-item (questions 5 – 8, see Appendix E) subset of the VSQ-9 to measure satisfaction only with direct physician care was highly reliable (alpha = 0.88). Similar to the findings of this second phase of the dissertation research, Barr found that the pre-interaction subset (questions 1 - 4, see Appendix E) was not a reliable measure. The exploratory factor analysis employed in this study found a higher reliability (alpha= 0.91) of a 5-item (questions 5 - 9, see Appendix E) sub-set of the VSQ-9. The last question in the VSQ-9 scale asks about “the visit overall” (see Appendix E). It appears that direct physician-patient encounter has more impact on people’s overall visit experience rather than does pre-interaction convenience.

The 15-item subset of ethnocentrism scale adapted from Hood (1982) did not emerge as a factor to measure people’s ethnocentricity. Inter-item correlations were unacceptable, and the measure did not factor as predicted by Hood. Most of the questions were specifically targeted towards expatriates (Dodd, 1995). The questions also assumed that the respondent was American (e.g., “American usage of time in business is better than in Africa or South America,” see Appendix E). A few survey respondents, in fact,
asked me as to why I used such questions in the survey. It appears that our communicative practices are driven by both personal and group identities (Hecht & Krieger, 2006).

The PPPCC scale developed in this phase of the study also demonstrates concurrent validity. The PGCC and the PPCCC measures were able to distinguish between scenarios and assign different levels of cultural competence to the physicians in each scenario. PGCC means for the scenarios were the following: scenario 1, \( M = 4.0, SD = 0.89 \); scenario 2, \( M = 3.6, SD = 1.01 \) and, scenario 3, \( M = 3.9, SD = 0.69 \). ANOVA indicates that differences among these scenarios were statistically significant (\( F = 3.40, df = 2, p = .035 \)). PPCCC means for the scenarios were the following: scenario 1, \( M = 2.85, SD = 0.94 \); scenario 2, \( M = 3.08, SD = 1.13 \) and, scenario 3, \( M = 3.47, SD = 0.93 \). ANOVA indicates that differences among these scenarios were statistically significant (\( F = 5.70, df = 2, p = .004 \)).

The results of this phase of the dissertation research show that people do classify dimensions of cultural competence in health care provider-receiver interactions as collective themes related to overall (global) cultural competence and to patient-centered treatment. More apparently, people acknowledge the importance of cultural consciousness that goes beyond culture-specific knowledge to include the ability for the physician to deliver quality health care to individual patients. People also perceive patient-centered care to be significant. Such treatment will allow physicians to care for each person as unique individuals and to adapt health care to their specific contexts. Clearly, the quality of direct encounter with the physician has an impact on how people
perceive overall health care interaction. Thus, the results of this study highlight an
association between perceptions of cultural competence, the interpersonal dynamics of
physician-patient interactions, and satisfaction with health care.

The findings of this phase of the dissertation research will be of particular
importance to those who are working to refine and improve patient satisfaction surveys in
health care. It will also be useful to those seeking to measure health care providers’
progress towards cultural competence. The results of this study can help further research
on developing parameters and specifics of cultural competence interventions for quality
health care delivery and outcome.

Limitations

As the demographic characteristics of the study sample indicates, the educational
attainment of the participants (28.9% hold a college degree) may make it difficult to
predict about studies of people more representative of the general population. For
example, although these educational attainment levels are similar to Athens County
(25.7% hold a college degree) and the City of Columbus (29.0% hold a college degree),
these levels are higher than the overall U.S. (27.2%); they are not representative of many
minority cultural groups (U.S. Bureau of the Census, 2000). The study also warrants
more research to identify specific cultural differences between health care providers and
receivers and to have better understanding of their perceptions of cultural competence. In
addition, the study relied on self-reports of people’s perception of physician behavior.
Further research needs to inquire into physicians’ perceptions of cultural difference and
cultural competence in health care interactions.
Phase Three

Brown, Stewart, and Ryan (2003) outlined “a research agenda for the 21st century” in their discussion of patient-provider interaction research (p. 152). Recognizing the merit of studying the outcomes of patient-provider interaction, they urged researchers to take into consideration certain factors when designing studies on this topic. Among those, I argue that the recommendation that the researcher should develop and refine instruments to assess patient-provider interaction is particularly relevant for this dissertation research. Accordingly, in the third phase of my dissertation research, I attempted to refine and validate the public perception of physician’s cultural competence scale to assess patient perceptions of physicians’ cultural competence in health care interactions. The study used survey procedures among the patient population. In an ideal situation, combining survey methods with interviews of health care receivers would allow a fullest understanding of their perceptions of cultural differences and physicians’ cultural competence in health care interactions. However, performing both survey and interview procedures was not feasible due to issues of time and cost, and was limited by the need for confidentiality in a health care site. Because most studies have documented quantitative measures of patients’ perceptions on health care related issues, using survey responses from patients reflects the dominant practice of collecting information from patients.
Study Variables

The dependent variable in this phase is *satisfaction with the direct clinical encounter* with values 1 = “excellent,” 2 = “very good,” 3 = “good,” 4 = ‘fair,” 5 = “poor” (see Appendix F).

The independent variables for this study include *culturally competent physician behaviors, ethnocentric cultural views, physicians’ communication accommodation behaviors* and *fear of physicians*. Each variable was measured using a Likert-type response format on a five-point scale. The first three independent variables used responses: 1 = “strongly agree,” 2 = “agree,” 3 = “not sure,” 4 = “disagree,” 5 = “strongly disagree.” *Fear of physicians* used values of: 1 = “not at all,” 2 = “somewhat,” 3 = “moderately so,” 4 = “very much so,” 5 = “always” (see Appendix F).

The demographic variables include information on age, sex, racial/ethnic background, level of education, yearly household income, health insurance, number of physician visits in the past year, and the place of birth.

Hypotheses and Research Question

In this third phase of the dissertation research, I investigated the potential role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions in the context of Appalachian Ohio. Based on the research questions posed in chapter two and evidence in existing literature, I hypothesize:
H3.1: Intercorrelations among perceptions of cultural competence, communicative accommodation strategies, ethnocentricity, fear of physicians, and patient satisfaction with the direct clinical encounter will emerge. This general hypothesis was divided into seven specific hypotheses.

As mentioned in phase two, several studies (Norman, 1999; Wade & Bernstein, 1991) have examined the connection between cultural competence and health care outcomes and found some association between culturally competent and sensitive care and patient satisfaction. Accordingly, I expect a positive association between higher levels of perceptions of physicians’ cultural competence, the interpersonal dynamics of physician-patient interactions, and patient satisfaction with health care. As such, I hypothesize the following:

H3.1A Patients who perceive that their physicians have high levels of cultural competence, both global and patient-centered, will report higher levels of patient satisfaction with the direct clinical encounter than will patients who perceive their physicians have low levels of cultural competence.

While convergent accommodation in doctor-patient interactions is characterized by communicative involvement, divergent accommodation reinforces “doctors’ control over patients in the interaction” (Street, 1991, p. 145). Street (2003a) argued that active participation during medical consultations can bring better health care outcomes for patients than for patients who are more passive. Accordingly, I expect that perceptions of higher levels of physicians’ cultural competence will be experienced when communicative convergence is
employed and lower levels will be experienced when communicative divergence is employed. As such, I hypothesize the following:

H3.1B: Higher levels of perceived physician’s cultural competence, both global and patient-centered, will be reported when physicians are perceived to use communication accommodation strategies that converge and lower levels will be reported when physicians are perceived to use communication accommodation strategies that diverge.

Patient satisfaction can be fostered by doctor-patient communicative convergence (Street, 1991). Accordingly, I expect that higher levels of patient satisfaction will be expressed when communication accommodation strategies that converge are used by physicians and lower levels will be experienced when communication accommodation strategies that diverge are used by physicians. As such, I hypothesize the following:

H3.1C: Higher levels of patient satisfaction will be reported when physicians are perceived to use communication accommodation strategies that converge and lower levels will be reported when physicians are perceived to use communication accommodation strategies that diverge.

Studies have documented the role of ethnicity in physician-patient communication (Perloff, et al., 2006; Street, 2003a). Street (2003a) considered ethnic differences between physician and patient to be a serious obstacle to physician-patient interactions, “especially if one holds negative attitudes toward the other’s ethnicity” (p. 79). I expect that a patient’s ethnocentric views will be
negatively associated with perceptions of physicians’ culturally competent
behaviors. As such, I hypothesize the following:

H3.1D: Patient’s ethnocentricity will be negatively associated with perceived
physician’s cultural competence, both global and patient-centered.

Similar to H3.1D, I expect that patients who believe their culture to be
superior to the culture of others will report decreased levels of patient satisfaction
with health care. As such, I hypothesize the following:

H3.1E: Lower levels of patient satisfaction with the direct clinical encounter will
be reported when patients have higher levels of ethnocentricity.

Physician-patient communicative practices are formed by particular
perceptions, expectations, and attitudes that each interactant brings to the medical
encounter (Perloff, et al., 2006). Mistrust and fear of physicians are compounded
by cultural differences, particularly by religious and relational aspects of care
(Perloff, et al., 2006). I expect that higher levels of fear of physicians will result in
lower levels of patient satisfaction with the direct clinical encounter. As such, I
hypothesize the following:

H3.F: Lower levels of patient satisfaction with direct clinical encounter will be
reported when patients have higher levels of fear of physicians.

Since a sense of anxiety and fear can influence physician-patient
communication, I expect that patient’s fear of physicians will be negatively
associated with perceptions of higher levels of physicians’ culturally competent
behaviors. As such, I hypothesize the following:
H3.1G: Patient’s fear of physicians will be negatively associated with higher levels of perceived physician’s cultural competence, both global and patient-centered.

Many unobserved variables can have a direct influence on the dependent variable or can influence the connection between the independent and the dependent variables. For instance, in their study of physicians’ and patients’ evaluation of physicians’ explanations in medical encounters, Hagihara, Tarumi, and Nobutomo (2006) found patient gender and physicians’ clinical experience to be significant predictor variables. In another study of cancer patients’ satisfaction with perceived quality of care, Davidson, and Mills (2004) found that age had a significant effect on such patient perception. Accordingly, I want to know whether many variables can influence patient satisfaction and whether these variables do so in different ways. As such, I pose the following question:

RQ3.1: What, if any, of the demographic variables and the independent variables best predict patient satisfaction with the direct clinical encounter?

Research Tool

To assess patient perceptions of physicians’ cultural competence, a 83-item (including 9 demographic questions) paper-and-pencil self-administered survey questionnaire was developed. Survey items were drawn from the newly developed three-factor solution to measure public perceptions of physicians’ cultural competence in health care interactions. Together with this PPPCC scale developed in phase two, I also tested previously validated measures of ethnocentrism and fear of physicians to assess patients’
perceptions of physicians’ cultural competence in health care interactions. McDaniel, Samover, and Potter (2006) viewed culture as ethnocentric. Studies have recognized that people’s communicative practices are governed by their group identity alongside and with their personal identity (Hecht & Krieger, 2006). Studies have also identified “the nature of physician-patient relationship as a meeting of people of difference” (Cline & McKenzie, 1998, p. 61). Hence, I used the Generalized Ethnocentrism Scale (alpha = .80-.90) (Neuliep & McCroskey, 1997) to assess possible cultural differences in such interactions resulting from a patient’s “strong sense of group attachment,” “enculturation,” and/or “underexposure to other cultures” (McDaniel, Samover, and Potter, 2006, pp. 11-12). I also used the Fear of Physician Scale (alpha = .90) (Richmond, Smith, Heisel, & McCroskey, 1998) to examine how patients’ perceived fear of physicians interacts with cultural differences between physicians and patients and how it may influence patients’ perceptions of physicians’ cultural competence in health care interactions. Inclusion of this scale in the survey will also account for patients’ perceptions of physicians’ communication accommodation based on the relative power distance between the patient and the physician.

Finally, to assess strategies of communication accommodation in health care interactions, I adapted 26 items from Watson and Gallois’ (1998) questionnaire of health professionals’ goals (attention to relationship needs, emotional needs, communicative competence, and role relationship) and health professionals’ sociolinguistic strategies (discourse management, emotional expression, interpretability, interpersonal control). The inclusion of the Generalized Ethnocentrism Scale, the Fear of Physician Scale, and
the communication accommodation goals and strategies items in a patient satisfaction survey make an important contribution by way of including additional variables that are unique to this study to operationalize cultural competence in health care. The survey consisted of structured, closed-ended questions and employed Likert-type scales. Pre-testing indicated that it took about 20 minutes to complete the survey (questionnaire for the survey is attached as Appendix F).

Setting

The study was conducted in three Appalachian Ohio Counties - Athens, Jackson, and Gallia. The specific health care sites studied were in the cities of Athens, Jackson, and Gallipolis. Although all three are in Appalachian counties, the economics of these three Counties differ. Athens is driven economically by the presence of Ohio University and Hocking College, while Jackson retains manufacturing as its primary economic base, and Gallipolis has a dominant service industry. Athens also has a larger transient population, owing to the presence of Ohio University and Hocking College, while Jackson and Gallipolis have less transient populations. These differences will allow me to document any unique or diverse variations in the populations that may result from their adaptation to different conditions or to identify important common patterns that may cut across these variations.

Sampling

Participants (N = 310) for this phase of the study were recruited through a combination of purposive sampling and representative sampling (Kolodinsky & LaBrecque, 1996) from the patient base at Holzer Clinics in Athens (n = 100), Jackson (n
= 103), and Gallipolis (n = 103) during November, 2006. In this third phase of the dissertation research, I wanted to refine items in the survey instruments to assess patient perception of cultural competence in health care interactions in an Appalachian Ohio context. Employing a purposive sampling method, “which may be used to select sampling units at one stage of a multistage sample that uses a probability-based method for selecting elements” (Schutt, 2001, p. 134), I relied on referrals from personal networks to contact physicians and business administrators at Holzer Clinics in Athens, Jackson, and Gallipolis to allow me to conduct surveys with patients in their clinics. After securing permission from Holzer Clinics in those three cities, I used a representative sampling method to select participants to fill out the surveys (Schutt, 2001).

I secured approval for the study from the Institutional Board Review at Ohio University (see Appendix G). Patients older than eighteen years of age were recruited. No other inclusion or exclusion criteria were used. Each individual (except those who did not want to participate) had the same possibility to be recruited to complete a survey. This study did not pose any risk or discomfort to participants. Potential participants were assured that involvement in the study was strictly voluntary and that they had the option to decline participation at any point. Participants did not receive any direct benefit from participation. They were told that the information they shared could contribute to improving patient-provider communication. Individuals who participated in the survey received $5 gift card for their participation, regardless of whether or not they completed the survey. The consent process occurred before conducting the survey. Each participant
was given informed consent forms with complete disclosure of the research to encourage for voluntary participation.

Data Collection

Data collection for this phase of the dissertation research was facilitated by funding obtained from the Scripps College of Communication - Ohio Division of the American Cancer Society (ACS) Partnership in 2006. I received a total of $1,500 in expense reimbursement toward the research work (see Appendix H). I contacted University Medical Associates in Athens and Holzer Clinics in Athens, Jackson, and Gallipolis to solicit their willingness to serve as a data collection site by allowing me to conduct surveys with their patients in their waiting rooms. Although I received positive responses from both places, I collected data from Holzer Clinic only because they responded first and because collecting data from the same facility at different locations will allow for more comparable groups.

To conduct surveys with patients in the waiting rooms, I first introduced myself and then said, “I am conducting a study for my dissertation project on doctor-patient communication. Your kind participation in the study will help me develop a patient satisfaction survey. You will respond to a number of questions. I will keep all the information confidential. There is a $5 gift card in appreciation of your participation. The survey will take about 20 minutes of your time.” In Holzer Clinics in Athens, Jackson, and Gallipolis, where I directly administered the survey, I would begin with a brief description of the study. I then provided a copy of the consent form and reviewed it with the participants so that they obtain a clear and precise description of the nature of their
involvement in the study. I explained to the participants that their identity would remain confidential and that there were no known risks or discomforts associated with the research so that they could make an informed decision to participate in the research. I reminded them that participation was voluntary. If they decided to participate, I asked them to complete the consent form prior to the survey (a copy of the consent form is attached as Appendix F). I answered questions that individuals had before the survey was completed.

Participants read the survey and then evaluated physician behavior on several dimensions. Based on their understanding of culture, the participants were asked to rate fifteen items on the Ethnocentrism scale. Based on their feelings when they communicate with their physicians, the participants were asked to rate five items on the Fear of Physician scale. Based on their most recent experience with a physician, the participants were asked to rate 26 items pertaining to communication accommodation goals and communication accommodation sociolinguistic strategies. Based on their satisfaction with their most recent physician visit, the participants were asked to rate five items on the Patient Satisfaction with the Direct Clinical Encounter scale. Based on their most recent experience with a physician, the participants were asked to rate twenty items on the PPPCC scale. The participants were also asked (3 questions) to provide information on their perceptions of their physicians’ Appalachian background, racial/ethnic background, and U.S. background. Participants also completed nine demographic items about themselves (see Appendix F).
Data Analysis

I kept the identity of the participants confidential. The raw data was shared only with the faculty advisor for research purposes. I will not make any identifiable references to the participants, but present data in aggregate form only. The survey data was analyzed using Statistical Package for the Social Sciences (SPSS for Windows 11.5, 2003). Exploratory factor analysis was employed to assess emergent scales and subscales from the items (74) to develop a reliable instrument (Eigenvalues > 1.0, inter-item correlations > 0.60) for assessing patient perceptions of physicians’ cultural competence in health care interactions. I also ran ANOVA, median split analysis, and multiple regressions for more powerful results.

I compared patient satisfaction with the direct clinical encounter using a median split procedure to divide the patients into two groups for each independent variable of interest: high and low on the basis of their perceived levels of ethnocentrism, their fear of physicians, the physician’s global cultural competence related to macro cultural issues, the physician’s global cultural competence related to proxemics/chronemics, the physician’s global cultural competence related to language issues, and the physician’s patient-centered cultural competence. The median split was used for the independent variables, while unsplit data was used for the dependent variables.

Using the split sample, I ran one-way ANOVA for patient satisfaction with the direct clinical encounter, the physician’s global cultural competence related to macro cultural issues, the physician’s global cultural competence related to proxemics/chronemics, the physician’s global cultural competence related to language
issues, and physician’s patient-centered cultural competence among different levels of physicians’ use of communication accommodation strategies.

Results

This phase of the study involved 310 survey respondents yielding a response rate of 100%. However, after screening for completeness and missing values, 306 cases were used for the final analyses; four surveys were incomplete. Among the respondents, 26.5% were male and 73.5% were female. The age ranged from 18-92 ($M = 44.1; SD = 16.8$). The majority of the participants self-identified as European-American/white (83.0%), while 2.3% self-identified as African-American/Black, 11.8% as Native American, 1.0% as Hispanic, 0.3% as Asian American, 0.6% and 2.6% as Other. Participants who identified themselves as “other” may include people who are non-Americans, people of two or more racial background, and people who do not identify themselves with any of the given substantive response choices. 64.4% of the participants self identified as from being Appalachia and 29.4% self identified as being not from Appalachia, while 12% self identified as being from “outside the U.S.” Full background characteristics of the participants surveyed in the third phase are presented in Table C3.

I analyzed the survey items (74) using factor analysis and reliability procedures. The factor analysis employed Principal Component Analysis with Varimax rotation. The Barlet test of sphericity suggested that the data met assumptions necessary for factor analysis ($\chi^2 = 4871.70$ (190), $p < .001$). Based on the Scree Plot (a visual test of identifying factors) and Kaiser’s (1960) Eigenvalue scores (the most widely used criterion to retain factors) for the rotated factor matrix, a five-factor solution emerged as
the most parsimonious measure for the physicians’ cultural competence for patient satisfaction (PCCPS) scale (see Table C5). The first factor contained five items measuring the physician’s global cultural competence related to macro cultural issues, the second contained three items measuring the physician’s global cultural competence related to proxemics/chronemics, the third contained three items measuring the physician’s global cultural competence related to language issues, the fourth contained four items measuring the physician’s patient-centered cultural competence, and the fifth contained five items measuring patient satisfaction with the direct clinical encounter (see Table C5). I used a liberal 60/40 criteria for factor loadings. In case an item correlated with two or more components, I assigned that item to the component with which it had higher correlation. The five factors collectively accounted for 65.43% of the variance in the scale. In descending order, the sub-scales that explained the greatest percentage of variance were patient satisfaction with the direct clinical encounter (28.74%), physicians’ global cultural competence related to macro cultural issues (20.99%), physicians’ patient-centered cultural competence (5.90%), physicians’ global cultural competence related to proxemics/chronemics (5.63%), and physicians’ global cultural competence related to language issues (4.16%).

Reliability estimates were calculated for the items comprising each factor. Using Chronbach’s (1951) alpha, the reliability estimate for physician’s global cultural competence related to macro cultural issues was 0.90 for physicians’ global cultural competence related to proxemics/chronemics 0.73 for physicians’ global cultural competence related to language issues 0.79, physicians’ patient-centered cultural
competence was 0.90, and for patient satisfaction, with the direct clinical encounter was 0.95. I analyzed every question for each retained factor to determine an overall reliability estimate for the five factors; that procedure resulted in an alpha level of 0.85. Analysis of individual items suggested that no item needed to be deleted from individual factors or the overall scale to improve reliability further. Alpha levels of the Ethnocentrism and Fear of Physician Scales were 0.82 and 0.86, respectively.

Pearson’s correlations were computed for each pairwise combination of factors on the PCCPS scale. Results are reported in Table C7. Physicians’ global cultural competence related to macro cultural issues was strongly associated with physicians’ global cultural competence related to proxemics/chronemics and physicians’ global cultural competence related to language issues, and some association with physicians’ patient-centered cultural competence was found. Physicians’ global cultural competence related to proxemics/chronemics was strongly associated with physicians’ global cultural competence related to language issues, physicians’ patient-centered cultural competence, and patient satisfaction with the direct clinical encounter. Physicians’ global cultural competence related to language issues was strongly associated with physicians’ patient-centered cultural competence. Physicians’ patient-centered cultural competence was strongly associated with patient satisfaction with the direct clinical encounter. However, no associations were found between physicians’ global cultural competence related to macro cultural issues and patient satisfaction with the direct clinical encounter or between physicians’ global cultural competence related to language issues and patient satisfaction with the direct clinical encounter.
H3.1 predicted that intercorrelations among perceptions of cultural competence, communicative accommodation strategies, ethnocentrism, fear of physicians, and patient satisfaction with the direct clinical encounter would emerge. Pearson’s correlations indicated that the positive correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and physicians’ global cultural competence related to macro cultural issues (\(M = 3.54, SD = 0.90\)) was statistically significant, \(r (302) = .209, p = 0.01\). The positive correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and physicians’ global cultural competence related to language issues (\(M = 3.57, SD = 0.90\)) was statistically significant, \(r (302) = .117, p = 0.05\). The negative correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and physicians’ patient-centered cultural competence (\(M = 2.13, SD = 0.87\)) was statistically significant, \(r (304) = -.233, p = 0.01\). The negative correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and patient satisfaction with the direct clinical encounter (\(M = 1.98, SD = 0.89\)) was statistically significant, \(r (305) = -.224, p = 0.01\). However, the correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and patients’ fear of physicians (\(M = 14.95, SD = 2.23\)) was not statistically significant, \(r (304) = -.096, p = 0.96\). The correlation of perceptions of ethnocentrism (\(M = 54.17, SD = 8.37\)) and physicians’ global cultural competence related to proxemics/chronemics (\(M = 3.20, SD = 1.03\)) was not statistically significant, \(r (305) = -.023, p = .698\).
The negative correlation of patient’s fear of physicians \((M = 14.95, SD = 2.23)\) and physicians’ global cultural competence related to proxemics/chronemics \((M = 3.20, SD = 1.03)\) was statistically significant, \(r (305) = -.143, p = 0.05\). The negative correlation of patients’ fear of physicians \((M = 14.95, SD = 2.23)\) and physicians’ patient-centered cultural competence \((M = 2.13, SD = 0.87)\) was statistically significant, \(r (304) = -.122, p = 0.05\). The negative correlation of patients’ fear of physicians \((M = 14.95, SD = 2.23)\) and patient satisfaction with the direct clinical encounter \((M = 1.98, SD = 0.89)\) was statistically significant, \(r (305) = -.166, p = 0.01\). However, the correlation of patients’ fear of physicians \((M = 14.95, SD = 2.23)\) and physicians’ global cultural competence related to macro cultural issues \((M = 3.54, SD = 0.90)\) was not statistically significant, \(r (302) = -.013, p = .822\). The correlation of patients’ fear of physicians \((M = 14.95, SD = 2.23)\) and physicians’ global cultural competence related to language issues \((M = 3.57, SD = 0.90)\) was not statistically significant, \(r (302) = -.036, p = .530\).

The correlation of physicians’ global cultural competence related to macro cultural issues \((M = 3.54, SD = 0.90)\) and physicians’ global cultural competence related to proxemics/chronemics \((M = 3.20, SD = 1.03)\) was statistically significant, \(r (305) = .442, p = 0.01\). The correlation of physicians’ global cultural competence related to macro cultural issues \((M = 3.54, SD = 0.90)\) and physicians’ global cultural competence related to language issues \((M = 3.57, SD = 0.90)\) was statistically significant, \(r (302) = .626, p = 0.01\). The correlation of physicians’ global cultural competence related to macro cultural issues \((M = 3.54, SD = 0.90)\) and physicians’ patient-centered cultural competence \((M =
2.13, $SD = 0.87$) was statistically significant, $r (304) = .144$, $p = 0.05$. However, the correlation of physicians’ global cultural competence related to macro cultural issues ($M = 3.54, SD = 0.90$) and patient satisfaction with the direct clinical encounter ($M = 1.98, SD = 0.89$) was not statistically significant, $r (305) = .005, p = .932$.

The correlation of physicians’ global cultural competence related to proxemics/chronemics ($M = 3.20, SD = 1.03$) and physicians’ global cultural competence related to language issues ($M = 3.57, SD = 0.90$) was statistically significant, $r (302) = .500, p = 0.01$. The correlation of physicians’ global cultural competence related to proxemics/chronemics ($M = 3.20, SD = 1.03$) and physicians’ patient-centered cultural competence ($M = 2.13, SD = 0.87$) was statistically significant, $r (304) = .274, p = 0.01$. The correlation of physicians’ global cultural competence related to proxemics/chronemics ($M = 3.20, SD = 1.03$) and patient satisfaction with the direct clinical encounter ($M = 1.98, SD = 0.89$) was statistically significant, $r (305) = .203, p = 0.01$.

The correlation of physicians’ global cultural competence related to language issues ($M = 3.57, SD = 0.90$) and physicians’ patient-centered cultural competence ($M = 2.13, SD = 0.87$) was statistically significant, $r (304) = .181, p = 0.01$. However, the correlation of physician’s global cultural competence related to language issues ($M = 3.57, SD = 0.90$) and patient satisfaction with the direct clinical encounter ($M = 1.98, SD = 0.89$) was not statistically significant, $r (305) = .070, p = .229$. The correlation of physicians’ patient-centered cultural competence ($M = 2.13, SD = 0.87$) and patient
satisfaction with the direct clinical encounter ($M = 1.98$, $SD = 0.89$) was statistically significant, $r (305) = .596$, $p = 0.01$.

Although correlations show potential relationships among variables, more specific tests allow deeper investigation of these other predictions and causal relationship.

H3.1A predicted that patients who perceived that their physicians have high levels of cultural competence, both global and patient-centered, would report higher levels of patient satisfaction with direct clinical encounter than would patients who perceived their physicians to have low levels of cultural competence.

A statistical experiment was conducted to determine whether perceived levels of physicians’ global cultural competence related to macro cultural issues influenced patient satisfaction with the direct clinical encounter. The experiment compared two groups of persons who perceived high levels of physicians’ global cultural competence related to macro cultural issues to persons who perceived low levels. Participants’ (n= 302) mean and median perception scores of physicians’ global cultural competence related to macro cultural issues scores were 3.54 and 3.60, respectively. The cut-off level was set to $\leq 3.60$ for the high group and $>3.601$ for the low group. A one-way ANOVA was used to determine whether significant differences in patients’ satisfaction existed between the two groups. The Omnibus F test was not significant, $F = 0.07$, (1, 299), $p = .794$, which indicates that no significant difference was present.

A statistical experiment was conducted to determine whether perceived levels of physicians’ global cultural competence related to proxemics/chronemics influenced
patient satisfaction with the direct clinical encounter. The experiment compared persons who perceived high levels of physicians’ global cultural competence related to proxemics/chronemics to persons who perceived low levels. Participants’ (n= 305) mean and median perception scores of physicians’ global cultural competence related to proxemics/chronemics were 3.20 and 3.33, respectively. The cut-off level was set to ≤3.3999 for the high group and >3.34 for the low group. A one-way ANOVA was used to determine whether significant differences in patients’ satisfaction existed between the two groups. The Omnibus F test was significant, $F = 6.32$, (1, 302), $p = .012$, which indicates that significant differences were present. As indicated by the means reported in Table C12, persons who perceived high levels of physicians’ global cultural competence related to proxemics/chronemics ($M = 2.13, SD = 0.95$) reported higher patient satisfaction than did persons who perceived lower levels of physician’s global cultural competence related to proxemics/chronemics ($M = 1.87, SD = 0.84$). The findings suggest that as perceived levels of physicians’ global cultural competence related to proxemics/chronemics increase, patient satisfaction increases.

A statistical experiment was conducted to determine whether perceived levels of physicians’ global cultural competence related to language issues influenced patient satisfaction with the direct clinical encounter. The experiment compared persons who perceived high levels of physicians’ global cultural competence related to language issues to persons who perceived lower levels. Participants’ (n= 302) mean and median perception scores of physicians’ global cultural competence related to language issues were 3.57 and, 3.66 respectively. The cut-off level was set to ≤3.666 for the high group
and $>3.667$ for the low group. The Omnibus F test was not significant, $F = 0.40, (1, 299)$, $p = .529$, which indicates that no significant difference was present.

A statistical experiment was conducted to determine whether perceived levels of physicians’ patient-centered cultural competence influenced patient satisfaction with the direct clinical encounter. The experiment compared persons who perceived high levels of physicians’ patient-centered cultural competence to persons who perceived lower levels. Participants’ (n= 304) mean and median perception scores of physician’s patient-centered cultural competence were 2.13 and 2.00, respectively. The cut-off level was set to $\leq 2.13$ for the high group and $>2.00$ for the low group. A One-Way ANOVA was used to determine whether significant differences in patients’ satisfaction existed between the two groups. The Omnibus F test was significant, $F = 61.89, (1, 301)$, $p <.05$, which indicates that significant differences were present. As indicated by the means reported in Table C14 persons who perceived high levels of physicians’ patient-centered cultural competence ($M = 2.42$, $SD = 0.88$) reported higher patient satisfaction than did persons who perceived lower levels of physicians’ patient-centered cultural competence ($M = 1.67$, $SD = 0.76$). The findings suggest that as perceived levels of physicians’ patient-centered cultural competence increase, patient satisfaction increases.

In sum, H3.1A was partially confirmed; perceptions of greater cultural competence in the areas of proxemics/chronemics and of physician’s patient-centeredness positively influence patient satisfaction with the direct clinical encounter.

H3.1B predicted that higher levels of perceived physicians’ cultural competence, both global and patient-centered, will be reported when physicians
are perceived to use communication accommodation strategies (CAT strategies) that converge and lower levels will be reported when physicians are perceived to use communication accommodation strategies that diverge. This hypothesis was not supported; indeed, with regard to the use of certain strategies, the opposite was found when differences were present. The convergent and divergent CAT strategies did not emerge as a scale for patients’ satisfaction of physicians’ cultural competence. Since the CAT strategies used in this dissertation did not form a reliable index, each strategy was used separately to tease out and tap into nuances of the perceived physician-patient communicative behavior during health care interactions.

ANOVA results show that patients who perceived that their physicians often used the CAT strategy of “Treating the patient as an equal” reported lower levels of perceived physicians global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C15). The Omnibus F test, however, was not significant, $F = 0.75, (4, 297), p = .560, \eta^2 = .010$, which indicates that no statistically significant main effect was detected and the power for the non-significant main effect was small, thus indicating a small possibility of Type II error, “the error of failing to reject the null hypothesis when it is false” (Pyrczak, 2001, p. 83).

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an equal” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who
perceived their physicians did not use this CAT strategy (see Table C15). The Omnibus F test was significant, $F = 2.41, (4, 300), p = .049, \eta^2 = .031$, which indicates that a statistically significant main effect was detected. The power for the main effect was small, thus indicating the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an equal” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C15). The Omnibus F test was not significant, $F = 1.13, (4, 297), p = .345, \eta^2 = .015$, which indicates that no statistically significant main effect was detected and the power for the non-significant main effect was small, thus indicating the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an equal” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C15). The Omnibus F test was significant, $F = 18.71, (4, 299), p < .05, \eta^2 = .200$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was relatively large, thus, to some extent, reducing the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Maintaining a good relationship with the patient” reported lower levels of
perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C16). The Omnibus F test was not significant, $F = 1.22, (4, 297), p = .303, \eta^2 = .016$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was relatively small, thus, to some extent, indicating the possibility of a Type II error.

Patients who perceived that their physician often used the CAT strategy of “Maintaining a good relationship with the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C16). The Omnibus F test was not significant, $F = 2.96, (4, 300), p = .020, \eta^2 = .038$, which indicates that statistically significant main effect was detected. The power for the main effect was relatively small, thus, to some extent, indicating the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Maintaining a good relationship with the patient” reported lower levels of physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C16). The Omnibus F test was not significant, $F = 3.74, (4, 297), p = .005, \eta^2 = .048$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of a Type I error.
Patients who perceived that their physician often used the CAT strategy of “Maintaining a good relationship with the patient” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C16). The Omnibus F test was significant, $F = 19.03$, (4, 299), $p = .< .05$, $\eta^2 = .203$, which indicates that a significant main effect was detected. The power for the significant main effect was relatively large, thus, to some extent, reducing the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an individual” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C17). The Omnibus F test was not significant, $F = 0.80$, (4, 297), $p = .527$, $\eta^2 = .011$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of a Type II error.

Patients who perceived that their physician who often used the CAT strategy of “Treating the patient as an individual” reported lower levels of perceived physician’s global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C17). The Omnibus F test was significant, $F = 2.73$, (4, 300), $p = .030$, $\eta^2 = .035$, which indicates that a statistically significant
main effect was detected. The power for the main effect was small, thus indicating the possibility of a Type I error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an individual” reported lower levels of perceived physician’s global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C17). The Omnibus F test was not significant, \( F = 0.69, (4, 297), p = .599, \eta^2 = .009 \), which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of a Type II error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an individual” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C17). The Omnibus F test was significant, \( F = 17.24, (4, 299), p = < .05, \eta^2 = .187 \), which indicates that a statistically significant main effect was detected. The power for the significant main effect was relatively large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Asking questions of the patient” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C18). The Omnibus F test was not significant, \( F = 0.58, (5, 296), p = .716, \eta^2 = .010 \), which
indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Asking questions of the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceive their physicians did not use this CAT strategy (see Table C18). The Omnibus F test was significant, $F = 3.68, (5, 299), p = .003, \eta^2 = .058$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate indicating the possibility of a Type I error.

Patients who perceived that their physician who often used the CAT strategy of “Asking questions of the patient” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C18). The Omnibus F test was not significant, $F = 1.65, (5, 296), p = .148, \eta^2 = .027$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of a Type II error.

Patients who perceived that their physician often used the CAT strategy of “Asking questions of the patient” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C18). The Omnibus F test was significant, $F = 15.68, (5, 298), p = .< .05, \eta^2 = .208$, which indicates that a
statistically significant main effect was detected. The power for the significant main effect was relatively large, thus, to some extent, reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Reassuring the patient” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C19). The Omnibus F test was not significant, $F = 0.87$, $(4, 296)$, $p = .485$, $\eta^2 = .012$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Reassuring the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C19). The Omnibus F test was not significant, $F = 1.64$, $(4, 299)$, $p = .164$, $\eta^2 = .021$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Reassuring the patient” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceive
their physicians did not use this CAT strategy (see Table C19). The Omnibus F test was not significant, \( F = 2.11, (4, 296), p = .079, \eta^2 = .028 \), which indicates that statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Reassuring the patient” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C19). The Omnibus F test was significant, \( F = 21.33, (4, 298), p = .001, \eta^2 = .223 \), which indicates that a statistically significant main effect was detected. The power for the significant main effect was relatively large, thus, to some extent, reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Showing liking for the patient” reported lower levels of perceived physician’s global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C20). The Omnibus F test was not significant, \( F = 16.44, (5, 298), p = .602, \eta^2 = .012 \), which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that the physician often used the CAT strategy of “Showing liking for the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived
their physicians did not use this CAT strategy (see Table C20). The Omnibus F test was significant, $F = 3.54$, (5, 298), $p = .004$, $\eta^2 = .056$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Showing liking for the patient” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C20). The Omnibus F test was not significant, $F = 1.89$, (5, 295), $p = .097$, $\eta^2 = .031$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Showing liking for the patient” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C20). The Omnibus F test was significant, $F = 11.37$, (5, 297), $p = .<.05$, $\eta^2 = .161$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate to large, thus having the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Reducing the patient’s anxiety” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C21). The
Omnibus F test was not significant, $F = 0.35, (5, 296), p = .881, \eta^2 = .006$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Reducing the patient’s anxiety” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C21). The Omnibus F test was not significant, $F = 1.51, (5, 299), p = .185, \eta^2 = .025$, which indicates that statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Reducing the patient’s anxiety” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C21). The Omnibus F test was not significant, $F = 2.35, (5, 296), p = .041, \eta^2 = .038$, which indicates that statistically significant main effect was detected. The power for the main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Reducing the patient’s anxiety” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C21). The Omnibus F test
was significant, $F = 19.33, (5, 298), p = < .05$, $\eta^2 = .245$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was somewhat large, thus, to some extent, reducing the possibility of Type I error.

Patients who perceived that their physician often uses the CAT strategy of “Expressing himself/herself clearly to the patient” reported little difference in their perception of physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C22). The Omnibus F test was not significant, $F = 1.06, (4, 297), p = .377$, $\eta^2 = .014$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Expressing himself/herself clearly to the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C22). The Omnibus F test was not significant, $F = 2.03, (4, 300), p = .090$, $\eta^2 = .026$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Expressing himself/herself clearly to the patient” reported little difference in levels of
perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C22). The Omnibus F test was not significant, $F = 1.75$, $(4, 297)$, $p = .140$, $\eta^2 = .023$, which indicates that statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Expressing himself/herself clearly to the patient” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C22). The Omnibus F test was significant, $F = 11.81$, $(4, 299)$, $p = < .05$, $\eta^2 = .136$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate to large, thus, reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Checking to see if the patient understands him/her” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C23). The Omnibus F test was not significant, $F = 0.39$, $(4, 297)$, $p = .891$, $\eta^2 = .005$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Checking to see if the patient understands him/her” reported lower levels of
perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C23). The Omnibus F test was not significant, \( F = 1.89, (4, 300), p = .112, \eta^2 = .025 \), which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Checking to see if the patient understands him/her” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C23). The Omnibus F test was not significant, \( F = 0.34, (4, 297), p = .849, \eta^2 = .005 \), which indicates that statistically significant main effect was not detected. The power for the non-significant main effect was small, thus, reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Checking to see if the patient understands him/her” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C23). The Omnibus F test was significant, \( F = 13.56, (4, 299), p = < .05, \eta^2 = .154 \), which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate to large, thus, reducing the possibility of Type I error.
Patients who perceived that their physician often used the CAT strategy of “Handling conversation competently” reported no difference in levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C23). The Omnibus F test was not significant, $F = 0.07, (4, 297), p = .990, \eta^2 = .001$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus, reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Handling conversation competently” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C24). The Omnibus F test was not significant, $F = 1.03, (4, 300), p = .395, \eta^2 = .013$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus, reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Handling conversation competently” reported lower levels of perceived physician’s global cultural competence related to language issues than did patients who perceive their physicians who did not use this CAT strategy (see Table C24). The Omnibus F test was not significant, $F = 0.94, (4, 297), p = .443, \eta^2 = .012$, which indicates that statistically significant main effect was not detected and
the power for the non-significant main effect was small, thus, having the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Handling conversation competently” reported lower levels of perceived physician patient-centered cultural competence than did patients who perceived their physicians did not use this CAT strategy (see Table C24). The Omnibus F test was significant, $F = 12.22, (4, 299), p = .05$, $\eta^2 = .141$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate to large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Looking comfortable with the patient” reported lower levels of perceived physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C25). The Omnibus F test was not significant, $F = 0.94, (4, 297), p = .443$, $\eta^2 = .012$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Looking comfortable with the patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C25). The Omnibus F test was not significant, $F = 1.06, (4, 300), p = .377$, $\eta^2 =$
.014, which indicates that a statistically significant main effect was not detected.
The power for the non-significant main effect was small, thus reducing the
possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of
“Looking comfortable with the patient” reported lower levels of perceived
physician global cultural competence related to language issues than did patients
who perceived their physicians did not use this CAT strategy (see Table C25). The Omnibus F test was not significant, $F = 1.17, (4, 297), p = .324, \eta^2 = .016$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of
“Looking comfortable with the patient” reported lower levels of perceived
physician patient-centered cultural competence than did patients who perceived
their physicians did not use this CAT strategy (see Table C25). The Omnibus F test was significant, $F = 17.76, (4, 299), p = < .05, \eta^2 = .192$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was relatively large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of
“Controlling conversation” reported lower levels of physician global cultural
competence related to macro cultural issues than did patients who perceived their
physicians did not use this CAT strategy (see Table C26). The Omnibus F test
was not significant, $F = 1.22, (4, 297), p = .302, \eta^2 = .016$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Controlling conversation” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C26). The Omnibus F test was not significant, $F = 1.55, (4, 300), p = .187, \eta^2 = .020$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Controlling conversation” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C26). The Omnibus F test was not significant, $F = 1.44, (4, 297), p = .220, \eta^2 = .019$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Controlling conversation” reported similar levels of perceived physician patient-centered cultural competence as did patients who perceived their physicians did not use this CAT strategy (see Table C26). However, patients who perceived that
their physician fell somewhere in between reported lower levels of perceived physician patient-centered cultural competence. The Omnibus F test was significant, $F = 1.44, (4, 299), p = < .05, \eta^2 = .042$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Deciding on topics talked about” reported lower levels of physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C27). The Omnibus F test was not significant, $F = 1.60, (4, 296), p = .175, \eta^2 = .021$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Deciding on topics talked about” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C27). The Omnibus F test was not significant, $F = 0.90, (4, 299), p = .463, \eta^2 = .012$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.
Patients who perceived that the physician often used the CAT strategy of “Deciding on topics talked about” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C27). The Omnibus F test was not significant, $F = 0.98, (4, 296), p = .419, \eta^2 = .013$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Deciding on topics talked about” reported similar levels of perceived physician patient-centered cultural competence as did patients who perceived their physicians did not use this CAT strategy (see Table C27). However, patients who perceived that their physician fell somewhere in between reported lower levels of perceived physician patient-centered cultural competence. The Omnibus F test was significant, $F = 4.30, (4, 298), p = .002, \eta^2 = .055$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus reducing the possibility of Type II error.

The ANOVA tests for the questions of physicians’ use of divergent communication accommodation strategies revealed some interesting mixed results. Patients who perceived that their physician who often used the CAT strategy of “Talking down to patient” reported lower levels of physician global cultural competence related to macro cultural issues than did patients who
perceived their physicians did not use this CAT strategy (see Table C28). The Omnibus F test was not significant, $F = 1.77$, (4, 296), $p = .136$, $\eta^2 = .023$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

Patients who perceived that their physician often used the CAT strategy of “Talking down to patient” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C28). The Omnibus F test was not significant, $F = 1.42$, (4, 299), $p = .277$, $\eta^2 = .019$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.

However, patients who perceived that their physician often used the CAT strategy of “Talking down to patient” reported higher levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C28). The Omnibus F test was not significant, $F = 1.68$, (4, 296), $p = .154$, $\eta^2 = .022$, which indicates that a statistically significant main effect was not detected. The power for the non-significant main effect was small, thus reducing the possibility of Type II error.
Patients who perceived that their physician often used the CAT strategy of “Talking down to patient” reported similar levels of perceived physician patient-centered cultural competence as did patients who perceived their physicians did not use this CAT strategy (see Table C28). However, patients who perceived that their physician fell somewhere in between reported lower levels of perceived physician patient-centered cultural competence. The Omnibus F test was significant, $F = 8.00, (4, 298), p = < .05, \eta^2 = .097$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Intruding on patient’s privacy” reported lower levels of physician global cultural competence related to macro cultural issues than did patients who perceived their physicians did not use this CAT strategy (see Table C29). The Omnibus F test was significant, $F = 5.12, (4, 296), p = .001, \eta^2 = .065$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Intruding on patient’s privacy” reported lower levels of perceived physician global cultural competence related to proxemics/chronemics than did patients who perceived their physicians did not use this CAT strategy (see Table C29). The Omnibus F test was significant, $F = 4.20, (4, 299), p = .003, \eta^2 = .053$, which indicates that a statistically significant main effect was detected. The power for
the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Intruding on patient’s privacy” reported lower levels of perceived physician global cultural competence related to language issues than did patients who perceived their physicians did not use this CAT strategy (see Table C29). The Omnibus F test was significant, $F = 3.06$, $(4, 296)$, $p = .017$, $\eta^2 = .040$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Intruding on patient’s privacy” reported similar levels of perceived physician patient-centered cultural competence as did patients who perceived their physicians did not use this CAT strategy (see Table C29). However, patients who perceived that their physician fell somewhere in between reported lower levels of perceived physician patient-centered cultural competence. The Omnibus F test was significant, $F = 6.54$, $(4, 298)$, $p = < .05$, $\eta^2 = .081$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was moderate, thus reducing the possibility of Type I error.

The findings revealed that patients’ perceptions of physicians’ global and patient-centered cultural competence are contingent upon perceived levels of physicians’ use of particular CAT strategies that converge and diverge. For
instance, when physicians are perceived to use convergent CAT strategies they tend to score low on global and patient-centered cultural competence. When physicians are perceived to be too divergent or not at all, they score low on global and patient-centered cultural competence. However, diverging a little bit earns physicians higher scores on global and patient-centered cultural competence.

H3.1C predicted that higher levels of patient satisfaction will be reported when physicians are perceived to use communication accommodation strategies that converge and lower levels will be reported when physicians are perceived to use communication accommodation strategies that diverge. This hypothesis was not confirmed; indeed, the opposite was found. ANOVA results show that patients who perceived that their physician often used the CAT strategy of “Treating the patient as an equal” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physicians did not use this CAT strategy (see Table C15). The Omnibus F test was significant, $F = 48.96, (4, 300), p < .05, \eta^2 = .395$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that the physician often used the CAT strategy of “Maintaining a good relationship with the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C16). The Omnibus F test was significant, $F = 60.97, (4, 300), p < .05, \eta^2 = .448$, which indicates that a
statistically significant main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Treating the patient as an individual” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C17). The Omnibus F test was significant, \( F = 57.78, (4, 300), p < .05, \eta^2 = .435, \) which indicates that a statistically significant main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that their physician used the CAT strategy of “Asking questions of the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C18). The Omnibus F test was significant, \( F = 25.37, (5, 299), p < .05, \eta^2 = .298, \) which indicates that a statistically significant main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Reassuring the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C19). The Omnibus F test was significant, \( F = 59.18, (4, 299), p < .05, \eta^2 = .442, \) which indicates that a statistically significant
main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Showing liking for the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C20). The Omnibus F test was significant, $F = 16.44, (5, 298), p = < .05, \eta^2 = .216$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was large, thus, to some extent, reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Reducing the patient’s anxiety” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C21). The Omnibus F test was significant, $F = 40.83, (5, 299), p = < .05, \eta^2 = .406$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was very large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Expressing himself/herself clearly to the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C22). The Omnibus F test was significant, $F = 39.70, (4, 300), p = < .05, \eta^2 = .346$, which indicates that a
statistically significant main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Checking to see if the patient understands him/her” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C23). The Omnibus F test was significant, $F = 35.88, (4, 300), p = .05, \eta^2 = .324$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

Patients who perceived that the physician often used the CAT strategy of “Handling conversation competently” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physicians did not use this CAT strategy (see Table C24). The Omnibus F test was significant, $F = 25.49, (4, 300), p = .05, \eta^2 = .254$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

Patients who perceived that their physician often used the CAT strategy of “Looking comfortable with the patient” reported lower levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C25). The Omnibus F test was significant, $F = 31.55, (4, 300), p = .05, \eta^2 = .296$, which indicates that a
statistically significant main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

On the contrary, patients who perceived that their physician who uses the CAT strategy of “Controlling conversation” reported higher levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C26). The Omnibus F test was significant, $F = 5.54$, $(4, 300)$, $p = .016$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician who used the CAT strategy of “Deciding on topics talked about” reported higher levels of patient satisfaction with direct the clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C27). The Omnibus F test was significant, $F = 7.15$, $(4, 300)$, $p = .087$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was small, thus indicating the possibility of Type I error.

Patients who perceived that their physician used the CAT strategy of “Talking down to patient” reported higher levels of patient satisfaction with the direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C28). The Omnibus F test was significant, $F = 19.94$, $(4, 299)$, $p = .211$, which indicates that a statistically significant
main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

Patients who perceived that their physician who used the CAT strategy of “Intruding on patients’ privacy” reported higher levels of patient satisfaction with direct clinical encounter than did patients who perceived their physician did not use this CAT strategy (see Table C29). The Omnibus F test was significant, $F = 18.84, (4, 299), p = < .05, \eta^2 = .201$, which indicates that a statistically significant main effect was detected. The power for the significant main effect was large, thus reducing the possibility of Type I error.

These findings revealed that patient satisfaction with direct clinical encounter is subject to perceived levels of physicians’ use of CAT strategies of convergence and divergence. For instance, patients are less satisfied when physicians are perceived to use convergent CAT strategies. Patients are less satisfied when physicians are perceived to be too divergent or not at all. However, patients are more satisfied when physicians are perceived to be diverging a little bit.

H3.1D predicted that a patient’s ethnocentrism will be negatively associated with his or her perceptions of physician’s cultural competence, both global and patient-centered. This hypothesis was not confirmed; rather mixed associations were found. Pearson’s correlations indicate positive associations between the patient’s ethnocentrism and physician’s global cultural competence related to macro cultural issues and physician’s global cultural competence related
to language issues. The positive correlation of a patient’s ethnocentrism ($M = 54.17, SD = 8.37$) and perception of physician’s global cultural competence related to macro cultural issues ($M = 3.54, SD = 0.90$) was statistically significant, $r (302) = .209, p = 0.01$. The positive correlation of patient’s ethnocentrism ($M = 54.17, SD = 8.37$) and perception of physician’s global cultural competence related to language issues ($M = 3.57, SD = 0.90$) was statistically significant, $r (302) = .117, p = 0.05$. The correlation of perceptions of ethnocentrism ($M = 54.17, SD = 8.37$) and physician’s global cultural competence related to proxemics/chronemics ($M = 3.20, SD = 1.03$) was not statistically significant, $r (305) = -.023, p = .698$. There was however, negative association between perceptions of ethnocentrism and physicians’ patient-centered cultural competence. The negative correlation of perceptions of ethnocentrism ($M = 54.17, SD = 8.37$) and physicians’ patient-centered cultural competence ($M = 2.13, SD = 0.87$) was statistically significant, $r (304) = -.233, p = 0.01$. The findings suggest that patients with ethnocentric views may judge physicians in relation to their own particular ethnic group or culture, especially with concern to customs, religion, and language. The findings also suggest that patients with ethnocentric views may judge physicians’ patient-centeredness in relation to the beliefs in superiority of their own particular ethnic group or culture.

H31E predicted that lower levels of patient satisfaction with the direct clinical encounter will be reported when patients have high levels of ethnocentricity when compared to patients with low levels of ethnocentricity. A
statistical experiment was conducted to determine whether perceived levels of ethnocentrism influenced patient satisfaction with the direct clinical encounter. The experiment compared persons with high ethnocentric views to those with low ethnocentric views. Participants’ (n= 300) mean and median ethnocentrism scores were 54.17 and 54.00, respectively. The cut-off level was set to ≤54.00 for the low group and >55.00 for the high group. A One-Way ANOVA was used to determine whether significant differences in patient’s satisfaction existed between the two groups. The Omnibus F test was significant, \( F = 9.60, (1, 297), p = .002, \) which indicates that significant differences were present. As indicated by the means reported in Table C9, persons with high levels of ethnocentrism (\( M = 1.80, SD = 0.85 \)) scored lower in patient satisfaction than did persons with lower levels of ethnocentrism (\( M = 2.12, SD = 0.90 \)). The findings suggest that as perceived levels of ethnocentrism increases, patient satisfaction decreases.

H3.1F predicted that lower levels of patient satisfaction with direct clinical encounter will be reported when patients have higher levels of fear of physicians. A statistical experiment was conducted to determine whether perceived levels of fear of physicians influenced patient satisfaction with the direct clinical encounter. The experiment compared persons with high fear of physicians to persons with low fear of physicians. Participants’ (n= 304) mean and median perception scores of fear of physicians scores were 14.95 and 15.00, respectively. The cut-off level was set to ≤15.00 for the low group and >16.00 for the high group. A One-Way ANOVA was used to determine whether significant differences in patient’s satisfaction existed between the
two groups. The Omnibus F test was significant, $F = 7.84$, (1, 301), $p = .005$, which indicates that significant differences were present. As indicated by the means reported in Table C10, persons with high levels of fear of physicians ($M = 1.81$, $SD = 0.88$) scored lower in patient satisfaction than did persons with lower levels of fear of physicians ($M = 2.10$, $SD = 0.89$). The findings suggest that as perceived levels of fear of physicians increases, patient satisfaction decreases.

H3.1G predicted that patient’s fear of physicians will be negatively associated with perceived physician’s cultural competence, both global and patient-centered. This hypothesis was partially conformed. In this phase of the dissertation research, the measure of physicians’ global cultural competence had three sub-scales - physician’s global cultural competence related to macro cultural issues, physician’s global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues. Pearson’s correlations show that patient’s fear of physicians had some negative association with physician’s global cultural competence related to proxemics/chronemics and physician’s patient-centered cultural competence. But patient’s fear of physicians had no association with physician’s global cultural competence related to macro cultural issues and physician’s global cultural competence related to language issues. The negative correlation of patient’s fear of physicians ($M = 14.95$, $SD = 2.23$) and physician’s global cultural competence related to proxemics/chronemics ($M = 3.20$, $SD = 1.03$) was statistically significant, $r (305) = -.143$, $p = 0.05$. The negative correlation of patients’ fear of physicians ($M = 14.95$, $SD = 2.23$) and physicians’ patient-centered cultural competence ($M = 2.13$, $SD = 0.87$) was
statistically significant, $r (304) = -.122, p = 0.05$. However, the negative correlation of patient’s fear of physicians ($M = 14.95, SD = 2.23$) and physician’s global cultural competence related to macro cultural issues ($M = 3.54, SD = 0.90$) was not statistically significant, $r (302) = -.013, p = .822$. The negative correlation of patient’s fear of physicians ($M = 14.95, SD = 2.23$) and physician’s global cultural competence related to language issues ($M = 3.57, SD = 0.90$) was not statistically significant, $r (302) = -.036, p = .530$. The findings suggest that patients’ fear of physicians is more closely connected to physicians’ immediacy behaviors during the medical encounter and patients’ interpersonal treatment goals than physicians’ broad understanding of cultural and linguistic differences.

RQ3.1 asked whether any of the demographic variables and the independent variables best predicted patient satisfaction with the direct clinical encounter. I employed hierarchical regression analysis to test demographic variables, such as age, sex, race, education, income, insurance, and cross-cultural conditions (Appalachian physician and Appalachian patient; Appalachian physician and non-Appalachian patient; Non-Appalachian physician and Appalachian patient; Non-Appalachian physician and non-Appalachian patient), along with other independent variables, such as ethnocentrism, fear of physicians, physicians’ global cultural competence related to macro cultural issues, physicians’ global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues, and physicians’ patient-centered cultural competence as predictors of patient satisfaction with the direct clinical encounter. Analysis of the regression coefficients indicated that none of the demographic variables...
emerged as predictors of patient satisfaction with the direct clinical encounter: age ($\beta = -0.005, t = -1.49, p = .136$); sex ($\beta = .106, t = .881, p = .379$); race ($\beta = .020, t = .382, p = .703$); education ($\beta = -.067, t = -1.56, p = .121$); income ($\beta = -.011, t = .474, p = .636$); insurance ($\beta = .050, t = .283, p = .777$); and cross-cultural conditions (Appalachian versus non-Appalachian physician and patient) ($\beta = .041, t = 1.31, p = .190$). Regression results indicated that the demographic model did not significantly predict patient satisfaction with the direct clinical encounter, $R^2 = .032, R_{adj}^2 = .007, F = 1.268, (7, 267), p = .266$. This model accounted for only 0.03% of variance in patient satisfaction with the direct clinical encounter.

Analysis of the regression coefficients also indicated that most of the other independent variables did not emerge as predictors of patient satisfaction with the direct clinical encounter: ethnocentrism ($\beta = -.148, t = -1.45, p = .148$); fear of physicians ($\beta = -.189, t = -1.89, p = .062$); physician’s global cultural competence related to macro cultural issues ($\beta = -.162, t = -1.39, p = .167$); physicians’ global cultural competence related to proxemics/chronemics ($\beta = .153, t = 1.38, p = .169$); physicians’ global cultural competence related to language issues ($\beta = .030, t = -1.49, p = .803$). Physicians’ patient-centered cultural competence, however, emerged as a predictor of patient satisfaction with the direct clinical encounter ($\beta = .696, t = -1.49, p < .05$). Regression results indicated that the model significantly predicted patient satisfaction with the direct clinical encounter, $R^2 = .239, R_{adj}^2 = .201, F = 6.291, (13, 261), p < .05$. Although this model accounted for 24% of variance in patient satisfaction with the direct clinical encounter, physicians’ patient-centered cultural competence alone predicted some. A summary of
regression coefficients is presented in Table C8, which indicated that only one (physician’s patient-centered cultural competence) of the six independent variables significantly contributed to patient satisfaction with the direct clinical encounter.

Discussion

In the third phase of this dissertation research, a five-factor survey instrument emerged as a measure for physician’s cultural competence for patient satisfaction (PCCPS). The four original measures are the Physician’s Global Cultural Competence related to macro cultural issues (PGCC-Macro), Physician’s Global Cultural Competence related to proxemics/chronemics (PGCC-Proxemics/Chronemics), Physician’s Global Cultural Competence related to language issues (PGCC-Language), and the Physician’s Patient-Centered Cultural Competence (PPCCC). The PGCC-Macro (alpha = 0.90) includes items which reflect perceptions of the doctor’s development of cultural knowledge (e.g., “My doctor wants to know about my nationality”). The PGCC-Proxemics/Chronemics (alpha = 0.73) includes items which reflect perceptions of the doctor’s understanding of the dynamics of cross-cultural differences (e.g., “My doctor wants to know if time is a concern for me with regard to the health exam”). PGCC-Language (alpha = 0.79) includes items which reflect perceptions of the doctor’s awareness and recognition of patient’s cultural and linguistic difference (e.g., “My doctor wants to know about my language skills”). The PPCCC (alpha = 0.90) includes items which reflect perceptions of the doctor’s adaptation to patient’s cultural plurality (e.g., “My doctor wants to know my viewpoint on treatment goals”).
It is important to note that the first three factors (PGCC-Macro, PGCC-Proxemics/Chronemics, and PGCC-Language) emerged as separate sub-scales from the valid measure of public perceptions of physician’s global cultural competence in the second phase of this dissertation research. In the previous phase, this measure (alpha = 0.96) retained 16 items related to physician’s global culturally competent behaviors. In this third phase, while three sub-scales emerged from the PGCC measure, six items (“My doctor wants to know about my spiritual beliefs related to health issues,” “My doctor asks me about my food and dietary habits,” “My doctor asks me if personal space is an issue during the physical exam,” “My doctor asks me if I prefer to be addressed as Mr., Ms., or Mrs.,” “My doctor asks me if I prefer to be called by my first name or given name”) did not load on any the sub-scales. The fourth factor, PPCCC, emerged as a valid measure of public perceptions of physicians’ patient centered cultural competence in the second phase of this dissertation research. During the first phase, PPCCC had an alpha of 0.87 and retained 4 items related to physician’s patient- centered culturally competent behaviors. During this third phase, the measure has been further validated resulting in a higher alpha of 0.90 and retaining the same four items. The fifth factor that emerged was a 5-item measure of patient satisfaction with the direct clinical encounter. It was a refined measure (alpha = 0.91) in the second phase of this dissertation research from a previously established measure of patient satisfaction (VSQ-9 scale) (Barr, 2004). In this third phase, the measure of patient satisfaction with the direct clinical encounter was further validated with a higher alpha of 0.95 retaining the same five items.
The Ethnocentrism and the Fear of Physician scales were validated to measure patient’s fear of physicians and patient’s ethnocentricty to find association with patients’ satisfaction with physicians’ cultural competence in health care. Results indicated patient’s ethnocentric views had positive association with physician’s global cultural competence related to macro cultural issues and physician’s global cultural competence related to language issues and negative association with physician’s patient-centered cultural competence and patient satisfaction with direct clinical encounter. These associations imply that, while patients with ethnocentric views may perceive physicians’ global cultural competence related to macro cultural issues and language issues to be important, patients with ethnocentric views may be less inclined to recognize physicians’ patient-centered care and be less satisfied with physician care. Patient’s fear of physicians had negative association with physicians’ global cultural competence related to proxemics/chronemics, physicians’ patient-centered cultural competence, and patient satisfaction with the direct clinical encounter. These negative associations imply that, as long as a high perceived level of fear exists in patients in their interactions with physicians, patients may not be able to recognize physicians’ accommodative communication styles, physicians’ patient-centered care, and be satisfied with physician care. Hence, the Ethnocentrism and the Fear of Physician scales can be used to systematically study connections between culturally competent care, physician-patient interactions, and health care outcomes, such as satisfaction.

The 26 item communication accommodation goals and sociolinguistic strategies used by health professionals did not emerge as a scale. Although Watson and Gallois
(1998) used the CAT goals and strategies as separate categories to investigate perceived intergroup and interpersonal relationships in health care interactions, this dissertation found that the CAT strategies and goals did not emerge as reliable scales for any of the different goals (attention to relationship needs, alpha = 0.55; emotional needs, alpha = 0.69; communicative competence, alpha = 0.75; role relationship, alpha = 0.62) or strategies (discourse management, alpha = 0.74; emotional expression, alpha = 0.56; interpretability, alpha = 0.71; interpersonal control, alpha = 0.44). The one-way ANOVA results could not explain any differences in perceived levels of patient satisfaction or physicians’ cultural competence among the 12 items related to physicians’ goals of attention to relationship needs, patients’ emotional needs, communicative competence, or role relationship. The ANOVA results, however, could determine differences among the 15 items related to physicians’ strategies of discourse management, emotional expression, interpretability, and interpersonal control, and different perceived levels of patient satisfaction. In general, physicians who converge in their accommodation are perceived to be less culturally competent and to provide less satisfactory care, while physicians who diverge a little bit in their accommodation are perceived to be more culturally competent and to provide more satisfactory care. Hence, each CAT strategy must be treated as an individual approach.

Limitations

The study sample was limited to a specific patient population in one health care organization at different locations. While this limitation offers more comparability, it also restricts generalizability across different population groups and health care organizations.
Future research should include sampling from different health care organizations for results to be generalized beyond a particular group. Although this phase of the dissertation research had a large enough sample size, future research should employ random sampling methods for greater generalizability of study results to a larger population. Although the study sample is very representative of Appalachian Ohio population (mostly European-American/White), future studies should include more diverse population groups to develop cross-culturally validated instruments for patient satisfaction.

Another limitation of the study involves collection of survey data from a fraction of the actual patient population. Folks at Holzer Clinics in Athens, Jackson, and Gallipolis, who participated in this dissertation, may have access to health care. Hence, if non-respondents in those three Counties have less access to adequate health care, study results may represent biased estimates of patients’ perceptions of physicians’ cultural competence and satisfaction with the direct clinical encounter.

The demographic findings of the study revealed that a majority of the respondents were female. Although this representation might skew results, research has shown that compared to men, women have a greater likelihood of seeking more health care, using more health care services, and spending more time on medications (Correa-de-Araujo, 2004; Roe, McNamara, & Motheral, 2002). This sample characteristic reinforces the U.S. cultural view of women’s caretaker role in their families (Wood, 2007).

Scale Development and Validity

Devellis (2003) set forth eight guidelines in developing scale measurements. The
development of the PCCPS scale has been guided by these eight steps. Devellis emphasized clarity in scale development, which can be achieved by theoretical guidance. As mentioned in chapter two of this dissertation, I used communication accommodation theory as a theoretical foundation for this study. I also drew survey items from CAT goals and strategies (Watson & Gallois, 1998) to assess strategies of communication accommodation in health care interactions. The second step to scale development is to produce a pool of items (Devellis, 2003). I chose items that reflected the purpose of my study in each three phases and also reflected the overall goal of the dissertation. Devellis (2003) argued that “redundancy is not a bad thing when developing a scale” (p. 65). Both in the scale development phase and in the validation phase, I used a wide range of questions based on the validated scenarios of cultural competence and incompetence in health care interactions in phase one. These questions pertained to people’s understanding of culture and their experience with physician interaction. I also tested, refined, and validated scales of ethnocentrism, fear of physicians, and CAT strategies and goals of health professionals. Using many items in the survey allowed me to ask questions and probe for relevant information. The inclusion of many questions also allowed me to select and test items that were particularly relevant and items that measured what I wanted to measure and measure consistently. A lengthy survey also allowed me to use demographic information to find their influence on and predictability for the dependent variable(s).

The third step in scale development is to “determine the format for measurement” (Devellis, 2003, p. 70). In this dissertation, I decided to use the questionnaire format comprising closed-ended questions on a five point Likert-type scale throughout the three
phases, which allowed for compatibility in all the phases. The fourth step in scale development includes review of the item pool by experts (Devellis, 2003). In the second phase of this dissertation, physicians and health care administrators read the survey questionnaire and provided useful feedback on the contents, clarity, and inclusion of items. This review process addressed the content validity of the PCCPS scale (Hammer, Bennett, & Wiseman, 2003). Consistent with the fifth step in scale development, I included validation items, “additional items in the same questionnaire,” during the third phase of this dissertation research (Devellis, 2003, p. 87). To validate the newly developed PPPCC scale in the second phase, I included two previously validated scales of ethnocentrism and fear of physicians and drew additional items from the CAT goals and strategies of health professionals as relevant constructs for measuring cultural competence in health care interactions. This inclusion of additional measures and theoretical constructs to refine and validate items to develop a patient satisfaction measure addressed construct validity for the PCCPS scale (Devellis, 2003; Hammer, Bennett, & Wiseman, 2003).

The sixth step in scale development involves conducting the survey with a large enough and representative sample population (Devellis, 2003). Throughout the three phases in this dissertation research, I administered survey questionnaires to three populations, with a view to developing a patient satisfaction instrument to measure health care receivers’ perceptions of health care receivers’ cultural competence in health care interactions. Conducting the study in three phases involving three different sets of population addressed the content validity of the PCCPS scale (Devellis, 2003). This three
phase-sequential process led to the seventh step in scale development, evaluation of the survey items. Devellis (2003) mentioned specific statistical tests that I argue this dissertation has employed: item-scale correlations, item variances, factor analysis, and alpha reliability. In the third phase of this dissertation research, I have also employed hierarchical regression analysis and median split for more powerful item evaluation for the scale. The last step in scale development, according to Devellis (2003), includes acceptable scale reliability and split samples. The patient satisfaction of physicians’ cultural competence scale developed in three phases has moderately high alphas on the sub-scales. With regard to split samples, this dissertation research was conducted in three phases with each building on the other. Each phase involved a large enough sample size, 175 in the first phase, 201 in the second phase, and 306 in the third phase. Because of the design of the study, the sample had already been split into sub-samples, and one thus served as “the primary development sample” and “the other[s were] used to cross-check the findings” (Devellis, 2003, p. 99).

The PCCPS scale was compared to theoretically related variables (CAT) to examine patients’ perceptions of physicians’ accommodative behaviors and other validated measures (Ethnocentrism and Fear of Physician) to predict patient satisfaction, thus demonstrating both construct and criterion-related validity (Devellis, 2003). The PCCPS scale established discriminant validity, also known as divergent validity, “the absence of correlation between measures of unrelated constructs” (Devellis, 2003, p. 56). The fact that physician’s cultural competence measures (global and patient-centered) emerged distinct from patient satisfaction with the direct clinical encounter measure and
that physician’s patient centered cultural competence and patient satisfaction with the
direct clinical encounter have strong association, demonstrate both divergent validity and
convergent validity, “evidence of similarity between measures of theoretically related
constructs” (Devellis, 2003, p. 56).

Finally, I argue that this phase of the dissertation research has taken into account
Brown, Stewart, and Ryan’s (2003) call for future research on outcomes of health care
provider-receiver interactions. More specifically, the study has developed a new
instrument and refined existing instruments to assess patient-provider interactions from
patients’ perspectives. Finally, the findings of the study will likely sensitize both
healthcare receivers and providers of cultural competence in health care and contribute to
further research on cultural competence interventions for quality health care delivery and
outcomes.

Chapter Summary

In chapter four, I reported and discussed the three phases of the dissertation
research that examined the role of cultural differences on health care receivers’
perception of health care providers’ cultural competence in health care interactions.

Scenarios demonstrating cultural difference or sameness between patient and
provider and physicians’ cultural competence or incompetence in health care interactions
were developed and pre-tested in the first phase. In the second phase, those validated
scenarios were used along with a survey questionnaire to measure public perception of
physicians’ cultural competence in health care interactions, which resulted in the
development of a three-factor scale, the PPPCC. In the third phase, I used the PPPCC
scale and used previously validated measures of similar constructs (e.g., ethnocentrism, fear of physicians, health professionals’ CAT goals and strategies) to refine items to develop a patient satisfaction instrument to measure physicians’ cultural competence in health care interactions. A five-factor scale emerged as a measure for physician’s cultural competence for patient satisfaction, the PCCPS.

In chapter five, I discuss implications for the study based on the review of the research questions posed in chapter two. Then, I draw conclusions from the findings reported in chapter four and offer directions for future research.
Chapter Five: Conclusions, Implications, and Directions for Future Research

This concluding chapter of the dissertation sheds light on our understanding of the interplay of health, communication, and culture in an Appalachian Ohio context. I do so, by, first, providing a detailed discussion of the findings as they help answer the research questions. Second, I present implications of the findings for the theoretical foundation and the cultural context for this dissertation. I also discuss practical implications for culturally competent interventions for quality health care delivery and outcome. Then, I discuss the significance and limitations of this dissertation research. Finally, I offer directions for future research.

Conclusions

The aim of this dissertation research has been to examine health care provider-receiver intercultural interaction processes and contribute to measuring health care receivers’ experience of health care providers’ cultural competence. More specifically, the study posed five research questions to examine the extent to which cultural differences play a role in health care interactions in Appalachian Ohio and to assess health care receivers’ perception of health care providers’ cultural competence in health care interactions. The research questions were:

RQ1: What role, if any, do cultural differences play in health care provider and receiver interactions in an Appalachian Ohio context?

RQ2: Do health care receivers perceive health care as currently practiced to be culturally competent and, if so, how?
RQ3: Do health care receivers’ cultural differences make a difference in their perception of health care providers’ treatment of them, and, if so, how?

RQ4: Do health care receivers perceive that health care providers adapt their communicative styles to accommodate health care receivers, and, if so, how?

RQ5: Do health care receivers’ ethnocentric views make a difference in their satisfaction with health care providers, and, if so, how?

To answer these research questions, I carried out a 3-phase sequential investigation and proceeded to test a set of hypotheses that stemmed from the research questions. In the first phase, I developed and tested scenarios displaying, first, cultural difference or sameness between the physician and the patient and, second, the physician’s cultural competence or incompetence in health care interactions using a convenience sample of undergraduate students. In the second phase, I used the validated scenarios from the first phase along with a survey questionnaire and administered it to members of the public to elicit public understanding of cultural competence in health care interactions. A three-factor (with two original measures, physician’s global cultural competence and physician’s patient-centered cultural competence and a refined measure of patient satisfaction with the direct clinical encounter) survey instrument emerged as a measure for public perception of physician’s cultural competence (PPGCC). In the third phase, I attempted to refine and validate the PPGCC scale to assess patient perceptions of physicians’ cultural competence in health care interactions. I used the PPGCC scale together with previously validated measures of ethnocentrism and fear of physicians and adapted items from a CAT questionnaire of health professionals’ goals and strategies to
survey the patient base at Holzer Clinic in three Appalachian Ohio Counties. A five-factor (with four original measures of physician’s global cultural competence related to macro cultural issues, physician’s global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues, and physician’s patient-centered cultural competence and the refined measure of patient satisfaction with the direct clinical encounter) survey instrument emerged as a measure for physician’s cultural competence for patient satisfaction (PCCPS). In the following, I discuss the findings of the research as they answer the research questions.

Discussion of Research Question One

Research question one asked if cultural differences play any role in health care provider and receiver interactions in an Appalachian Ohio context. Evidence to answer this question was collected and analyzed throughout the three-phases of this dissertation research. In phase one, I began by pilot testing scenarios demonstrating cultural difference or sameness between health care provider and receiver. It is important to note that the majority of the participants self-identified as European-American/white with an almost balanced split between the sexes and an average age of 21. The scenarios were tested for respondents’ perceived similarity or difference with the physician and the patient in the scenarios and for respondents’ perceptions of the quality (readability, believability, understandability, and likelihood) of the scenarios. I had hypothesized that the four scenarios would be judged to be equally readable and believable by participants, that participants would judge the physicians in scenarios one and two to be less like themselves than the physicians in scenarios three and four, and, that the participants
would judge the patients in scenarios three and four to be less like themselves than the patients in scenarios one and two. The ANOVA results revealed that people perceived three scenarios to be readable and believable and that people recognized cultural similarities and/or differences with the physicians and the patients in those scenarios. Hence, initial findings of phase one of this dissertation research helped build the second phase, which examined the role of cultural differences on public perceptions of health care providers’ cultural competence in health care interactions.

During the second phase of this dissertation research, I used the scenarios validated in the first phase. In this phase, the role of cultural differences between health care provider and receiver in the scenarios was examined by measuring respondents’ explicit and implicit assumptions regarding the physicians’ culturally competent or incompetent behaviors. Although a plurality of the survey participants self-identified as European-American/White, many persons decided to self-identify as the “other,” which likely reflects the participant’s decision to identify, for example, as Indian or Kenyan rather than as Asian-American or African American. A large part of the participants were of international background rather than domestically-born in the United States. Exploratory factor analysis results revealed that the public perceived physicians to be culturally competent when physicians were aware of and recognized patients’ cultural differences (nationality, racial background) and when physicians understood the dynamics of cross-cultural differences (spiritual beliefs related to health issues, food and dietary habits, preference of personal title in being addressed). These findings are concordant with extant literature that indicates that, when culture specific beliefs and
customs (e.g. traditional healing, food prohibition, religious beliefs) are ignored or not recognized, this ignorance or lack of recognition can hamper effective doctor-patient communication (Sheridan, 2006; Spector, 2004). Moreover, the hypotheses from phase two that perceptions of culturally competent physician behavior and perceived satisfaction with the direct clinical encounter will be positively correlated indicated that cultural difference is recognized in an Appalachian Ohio context.

The role of cultural differences in health care provider and receiver interactions was also examined by measuring respondents’ tendency to use their own cultural values to judge others. I had hypothesized that participants would display strong identification with ethnocentric cultural statements. However, exploratory factor analysis results revealed that the public did not consistently display strong identification with ethnocentric cultural statements, making the hypothesis untestable using this scale. It is important to note that most of the survey questions in the ethnocentrism scale were specifically targeted towards American expatriates. Hence, the public responses to the ethnocentrism scale adapted from Hood (1982) may reflect unidirectionality induced problems.

These findings from phase two of this dissertation research helped build the third phase. The third phase examined the role of cultural differences on patient perceptions of health care providers’ cultural competence in health care interactions. During the third phase, the role of cultural differences in health care provider and receiver interactions in an Appalachian Ohio context was examined by refining and further validating the public perception of physicians’ cultural competence scale developed during the second phase. I
surveyed the patient base in Holzer Clinic in Athens, Jackson, and Gallipolis. The majority of the respondents self-identified as European-American/white. Around three-fourths of the sample population were female, while one-fourth were male, with an average age around 44 years. Exploratory factor analysis results revealed that participants perceived physicians to be culturally competent when physicians were conscious of macro-cultural issues (e.g., religious practices related to health issues, decision maker in family). This finding is consistent with Rao’s (2002) study that found that physicians in collectivist cultures of Argentina, Brazil, and India often chose to share health care information with a family member who makes decisions for the patient. Results of H3.1 in phase three revealed that participants perceived physicians to be culturally competent when the physicians were perceptive of the dynamics of cultural differences related to proxemics and chronemics (e.g., touch issues during the physical exam, time concern with regard to medical treatment). This finding resonates with the guidelines for using time, touch, and space appropriately when providing health care to different cultural groups (Lipson & Dibble, 2005). Results of H3.1 also revealed that participants perceived physicians to be culturally competent when the physicians recognized patients’ cultural differences related to language issues (e.g., language skills, translator availability). This finding is consistent with studies that described health care interventions as culturally competent when they included linguistic services, such as bilingual interpreters among other elements of cultural competence (Brown, Garcia, Kouzekanni, & Hanis, 2002; Brant, Fallsdown, & Iverson, 1999; Goldsmith & Sisneros, 1996, Yancey, Tanjasiri, Klein, & Tunder, 1995).
The role of cultural differences in health care provider and receiver interactions was also examined by measuring participants’ responses to statements reflecting ethnocentric cultural views that were not specific to any given culture but rather, centered on a broad understanding of culture. Results from H3.1E in phase three, indicated that ethnocentrism – a trait reflecting the perceived superiority of one’s own culture – affected health care receiver-provider interactions. Specifically, Pearson’s correlations results revealed a positive association between patients’ ethnocentric views and perceptions of physician’s global cultural competence related to macro-cultural issues and between ethnocentrism and perceptions of the physician’s global cultural competence related to language issues. These associations indicate that patients with a strong sense of group identity perceive physicians’ recognition of macro-cultural issues and language issues as important in health care provider and receiver interactions. These findings of the preference among Appalachians for a physician who adapts to Appalachian cultural needs, but not simply for physicians who share their skin color or geographic origin, may be similar to the tendency in African Americans and Hispanic Americans to seek health care “from physicians of their own race because of personal preference and language, not solely because of geographic accessibility” (Saha, Taggart, Komaromy, & Bindman, 2000, p. 76). Saha et al. found that, while Hispanic Americans patients were more likely to be satisfied with their overall health care, African American patients rated their physicians as excellent for being respectful accessible, and for explaining symptoms and listening to patients when personal preferences are accounted for. Other studies have found differences in patients’ experience and participation in medical visits by
race/ethnicity and geographic location. For instance, Young and Kingle (1996) found Asian-American patients in Hawaii to be less participatory during medical encounters than their mainland American counterparts. Cooper, Roter, Johnson, Ford, Steinwachs, & Powe (2003) found that, in the Baltimore-Washington, DC metropolitan area, African-American patients experience more physician-centered communication than do White patients. In an Appalachian Ohio context, the findings of this dissertation reveal an association between patients’ beliefs about their unique cultural identity and perceived aspects of physician-patient interactions.

The role of cultural differences in health care provider and receiver interactions was furthermore examined by measuring participants’ perceived fear of physicians. ANOVA results from H3.1G in phase three, revealed a negative association between patients’ fear of physicians and physician’s global cultural competence related to proxemics/chronemics. Scholarly literature has clearly identified open communication as an essential skill for fruitful medical consultation, generally, and for cultural competence, in particular. Given the interpersonal nature of physician-patient communication, physicians’ and patients’ behavior may equally influence one another and are likely to shape the medical encounter. As Smedley, Stith, and Nelson (2002) argued, “to a great extent, patient’s values, fears and hopes, and other psychological characteristics influence the level and type of care they receive” (p. 131). Studies (e.g., LaVeist, Nickerson, & Bowie, 2000; Lillie-Blanton, Brodie, Rowland, Altman, & McIntosh, 2000) have documented minority patients’ perceptions of higher levels of racial discrimination in healthcare. For instance, studies (e.g., Bates & Harris, 2004; Corbie-Smith, Thomas,
Williams, & Moodey-Ayers, 1999; Harter, Stephens, & Japp, 2000) have looked at the implications of the Tuskegee Syphilis experiment on African Americans' perceptions of biomedical research and general distrust of the public health system. Cultural, historical, and psychological factors have led patients of color to fear White physicians and that, in turn, leads to lower use of care. The findings of a negative association between Appalachians’ fear of physicians and physicians’ global cultural competence related to proxemics/chronemics may indicate that patients’ apprehension of physicians may cloud patients’ recognition of physicians’ responsiveness to cultural differences during health care interactions. It could also be that manifestations of patients’ perceived fear of physicians (e.g., feeling tense, jittery, and nervous) during medical encounters may affect understandings of the dynamics of cross-cultural differences and discourage the development of cultural knowledge, thereby hindering cultural competence in health care.

At a general level, these findings indicate that cultural differences play an important role in health care provider and receiver interactions. The findings also provide important insights into the role that cultural differences play in health care provider and receiver interactions in an Appalachian Ohio context. Based on the survey data collected during the third phase, it appears that patients in the Holzer Clinics of Athens, Jackson, and Gallipolis did perceive physicians to be culturally competent when physicians were conscious of macro cultural issues, perceptive of the dynamics of cultural differences related to proxemics/chronemics, and when physicians recognized patients’ cultural differences related to language issues. For patients with a strong sense of group identity, physicians’ recognition of macro cultural issues and language issues are important in
health care provider and receiver interactions. It also appears that patients’ perception of physicians’ awareness of cultural differences during health care interactions may be influenced by their level of fear of physicians.

Discussion of Research Question Two

Research question two asked whether health care receivers perceive health care as currently practiced to be culturally competent. Evidence to answer this question was collected and analyzed throughout the three-phases of this dissertation research. Before moving into the discussion, it is important to restate that, based on a review of selected definitions, I have conceptualized the concept of cultural competence in health care as a dynamic and complex interrelated process of being aware of and recognizing individual differences and being perceptive of differences across cultures.

Answering research question two followed a similar developmental model as did the answer to research question one. The same scenarios derived in phase one were used to answer the research question. The findings of phase one were used to build the second phase, which, in part, investigated the role of cultural differences on public perceptions of health care providers’ cultural competence in health care interactions. After reading the scenarios, the survey respondents evaluated the physician’s behavior on several dimensions related to cultural competence. Exploratory factor analysis resulted in a three-factor survey instrument to measure public perception of physician’s cultural competence. The first factor contained items measuring the physician’s global cultural competence (e.g., doctor’s awareness and recognition of patients’ cultural difference, religious practices and spiritual beliefs related to health issues, dietary habits, personal
space needs, time concerns, language preferences). The second factor contained items measuring physician’s patient-centered cultural competence (e.g., recognition of patient’s feelings, emotions, viewpoint on illness, and treatment goals). The third factor contained items measuring satisfaction with the direct clinical encounter (e.g., the time spent with the doctor, explanation of what was done, the technical skills of the doctor, the personal manner of the doctor, and the visit overall). H2.1 in phase two, stated that perceptions of culturally competent physician behavior and perceived satisfaction with the direct clinical encounter would be positively correlated. Pearson’s correlations results indicted a strong association between physicians’ global cultural competence and physicians’ patient-centered cultural competence. The overall mean for physicians’ global cultural competence was \( M = 3.83, SD = 0.90 \). The overall mean for physicians’ patient-centered cultural competence was \( M = 3.10, SD = 1.03 \). Hence, participants do perceive health care as currently practiced to be culturally competent when physicians are aware of and recognize patients’ cultural differences and when physicians adapt to patients’ cultural plurality by being receptive to individual patient’s needs, values, and preferences. This finding agrees with other studies on cultural competence in health care. For example, the items measuring patients’ perceptions of physicians’ global cultural competence and physicians’ patient-centered cultural competence include the key features of cultural competence particularly within patient-provider interactions (e.g., recognition of individual and cross-cultural differences) as outlined by Beach, Saha, and Cooper (2006). In a more specific cultural context, Torres (2004) found that Caucasian
patients considered doctors who are caring, who show interest in the patient, and who recognize patients’ needs to be culturally competent.

In the third phase of this dissertation research, the same measures and populations were used as in RQ1. H3.1 in phase three, stated that intercorrelations among perceptions of cultural competence, communicative accommodation strategies, ethnocentricity, fear of physicians, and patient satisfaction with the direct clinical encounter would emerge. Pearson’s correlations results indicated that the physician’s global cultural competence related to macro cultural issues was strongly associated with the physician’s global cultural competence related to proxemics/chronemics and with the physician’s global cultural competence related to language issues. There was also some association with physician’s patient-centered cultural competence. The physician’s global cultural competence related to proxemics/chronemics was strongly associated with the physician’s global cultural competence related to language issues and with the physician’s patient-centered cultural competence. The physician’s global cultural competence related to language issues was strongly associated with the physician’s patient-centered cultural competence. The means for all forms of cultural competence were relatively high (the means ranged from 3.57 to 1.98). Hence, patients did perceive health care as currently practiced to be culturally competent. Moreover, when physicians were aware of and recognized patients’ cultural differences related to macro cultural issues, proxemics/chronemics, and language issues, and when physicians adapted to patients’ cultural plurality, physicians’ cultural competence is judged to be the highest. These findings resonate with other studies on cultural competence in health care. For
example, Thom and Tirado’s (2006) patient-reported provider cultural competency scale also included items related to family involvement in treatment and patient’s viewpoint on illness and treatment. These items are in line with the findings of this dissertation research, especially patients’ cultural differences related to macro cultural issues and patient-centered cultural competence. More specifically, the findings echo the important recognition that Denham (1999) made with regard to practicing family health in an Appalachian context. In her ethnographic study about family health, Denham found that “family health was influenced by the participants’ embedded cultural contexts” (p. 133). Denham argued for further discussion on family health from family perspectives. Similarly, the findings of this dissertation illuminate the fact that Appalachians recognize physicians as culturally competent and feel satisfied with care when physicians show awareness of individual and cultural differences and when physicians value patients’ perspectives.

Discussion of Research Question Three

Research question three asked whether and how health care receivers’ cultural differences make a difference in their perception of health care providers’ treatment of them. Evidence to answer this question was collected and analyzed throughout the three-phases of this dissertation research. In this dissertation research, I used patient satisfaction as an outcome variable of the physician-patient interaction. Hence, patient satisfaction with the direct clinical encounter is used to measure patients’ perception of health care providers’ treatment of them. As mentioned above, in the first phase, people did recognize cultural difference or sameness between the physician and the patient and
physicians’ cultural competence or incompetence in health care interactions in the valid scenarios. I used these valid scenarios in the second phase to examine the interaction of cultural differences in patient’s perception of physicians’ treatment of them, which resulted in the emergence of public perception of physician’s cultural competence scale with measures related to global cultural competence of the physician, patient-centered cultural competence of the physician, and patient satisfaction with the direct clinical encounter.

In the third phase, the public perception of physician’s cultural competence scale was refined and validated. A five-factor survey instrument to measure patient perceptions of physicians’ cultural competence emerged. Most relevant to RQ3 was the measure of patient satisfaction with the direct clinical encounter. To answer RQ3.1 in phase three, I employed hierarchical regression analysis to use race/ethnicity and cross-cultural conditions (Appalachian versus non-Appalachian physician and patient), and physician’s patient-centered cultural competence, along with other independent variables, as predictors of patient satisfaction with the direct clinical encounter to examine the interaction of health care receivers’ cultural differences in their perception of health care providers’ treatment of them. Results, however, indicated that none of the demographic variables, including race/ethnicity and cross-cultural conditions, emerged as predictors of patient satisfaction. Hence, the racial/ethnic background of the patients does not make a significant difference in their perceived levels of satisfaction with the direct physician encounter in an Appalachian Ohio context. Similarly, patient satisfaction is not contingent upon whether the health care interactions take place between an Appalachian
physician and an Appalachian patient, between an Appalachian physician and a non-
Appalachian patient, between a non-Appalachian physician and an Appalachian patient,
or between a non-Appalachian physician and a non-Appalachian patient. These findings
are discordant with studies that found an association between patients’ and physicians’
racial/ethnic concordance and patient satisfaction with care (Chen, Fryer, Philips, Wilson,
& Pathman, 2005), studies that found race-concordant medical encounters characterized
by positive affect and longer visit duration (Cooper et al., 2003) and studies that found
higher ratings of patient satisfaction, when race/ethnicity was concordant (Cooper et al.,
1999; Saha, Komaromy, & Bindman, 1999). However, the findings are consistent with
other studies that did not find any statistical association between patients’ race/ethnicity
and patient satisfaction (Barr, Vergun, & Barley, 2000, Saha, Arbwlaez, & Cooper,
2003).

Although no demographic variable of “objective” cultural differences emerged as
a predictor of patient satisfaction, physicians’ patient-centered cultural competence
emerged as very predictive of patient satisfaction with the direct clinical encounter.
Hence, patients are more attentive to individualized care that physicians offer than to
whether they share skin color or geographic origin with their provider. Patients are more
satisfied when physicians attempt to understand their feelings, when physicians make an
effort to understand their emotions, when physicians inquire about their viewpoint on
illness, and when physicians want to find out their viewpoint on treatment goals. This
finding is supported by Doescher et al.’s (2000) study which found that racial and ethnic
minority patients’ perception of their physicians is associated with physician style and
trust. Doescher et al. identified physicians’ inability to recognize racial and ethnic minority patients’ unique ways of viewing symptoms and illness as a possible reason for racial and ethnic minority patients’ less positive perceptions of physicians. In their view, “patients are more likely to continue to see physicians whose interactions are patient-centered” (p. 1162).

At a general level, these findings provide important insights into the interaction of cultural differences in patients’ perception of physicians’ treatment. These findings also provide important insights into the interaction of cultural differences in patients’ perception of physicians’ treatment in an Appalachian Ohio context. Based on the survey data collected during the third phase, it appears that patients in the Holzer Clinics of Athens, Jackson, and Gallipolis did not perceive racial background to be an important factor in their perceived levels of satisfaction with the direct physician encounter. Similarly, the patients’ Appalachian background and their physicians’ perceived Appalachian background did not matter for their direct clinical encounter. It also seemed that the patients placed more importance on whether or not their physicians offered them individualized care. The patients were more satisfied when physicians made an attempt to understand their feelings, when physicians made an effort to understand their emotions, when physicians wanted to know about their viewpoint on illness, and when physicians inquired about their viewpoint on treatment goals.

Discussion of Research Question Four

Research question four asked if and how health care receivers perceive that health care providers adapt their communicative styles to accommodate health care receivers.
Evidence to answer this question was collected and analyzed during the third phase of this dissertation research. In this dissertation research, I used the CAT strategies of convergence and divergence to represent the different adaptations and adjustments physicians may make in health care interactions. In the third phase, I used patients’ perceptions of the enactment of communication accommodation goals of health professionals (attention to relationship needs, emotional needs, communicative competence, and role relationship) and communication accommodation sociolinguistic strategies of health professionals (discourse management, emotional expression, interpretability, interpersonal control) to measure health care receivers’ perception of health care providers’ adaptation of communicative styles to accommodate health care receivers. I hypothesized that higher levels of patient satisfaction and that higher levels of physicians’ perceived cultural competence, both global and patient-centered, would be reported when physicians were perceived to use communication accommodation strategies that converge and lower levels will be reported when physicians are perceived to use communication accommodation strategies that diverge. The ANOVA results for H3.1B could not explain any difference among the items related to physicians’ communication accommodation goals and patients’ perceptions of physicians’ cultural competence, and patient satisfaction with the direct clinical encounter. Differences were found in the items related to physicians’ communication accommodation strategies that converge and diverge and patients’ perceptions of physicians’ cultural competence and patient satisfaction with the direct clinical encounter. Items expressing physicians’ convergent communication accommodation strategies (e.g., “My doctor encourages me to
ask questions”) and items expressing physicians’ divergent communication accommodation strategies (e.g., “My doctor controls the conversation”) did not emerge as reliable scales. However, physicians’ use of individual convergent and divergent CAT strategies had an effect on patients’ perceptions of physicians’ cultural competence and patient satisfaction with the direct clinical encounter.

Items reflecting physicians’ convergent CAT goals did not obtain a reliable index. Patients did not indicate that physicians’ use of CAT goals, such as encouraging patients to ask questions, reducing patients’ anxiety, and obtaining information from patients influenced their perceptions of physicians’ cultural competence and patient satisfaction. This finding may reflect the fact that, when patients go to clinics for health care, their main objective is to get medical treatment from the physicians. When seeking treatment for self or for family members and friends, patients are probably not concerned primarily with physicians getting to know patients as individuals or developing a good relationship with patients. This finding may reinforce the expectation for “clinician-centered communication” (clinicians as active and dominant in medical consultation) in Western medicine (Street, 2003b, p. 913). Street argued that both patients and health care providers anticipate the clinician to be the dominant communicator in the medical encounter. Street (2003b) argued that, “although patients generally appreciate caring and informative health care providers, the relationship between health outcomes and partnership building is rather complex” (p. 914). Street cited studies which found a difference (age, education, financial condition, and type of illness) in patients’ desire to
get more involved in medical decision making and expectation and preference for clinician-centered consultation.

Patients, however, indicated that physicians’ use of convergent CAT *strategies* of treating patients as equals, showing liking for patients, expressing themselves clearly to patients, letting patients express their opinion, checking to see if the patient understands the physician, handling conversation competently, and looking comfortable with the patient influenced patients’ perceptions of physicians’ cultural competence and patient satisfaction. Interestingly, the median-split analysis performed for H3.1B and H3.1C in phase three revealed that patients did not report higher levels of satisfaction with the direct clinical encounter when physicians were perceived to use communication accommodation strategies that converge. Neither did patients report higher levels of perceived physicians’ global and patient-centered cultural competence when physicians were perceived to use communication accommodation strategies that converge. As a matter of fact, in both cases, patients reported *lower* levels of satisfaction with the direct clinical encounter and *lower* levels of perceived physicians’ global and patient-centered cultural competence than did patients who perceived that their physicians did not use convergent CAT strategies. These findings resonate with the vulnerability in physician-patient interactions stemming from “communicative misperceptions and misunderstandings” (Street, 1991, p. 145). During medical consultation, while, physicians may underestimate patients’ aspiration for information and misperceive patients’ difference as lack of interest, physicians’ “overconvergence” (i.e., use of everyday language in medical consultation, which may be below patients’ level of
understanding) may be perceived as “condescending or patronizing” (Street, 1991, p. 146).

The median-split analysis in phase three also revealed that patients did not report lower levels of satisfaction with the direct clinical encounter when physicians were perceived to use communication accommodation strategies that diverge moderately. Neither did patients report lower levels of perceived physician’s global and patient-centered cultural competence when physicians were perceived to use communication accommodation strategies that diverge moderately. As a matter of fact, in both cases, patient’s reported higher levels of satisfaction with the direct clinical encounter and higher levels of perceived physician’s global and patient-centered cultural competence than did patients who perceived that their physicians did not use divergent CAT strategies. These findings highlight the complexity facing physicians and patients in negotiating “an appropriate pattern of communicative control” (Street, 1991, p. 148). It seems that patients expect physicians to be directive and assertive during medical encounter. However, as Street (1991) argued, “if doctors are either too passive or too domineering, the patient’s positive reaction to the medical consultation is reduced” (p. 148).

These findings spotlight the complexity surrounding physician-patient relationships. In an attempt to show the implications for health care when different metaphors are used to characterize physician-patient relationships, Beisecker and Beisecker (1993) explained different ways to conceptualize such medical relationship. While comparing two widely used metaphors: paternalism (the dominance of doctor over
patient) and consumerism (the importance of the patient’s rights), the authors also mentioned other physician-specific metaphors (educator, engineer, priestly healer, partner or friend) and patient-specific metaphors (learners, partners, and experts of personal medical history, bodies, and feelings). It is important to note that although paternalism advocates for “physician autonomy” and consumerism advocates for “patient autonomy, “the reality of most doctor-patient relationships is somewhere between the two” (Beisecker and Beisecker, 1993, p. 43). In a similar vein, the findings of patients’ perceptions of physicians’ use of divergent and convergent CAT strategies during medical encounters imply that physician-patient interaction is shaped by each interactant’s motivations to identify with, or to dissociate from, the communication practices of the other. For instance, although physicians are criticized for not treating patients as equals, patients may actually want the physician to take a leadership role. In such a situation, if “the motivational expectations for both doctor and patient presumably converge” (i.e., improving patient’s health), the resultant communicative accommodation will be complementarity, which allows the interactants to maintain social difference communicatively.

The physician-patient relationship becomes more complex, however, when “the healthcare provider, rather than the patient, is the more powerful actor in clinical encounters” (Smedley, Stith, & Nelson, 2002, p. 12). The findings may also reflect the fact that patients in a clinic often expect physicians to follow the biomedical approach and focus on diagnosis and treatment (Lebel, 2003). In a cross-cultural situation, Torres (2004) found that physicians tended to use a biomedical approach in their medical
encounters with patients, especially when the patients were from a different ethnic group. Providers’ beliefs, attitudes, behaviors, and expectations are likely to be reinforced in a medical encounter when particular patient groups assume the role to obey and cooperate with the physician. As Kim, Kingle, Sharkey, Park, Smith, and Cai’s (2000) study found, Chinese patients as less willing to actively participate in medical encounters than their American counterparts. As such, some cultural groups, including Appalachian Ohioans, may prefer a paternalistic model of care.

At a general level, these findings provide important insights into patients’ perceptions of physicians’ accommodative behaviors. These findings also provide important insights into patients’ perceptions of physicians’ accommodative behaviors in an Appalachian Ohio context. Based on the survey data collected during the third phase, it appears that, in the Holzer Clinics of Athens, Jackson, and Gallipolis, patients’ perception of physicians dominating the medical encounter did not harm patients’ satisfaction with physicians’ cultural competence; it improved satisfaction. Physicians’ perceived behavior of encouraging patients to ask questions, reducing patients’ anxiety, and obtaining information from patients did not seem to matter to patients’ perceptions of physicians’ cultural competence and patient satisfaction. Nevertheless, physicians’ perceived behavior of treating patients as equals, showing liking for patients, expressing themselves clearly to patients, letting patients express their opinion, checking to see if the patient understands the physician, handling conversation competently, and looking comfortable with the patient seemed to influence patients’ perceptions of physicians’ cultural competence and patient satisfaction. Interestingly, patients seemed to be less
satisfied with the direct clinical encounter and seemed to have lower levels of perceptions of physician’s global and patient-centered cultural competence compared to patients who perceived their physicians did not use those strategies. Physicians’ perceived behavior of controlling the conversation, deciding on the topics talked about, talking down to the patient, and intruding on patient’s privacy seemed to influence patients’ perceptions of physicians’ cultural competence and patient satisfaction. Interestingly, patients seemed to be more satisfied with the direct clinical encounter and seemed to have higher levels of perception of physician’s global and patient-centered cultural competence compared to patients who perceived their physicians did not use those strategies.

Beach, Saha, and Cooper (2006) described patient-centeredness as an individualized approach that involves “clinicians seeing the illness experience through patients’ eyes, helping patients to see the process through the clinicians’ eyes, and reaching common ground” (pp. 5-6). Yet, in an Appalachian Ohio context, while patients may find physicians’ patient-centered treatment as culturally competent, they do not appear to want to establish common ground with the physician. They rather appear to want the physician to assume a “doctor oriented” verbal response style “(e.g., asking closed-ended questions, giving directions, prescribing courses of action)” (Street, 1991, p. 149).

Discussion of Research Question Five

Research question five asked whether and how health care receivers’ ethnocentric views make a difference in their satisfaction with health care providers. Evidence to answer this question was collected and analyzed throughout this dissertation research. As
discussed before, during the second phase, I used an adapted ethnocentrism scale (Hood, 1982) to measure the role of cultural differences in health care provider and receiver interactions by measuring respondents’ tendency to use their own cultural values to judge others. However, questions measuring participants’ identification with ethnocentric cultural statements did not obtain a reliable index. Therefore, during the third phase, I used the Generalized Ethnocentrism Scale (Neuliep & McCroskey, 1997) to assess whether health care receivers’ ethnocentric views made a difference in their satisfaction with health care providers. Results from H3.1 in phase three, revealed a negative correlation between perceived ethnocentrism and patient satisfaction with the direct clinical encounter. Hence, participants who believe that their own culture is superior to all other cultures are less satisfied with physicians during health care interactions. To further examine whether health care receivers’ ethnocentric views made a difference in their satisfaction with health care providers, I hypothesized that lower levels of patient satisfaction with the direct clinical encounter would be reported when patients had higher levels of ethnocentricty. ANOVA outcomes from H3.1E in phase three, revealed that higher levels of patient ethnocentrism resulted in a decrease in patient satisfaction with the direct clinical encounter, as compared to patients with lower ethnocentrism. These findings highlight the fact that incongruity between patients’ and physicians’ beliefs, values, expectations, and communication styles (Perloff et al., 2006), and differences in explanatory models of illness (Kleinman, 1988), can pose challenges to doctor-patient interactions and the quality of health care.
At a general level, these findings provide important insights into the interaction of patients’ ethnocentrism in their satisfaction with the physician. These findings also provide important insights into the interaction of patients’ ethnocentrism in their satisfaction with physicians in an Appalachian Ohio context. Based on the survey data collected during the third phase, it appears that, in the Holzer Clinics of Athens, Jackson, and Gallipolis, patients who viewed their own culture as superior to all other cultures seemed to be less satisfied with physicians’ competence during health care interactions. It also seemed that patients who had high levels of ethnocentric views reported lower patient satisfaction than did patients who had lower levels of ethnocentric views.

Implications

I opened this dissertation by noting the importance of providing culturally competent health care to diverse population groups in multicultural societies, such as the U.S. Attempts to respond to current and projected demographic changes, to eliminate racial, ethnic, and cultural disparities in health care, and to improve the quality of health care delivery and outcome, have become more common. To contribute to assessing health care receivers’ perceptions of health care providers’ cultural competence in health care interactions, this dissertation has developed and validated new measures and refined existing measures of cultural competence in health care. Although the findings of this dissertation may have served these purposes in general, the findings have specific implications for several areas of health communication research and practice.
Implications for Research on Cultural Competence in Health Care

The findings of this dissertation indicate that cultural competence in health care involves both health care providers and receivers being aware of and recognizing individual differences and being perceptive of differences across cultures, albeit in different ways. The findings of this dissertation indicate that culturally competent health care demands a sense of commitment from health care providers and receivers to develop cultural knowledge and adapt to cultural plurality. Cultural competence in health care is not a unidirectional process; it is not the sole responsibility of the provider. Cultural competence is, rather, a transactional process, a communicative act involving both the provider and the receiver. Culturally competent health care demands a commitment from health care providers to recognize and be receptive to the unique values, beliefs, attitudes, and communication styles that health care receivers bring to the medical encounter. Equally, however, culturally competent health care demands awareness from health care receivers to be mindful of the expectations that they bring to the medical visit, which may shape health care delivery and outcome. Smedley, Stith, and Nelson (2002) argued “it is reasonable to speculate, however, that if patients convey mistrust, refuse treatment, or comply poorly with treatment, providers may become less engaged in the treatment process, and patients are less likely to be provided with more vigorous treatments and services” (p. 174). Although little research has been conducted to examine these issues, this dissertation studied a unique population group, Appalachians to examine how patients’ perceptions and expectations may influence the clinical encounter and how
patients’ responses to healthcare providers may also be a potential source of health disparities.

The findings of this dissertation imply that research on cultural competence in health care demands a holistic look at cultural competence including physicians’ recognition of macro cultural, proxemics/chronemics, and language issues and patient-centeredness. As Betancourt (2006) argued, “addressing language barriers is just one aspect of cultural competence” (p. 6). This understanding is especially important when dealing with “complex, interacting, and open systems,” such as health care, where multiple actors, including patients, health professions, accreditors, regulators, policy makers, and other stakeholders interact at multiple levels (Nishimi, 2006, p. 2). At the same time it should be remembered that, just as different physician-patient relationship models may work in different clinical circumstances (Emanuel & Emanuel, 1992), different cultural competency techniques (alone or in combination) may work under different health care contexts.

Implications for Measuring Cultural Competence in Health Care

Considerable research into cultural competence in health care and subsequent development of standard guidelines for health care providers’ and organizations’ cultural competence has been performed. Nevertheless, little effort has been made to assess health care receivers’ perceptions of what they consider to be culturally competent care during clinical encounters. In their report, HRSA (2001) reported that although measures for cultural competence in health care settings exist, there is a general lack of outcome/impact measures to assess the quality of care. Tested and validated measures of
cultural competence in health care are lacking. To my knowledge, this dissertation research has made the first step towards filling that void. I have developed and validated new measures of cultural competence in health care interactions and refined existing measures of other related concepts that may influence perceptions of cultural competence in health care interactions.

As discussed in the HRSA report (2001), there are practical challenges and conceptual challenges in measuring cultural competence in health care settings. The report identified availability of data source, feasibility of data collection, lack of baseline data, appropriate instrumentation and tools as general measurement challenges and it recognized the dynamic, multifaceted, and complex nature of the concepts of culture and cultural competence as a specific measurement challenge. As such the HRSA report argued for an approach to measure cultural competence in health care that will capture “not only fluidity, but also its relationship to and interaction with an individual, organization, health care delivery system, and society” (p. 43).

Another important consideration in measuring cultural competence in health care is the fact that cultural competence alone cannot “improve access, eliminating health disparities or impacting other types of outcomes” (HRSA, 2001, p. 43). Cultural competence in health care is not the, but a strategy to bring about quality and effective care delivery and outcome in intercultural, cross-cultural, and multicultural contexts. While developing measures, it is important to bear in mind the difficulty “to parse out the contribution of cultural competence in the larger context of other factors” (HRSA, 2001, p. 43). Any attempt at developing, validating, and refining measures of cultural
competence in health care should recognize and consider these general and specific
challenges.

Implications for Research on Patient Satisfaction

Patient satisfaction is a well-studied area of health communication (Brown,
Stewart, & Ryan, 2003; Dutta- Bergman, 2005; Thompson, 1994; Thompson & Parrott,
2002). Studies have found that increased patient involvement and providers’ emotional
support (Marvel, Doherty, & Weiner, 1998), improved listening skills (Buck, Jacoby,
Baker, Graham-Jones, & Chadwick, 1996), acts of friendliness, social conversation, and
partnership building (Williams, Weinman, & Dale, 1998), and displaying immediacy
(Wanzer, Butterfield, & Gruber, 2004) can contribute to patient satisfaction. Dutta-
Bergman (2005) argued that patient satisfaction is a significant assessment of health
outcomes because it is closely linked to effective physician-patient communication and
because it influences patient adherence to treatment and improved health status. The
strong association that this dissertation research found between physicians’ patient-
centered culturally competent behavior and patient satisfaction with the direct clinical
encounter bears important implications for future research on health outcomes. Although
this dissertation examined patients’ satisfaction with physicians’ perceived cultural
competence in health care interactions and found empirical evidence of a strong
association between physicians’ perceived patient-centered cultural competence and
patient satisfaction only, additional health outcome variables could involve measuring
patient trust (Perloff, et al., 2006) or adherence and health behavior (Thom & Tirado,
2006) as they are associated or not with perceptions of the physician’s cultural
competence. Doescher et al., (2000) argued that “patients are more likely to continue to see physicians whose interactions are patient-centered and who inspire trust, and more positive perceptions of a physician are likely to develop over multiple encounters” (p. 1162). Hence, building on the patient satisfaction instruments refined in this dissertation research can contribute to further research on patient health outcome.

**Implications for Research on Culturally Competent Health Care and Race/Ethnicity**

This examination of the relationship between the racial/ethnic/cultural background of the patient and the physician and the patients’ perceptions of physicians’ cultural competence in health care and patient satisfaction highlighted some interesting findings. Some of these findings are in line with the findings of other studies, while others are not. The fact that an increase in patients’ perceived level of ethnocentrism resulted in a decrease in patient satisfaction with the direct clinical encounter highlights the roles that induced stereotypes (Street, 2003b), attitudes (willingness to seek medical care) and expectations (treatment goals) (Perloff, et al., 2006) may play when patients bring them to clinical encounters. At the same time, the fact that race/ethnicity did not emerge as a predictor variable for patient satisfaction provides support for the assertion that “the association between race concordance and higher patient ratings of care is independent of patient-centered communication” (Cooper, et al., 2003, p. 907). In another study of measuring cultural competence from patients’ perspectives, Thom and Triado (2006) also found no association between cultural competency and race/ethnicity. On the other hand, Corbie-Smith, Flagg, Doyle, and O’Brien (2002), found bi-directional racial differences in receipt of preventive care.
These seemingly contradictory findings highlight the “complex pathway through which race concordance may moderate interpersonal exchange, medical decision making, and patient outcomes” (Cooper et al., 2003, p. 914). The findings also bear important implications for considering intercultural, cross-cultural, and multicultural settings as a single basis or multiple bases for cultural competence in health care. Upon identification of the optimal cultural context(s), either interpersonal, group, or organizational interventions can help provide culturally appropriate care for specific population groups. Betancourt (2006) underscored the interaction between cultural competence, quality improvement, and racial/ethnic disparities in health care. In his view, the expectation that cultural competence will reduce racial/ethnic health disparities on its own is an overly ambitious one. Instead, it is important to attend to the key social determinants “that contribute to disparities, expand, access to care, and address the myriad health system factors that contribute to this problem” (Betancourt, 2006, p. 12). As the findings of the dissertation research implied, patient’s satisfaction with the direct clinical encounter may operate independent of the physician’s racial background as long as the physician is cognizant of cultural differences and attentive to the patient’s individual needs. Recognizing the complexities of racial and ethnic health disparities in a primary care context, Cooper (2004) argued that “clinicians and researchers must keep central the ideal of providing exemplary care to individual patients in the context of their personal circumstances, which include biomedical, psychosocial, and cultural factors” (p. 986).
Implications for Research on Patient-Centered Care

The findings of this dissertation have important implications for the growing research on patient-centered health care that highlight “compassion, empathy, and responsiveness to the needs, values, and expressed preferences of the individual patient” (Betancourt, 2006, p. 9). According to Schyve (2006), patient-centered care is comprised of two models, cultural competence and linguistic competence. He argued that “patient-centered care is the overarching conceptual principle, while cultural and linguistic competence are methods for ensuring ‘patient-centeredness’” (p. 1). Beach, Saha, and Cooper (2006) explained that, although patient-centeredness (“broadly focused on the specific needs of people”) and cultural competence (“historically focused on the specific needs of people and communities of color”) are distinct approaches to improve the quality of health care, they “may look fairly similar in practice” (p. 13). Given that both movements share some common principles (i.e., benefiting patients and promoting high quality care), Beach, Saha, and Cooper (2006) recommended that “patient-centeredness and cultural competence remain distinct but aligned efforts to both elevate and balance the quality of health care for all patients” (p. 14).

It is important to note that the scales developed in the second and third phase of this dissertation to measure public perceptions and patient perceptions of physicians’ cultural competence resulted in sub-sales of physician’s global cultural competence, physicians’ patient-centered cultural competence, and patient satisfaction with the direct clinical encounter. Although the physicians’ cultural competence measures emerged as distinct scales from patient satisfaction, strong associations were found between
physicians’ patient-centered care and patient satisfaction with the direct clinical encounter. These findings have important implications for future research. With more validation and refinement, the scales may be used as one of the factors in assessing the quality of care provided by physicians for both patient-centeredness and cultural competence.

*Implications for Research on Provider and Patient Training in Communication Skills*

The findings of this dissertation provide useful direction for patient and provider communication skills training. Terry (2000) studied how physicians could educate patients to improve patient satisfaction with care and patients’ experience with physician-patient communication. He found an increase in satisfaction with care for patients who received self-care information from their physicians as compared to patients who did not receive such information. Although health care provider training in communication skills has long received attention in scholarly efforts (Thompson & Parrott, 2002), it is only recently that communication skills training for patients has been developed (Cegala, McClure, Marinelli, & Post, 2000; Cegala & Broz, 2003; Cegala, Gade, Broz, & McClure, 2004). Cegala et al. (2000) found that patient-centered communication is more often present in the medical encounter when the patient has received skills training than when the patient did not receive such training. These encounters also show a more active role played by the patient in information seeking and giving. Cegala and Broz (2003) argued that when both the provider and the patient receive communication skills training there is a strongly positive effect on both interactants.
The findings of this dissertation research revealed a strong association between a physician’s patient-centered cultural competence and a patient’s satisfaction with the direct clinical encounter. The dissertation also found lower reports of patient satisfaction when physicians were perceived to use convergent CAT strategies of discourse management, emotional expression, and interpretability than when physicians were not perceived to use those CAT strategies. Interestingly, this dissertation found higher reports of patient satisfaction when physicians were perceived to use divergent CAT strategies of interpersonal control moderately than when physicians were not perceived to use those CAT strategies. These findings imply that patients either prefer to converge upward to the physician or to complement the physician and expect the physician to maintain difference in the relative power of the interactants. In such a case, stakeholders can arrange for physician-provider communication skills training for patients to allow them to converge upward and for physicians to retain their position and not converge downward.

Although curricula and training programs for cultural competence are in use for health professionals to improve their knowledge, skills, and attitudes, an important challenge remains in terms of providing patient awareness and training for culturally competent health behavior. More research in this area should be conducted to study unique cultural contexts beyond the Appalachian Ohio context. Although Cegala and Broz (2003) made clear that provider communication skills training requires physicians to move away from a paternalistic biomedical model of the physician-patient relationship to a more patient-centered biopsychosocial model, the findings of this dissertation research revealed that unique patient cultures, such as Appalachian Ohioans, may not
want convergent communication in a medical encounter. Patients may be satisfied with physicians’ patient-centered culturally competent behavior and, simultaneously, not seek convergent communication or mind when physicians use divergent communicative acts. Emanuel and Emanuel (1992) rightly argued that different physician-patient relationship models may work under different clinical circumstances. While, some patients and cultural groups may prefer paternalistic physician-patient relationship, others may have a preference for informative model. Hence, cultural competence creates a persuasive case for realizing the different ways patients may act and may want to be treated in a clinical setting to ensure the best possible clinical outcome.

Implications for Theoretically Informed Work

This dissertation research used communication accommodation theory as a framework to assess health care receivers’ perceptions of health care providers’ accommodative behaviors in shaping culturally competent health care. More specifically, I used health professionals’ use of communication accommodation goals of attention to relationship needs, emotional needs, communicative competence, and role relationship and use of communication accommodation sociolinguistic strategies of discourse management, emotional expression, interpretability, and interpersonal control. Patients did not find physicians’ use of divergent communication accommodation strategies to manifest in patients’ dissatisfaction with the direct clinical encounter or with physicians’ cultural competence. In addition, patients found physicians’ use of convergent communication accommodation strategies to manifest in dissatisfaction with the direct clinical encounter and with physicians’ cultural competence. This finding bears important
implications for the line of work that examines patient-provider communication from patients’ preferences for divergence which “can yield insights into how different groups value the different aspects of medical interactions” (Ngo-Metzger, et al., 2006, p. 5). Using a CAT perspective allowed me to identify distinct preferences of patients. Researchers have found varied patient perspectives with regard to physicians’ communicative behavior. For example, Ngo-Metzger, Legedza, and Phillips (2004) found that Asian patients identified providers’ spending adequate time and listening skills as important components of health interactions. In another study, Saha, Arbelaez, & Cooper (2003) found that African Americans reported participatory decision-making and trust building with providers as important components of health interactions. Based on participants’ responses in the third phase of the dissertation, future research should probe further into the expressed preferences to obtain insights into the possible reasons.

The findings of the dissertation revealed that patients did not find physicians’ use of convergent CAT goals to influence their perceptions of physicians’ cultural competence or patient satisfaction. Patients, however, did find physicians' use of convergent CAT strategies to negatively influence patients’ perceptions of physicians’ cultural competence and patient satisfaction. Patients also found physicians’ moderate use of divergent CAT strategies to possibly influence patients’ perceptions of physicians’ cultural competence and patient satisfaction. Yet, patient's reported rather lower levels of satisfaction with the direct clinical encounter and lower levels of perceived physician’s global and patient-centered cultural competence when patients who perceived their physicians used convergent CAT strategies than those who did not. Street (1991) argued
that “patients react negatively to patterns of communicative exchange in which the doctor is insufficiency dominant and the patient exercises more control over the consultation” (p. 148). The dissertation findings also revealed that patients reported rather higher levels of satisfaction with direct clinical encounter and higher levels of perceived physician’s global and patient-centered cultural competence than did patients who perceived their physicians did not use those divergent CAT strategies. These findings have implications for understanding the difference between “patient-centered care” and the “patient-centered interview.” Lipkin, Quill, and Napodano (1984) explained patient-centered interview as a meeting that:

Approaches the patient as a unique human being with his own story to tell, promotes trust and confidence, clarifies and characterizes the patient’s symptoms and concerns, generates and tests many hypotheses that may include biological and psychological dimensions of illness, and creates the basis for an ongoing relationship. (as cited in Beach, Saha, & Cooper, 2006, p.1)

Although the concept of the patient-centered interview highlights the communication aspect of the patient-provider relationship, the concept of patient-centered care “is not limited to communication and often focuses on other aspects of care such as availability of office hours, ability to get appointments when needed, being seen on time for appointments, and having conveniently located services” (Beach, Saha, & Cooper, 2006, p. 3). It is important to note that, during the second phase of this dissertation research, the pre-interaction convenience items (i.e., “Convenience of the location of the doctor’s office”) did not emerge as a separate factor to measure patient satisfaction. This finding
was consistent with Barr’s (2004) study. It seems that the participants in this dissertation research might not have perceived pre-interaction convenience to be as important as the combination of the interpersonal aspects of a physician’s behavior and his or her delivery of health services to be.

It is important to note that Ngo-Metzger et al. (2006) argued for gathering patients’ perspective for systematic and in-depth knowledge on improving the health care system. The authors further argued for providers to “seek to understand the community and socio-environments that influence patients’ beliefs about illness and disease, as well as the values that patients assign to various elements of the health system” (p.22). Placing such importance on patients’ perspectives should also alert physicians to be aware of and recognize individual differences and be responsive to cross cultural differences. Finally, using CAT as a theoretical framework to study the specific culture of Appalachian Ohio as a context has contributed to our understanding of the intricate workings of communication in relation to health and culture. Future research should probe deeper for systematic explanations of the communicative differences in physician-patient interactions in unique health care settings.

Implications for Cultural Competence in Health Care in the Appalachian Ohio Context

The findings of this dissertation have important implications for designing culturally competent health care interventions in an Appalachian Ohio cultural context. Because scholars have identified Appalachia as a unique culture, this dissertation has examined Appalachian patients’ perspective on physicians’ global and patient-entered cultural competence and their satisfaction with the direct clinical encounter. It appears
that the patients in an Appalachian context recognize the value of cultural awareness, cross-cultural differences, and adapting to cultural plurality in the context of physician-patient interactions. For Appalachian patients, it is important that the physician be conscious of patients’ national, racial, and cultural backgrounds, patients’ religious practices related to health issues, and patients’ family decision-making process. As discussed in chapter two, the fact that Appalachians share a deep rooted cultural heritage, a common sense of purpose, strong family ties, and a deep sense of spirituality likely shape Appalachians’ perception of physicians’ global cultural competence related to macro cultural issues. For example, in the context of preventive health care for women in Southern Appalachian, Stephens (2005) recognized the need for spiritual assessment as “an important aspect of the health assessment of Appalachians” (p. 214; see also Burkhardt, 1993).

For patients in an Appalachian context, it is important that physicians take into consideration patients’ notions of time and space related to medical treatment. The patients’ perceptions of physicians’ global cultural competence related to proxemics/chronemics issues speaks to Appalachians’ sense of independence, and self-sufficiency, and their desire that their autonomous self be respected, factors discussed in chapter two. Recognizing the diverse background of the people in Appalachia, Lefler (2005) explained that “the differences in Western and tribal values include greatly different perspectives of time, space, property, age, and competition, to name a few,” between Appalachians and non-Appalachians (p. 224). Patients in an Appalachian context want their physicians to inquire about patients’ language skills and preferences
and to consider using translation services when needed. Although translation services seem not to speak to an Appalachian context, since they constitute a homogeneous, English speaking, language group, this inclusive outlook preferred by patients highlights the uniqueness of Appalachian culture, and, in particular, the Appalachian folk speech mentioned in chapter two. Denham and Rathbun (2005) argued that:

*Appalachian people often have a distinct dialect or speech pattern and culture. It is imperative that those serving individuals in this culture are aware of dialect patterns and cultural distinctions so that effective communication can occur with patients, clients and community members.* (p. 3).

The distinct features of Appalachian dialect, when coupled with low health literacy can lead to poor physician-patient interaction. Furthermore, Roark and Wallace’s (1996) study (as cited in Denham & Rathbun, 2005) found that people in Appalachia have lower levels of literacy and that they are, therefore, at higher risk for communication impairment.

Patients in an Appalachian context are more greatly satisfied when physicians try to understand patients’ feelings and emotions and when physicians want to know patients’ viewpoints on illness and treatment goals. This perception of physicians’ patient-centered care resonates with the idea of individualism as a personality trait of the Appalachians discussed in chapter two. Discussing the role of social worker in rural Appalachia, Gross (2005) argued that “the social worker who is moving into a rural community must come to that community ready to listen and learn” (p. 86). So, patients in an Appalachian context want physicians to treat them as individuals, and, at the same
time, they want physicians to be empathetic. Similarly, patients in an Appalachian context want physicians to be attentive to patients’ needs. For patients in an Appalachian context, it is important that physicians are interpersonally oriented in this multicultural health context.

During the physician visit, patients in an Appalachian context achieve patient satisfaction through the time spent with the physician, the explanation of what was done for the patients, and the technical skills, and the personal manner of the physician, along with the overall visit. This perception of patient satisfaction with the direct clinical encounter reflects other personality traits of Appalachian people discussed in chapter two, including valuing relationships and being person-oriented.

The findings of the dissertation also illuminate important connections among Appalachian patients’ perceptions of physicians’ cultural competence in health care and patients’ ethnocentric views, fear of physicians, and perceptions of physicians’ use of CAT strategies of divergence and convergence. Although studies have examined health care professionals’ ethnocentric biases (Stephens, 2005), this dissertation has examined patients’ ethnocentric views in relation to physician’s cultural competence and patient satisfaction. The fact that patients in an Appalachian context who are disposed to hold ethnocentric views have less patient satisfaction with the direct clinical encounter calls for further examination of physician-patient intercultural interactions and the quality of health care delivery and outcome.

The findings that, when patients in an Appalachian context have higher fear of physicians, they are less satisfied with physicians’ cultural competence in health care
highlights the often strong sense of mistrust that Appalachians display towards new people and outsiders who do not adapt to Appalachian culture. As argued by Gross (2005):

The social worker who moves into a rural area to practice his/her profession is often perceived as an outsider and is occupied with considerable hesitation. The social worker may be perceived as intrusive, disruptive, threatening and disdainful of the local norms and cultures while at the same time representing ‘the system’ (government).” (p. 81)

Similar to the social worker, the physician who moves to Appalachia to practice may also be perceived as an outsider. Culturally competent health care for an Appalachian population demands attention and adaptation to this unique orientation so that the physician is not seen as a danger to Appalachian norms and cultures.

Appalachian patients’ perceptions of physicians’ use of CAT strategies of divergence and convergence and perceived influence of these strategies on patient satisfaction and cultural competence have important implications for recognizing the cultural uniqueness of Appalachians with regard to health care. The findings spotlight the importance of viewing cultural competence in health care as a developmental process by building on cultural knowledge. For instance, while patients in an Appalachian context value patient-centered care, they seem to be less satisfied with physicians’ culturally competent behaviors when physicians use convergent CAT strategies. On the other hand, patients in an Appalachian context seem to feel the same when physicians diverge too much. When physicians diverge sometimes, but not always or never, patients in an
Appalachian context are most satisfied. This communication accommodation could be viewed as complementary, a pattern in which the physician and the patient mutually maintain the social distance. The physician-patient relationship is asymmetrical, and complementary CAT strategies can result in dissatisfaction between the interactants, especially for the powerless party, in some contexts (Street, 1991). However, in the case of patients in an Appalachian context, it seems that complementary accommodation results in more satisfying interpersonal communication for the patient. This assumption resonates with Weller’s (1965) explanation of the reason why Appalachians turn to the mountain doctor and not to the middle class doctor:

Many mountaineers turn to the old generation practitioners still living in the area rather than to new clinics and doctor’s office. These old doctors can speak the language of the people; they impart a feeling of confidence, while younger doctors do not. The approach of the older doctors is in sharp contrast to a middle class doctor’s practice, where the patient is treated as an active partner in the cure, and may at times even be told that the doctor is uncertain about the diagnosis or the treatment. The mountain doctor cannot betray any lack of knowledge or certainty, but must assume a dogmatic and omniscient command of the situation, hoping thereby to get his patients to follow his prescriptions. (pp. 116-117)

As Weller explained, Appalachian people think doctors’ role is to be in control of the medical encounter, while patients’ role is to comply with their doctors’ directives and medication regimens. Appalachians prefer doctors who fit these roles. Street (1991) argued that satisfaction and compliance seem to increase when doctors and patients
complement one another in terms of achieving their respective expectations for the interaction. At a more personal level, patients in an Appalachian Ohio context may have difficulties establishing trust with the physicians who do not accommodate them properly. Although this “trust” issue does not seem to affect patients’ perceived level of satisfaction in an Appalachian context, further research should investigate the impact on other possible health outcomes, i.e. patient adherence, health behaviors.

Finally, studying cultural competence in an Appalachian Ohio context allowed me to expand the scope of cultural competence in health care in three ways, by: 1) expanding the population to include a new sub-culture, i.e., Appalachian Ohio; 2) integrating concepts of ethnocentrism, fear of physicians, and communication accommodation to measure patients’ perceptions of physicians’ cultural competence in health care interactions; and, 3) aligning the concept of patient-centered care “beyond the interpersonal [intercultural] domain of cross-cultural care to include health care systems and communities [multicultural]” (Beach, Saha, & Cooper, 2006, p. 6).

Implications for Future Research

The findings of this dissertation provide an empirical and contextual basis for future research to look into disease-specific situations for assessing physicians’ perceived culturally competent behaviors. This line of research will add a cultural dimension to the growing interest in examining geographic variation in disease incidence. Moreover, assessing cultural competence will allow health care to be tailored to specific population groups. In their study of geographic variation in colon cancer incidence, Shipp, Desmond, Accortt, Wilson, Fouad, and Eloubeidi (2005) found that the variation in disease
incidence was related to issues of race and socio-economic characteristics. Literature has identified Appalachian Ohio as a high cancer incidence region. This dissertation found an association between patients’ perceptions of physicians’ culturally competent behaviors and patient satisfaction in an Appalachian Ohio context. Hence, these findings provide understandings important for tailoring cancer care to specific population groups based on their individual and cultural needs, attitudes, values, verbal cues, body language, and expectations. With further research, these understandings can help health care professionals adjust disease-specific treatment to accommodate different cultural attitudes and expectations.

By developing physicians’ global cultural competence and patient-centered treatment independent of patient satisfaction with the direct clinical encounter, this dissertation research has responded to Nishimi’s (2006) call for a framework for measuring culturally competent health care. The findings of the dissertation can help build further research to “describe the preferred or best practices, develop specific measures, and report performance data” for specific contexts (Nishimi, 2006, p. 2). The cultural competence movement initially responded to racial/ethnic disparity in health by developing programs, “cross-cultural medicine,” “cultural sensitivity,” “transcultural nursing,” multicultural counseling” “targeted primarily immigrant or refugee populations with limited English proficiency and exposure to Western cultural norms” (Beach, Saha, & Cooper, 2006, p. 5). More recently, the scope of cultural competence has been extended “largely by events that revealed racial disparities both in health status and the quality of health care in the United States” (Beach, Saha, & Cooper, 2006, pp. 6-7).
Simply put, being of a different culture no longer meant being from a different country. This expansion of the cultural competence movement allowed for the inclusion of the experiences of unique cultural groups, members of which may share the same nationality and skin color as the dominant culture, yet possess distinct values, beliefs, attitudes, expectations, socio-economic status, religion, gender, sexual orientation, way of life, age, language, education, and life style. For my dissertation, I studied Appalachian Ohio as a cultural context, a medically underserved area, in which members of the population have often been portrayed as a sub-culture of the U.S. More research should be undertaken to study unique cultural settings so that researchers can move beyond cultural markers of race and ethnicity to expand cultural competence in health care along with other social justice efforts and improve the quality of care for all.

**Limitations and Significance of the Dissertation**

*Limitations*

Certain limitations need to be taken into account when considering the findings of this dissertation. The first limitation concerns the sample of the study. Data for all three phases were collected by self-report. Patients’ perceptions of physicians’ cultural competence and satisfaction with care were studied within the context of Appalachian Ohio. The second limitation is that the dominating research approach has focused on gathering quantitative data, thus allowing replication of the findings in different contexts and surroundings, yet letting contextual details pass. The third important limitation of the study lies in its perception-based approach, which did not attempt to explain how an individual behaves, but rather provided the conceptual and operational tools for
investigating a person’s views in the context of recalled interactions. Fourth, this dissertation examined patients’ perceptions of communication accommodation rather than actual communicative accommodation within the physician-patient interactions. Although it is expected that these perceptions of communication are related to the actual behavior of the physician and patient, this is a noteworthy limitation to the scope of the study. Fifth, findings of this research only offer support for the association found among physicians’ global cultural competence, physicians’ patient-centered cultural competence, patient satisfaction with the direct clinical encounter, patients’ ethnocentrism, patients’ fear of physicians, and greater variance in patients’ perceptions of these associations. Future research may examine the nature of these associations to determine more deeply the causality of these relationships. Longitudinal work would be valuable here. Sixth, further investigation should move beyond the mostly White Appalachian Ohio population to a more ethnically diverse sample to determine if the current sample’s demographic characteristics were significant elements in the findings of this dissertation. Finally, this dissertation research focused on the role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence and patient satisfaction. Future work should examine the role of cultural differences on physician-patient interactions (i.e., communication accommodation) and the influence it has on patients’ health care behavior and outcome (compliance, health conditions), if any.

Although this dissertation has limitations, its findings have significance for both scholarship and policy as they provide important directions to the design of cultural competence interventions for quality health care delivery and outcome.
Scholarly Significance

By examining the role of cultural differences on health care provider-receiver interactions and the possible effect on health care receivers’ assessment of health care providers’ competence and on assessments of the health care quality, this dissertation adds to our understanding of cultural competence in health care interactions. By studying Appalachian Ohio as a cultural context, this dissertation provides insights into patients’ perceptions of physicians’ cultural competence in health care interactions in a medically underserved area. This dissertation found that: a) patients in the Appalachian Ohio context were not influenced by physician’s use of CAT goals of attention to relationship needs, emotional needs, communicative competence, or role relationship in their perceptions of physicians’ cultural competence and patient satisfaction; b) patients reported lower levels of satisfaction with the direct clinical encounter when physicians are perceived to use CAT strategies of discourse management, emotional expression, and interpretability that converge; c) patients reported lower levels of perceived physicians’ global and patient-centered cultural competence when physicians are perceived to use convergent CAT strategies; and, d) patients reported higher levels of satisfaction with the direct clinical encounter when physicians are perceived to use CAT strategies that diverge moderately.

These findings have important implications for the growing research on physician-patient communication and its impact on health care outcomes (Ngo-Metzger, et al., 2006). These findings are discordant with the work that found a close association between providers’ interpersonal skills of expressing caring and patients’ perceptions of
providers’ competence in health care among low income women (Sheppard, Zambrana, & O’Malley, 2004). As such, the reasons that patients in Holzer Clinics in Appalachian Ohio respond to physicians’ accommodativeness differently than expected may provide fruitful grounding to investigate further research in the area. An Appalachian Ohio perspective will be an added dimension to health communication research. This dissertation aimed to offer better understanding of patients’ perspectives in unique cultural contexts. The findings are likely help realize possible knowledge gaps in studying cultural competence in health care.

This dissertation revealed strong associations among the level of patients’ perception of physicians’ use of CAT strategies that converge and diverge, patients’ perception of physicians’ patient centered cultural competence, and patient satisfaction with the direct clinical encounter. In doing so, this dissertation has taken a first step to empirically test these relationships and responded to the call for researchers to “use and refine measures of cultural competence and patient-centeredness, and explore the impact of their unique and overlapping components on patient outcomes” (Beach, Saha, & Cooper, p. 13). Importantly, the patient population in Appalachian Ohio preferred a more paternalistic style by the physician, which is often compared to the parent-child relationship (Parsons, 1951, Parsons & Fox, 1958). This finding has important implications for the growing emphasis on patient autonomy and preservation of patient rights during medical encounters (Beisecker & Beisecker, 1993), partnership building with the physician (Roter & Hall, 1993, Street, 1992), and greater patient participation in medical consultation (Street, 1991a, 1992, Street, et al., 1995). Advocates of patient
empowerment argue that “patients who are more active communicators in medical encounters often receive more patient-centered care and experience better post-consultation outcomes than do more passive patients” (Street, 2003, p. 916). But these advocates do not consider cases when patients do not want to be active in clinical decision-making. Patients may not always look for a relationship with physicians, but may sometimes just want physicians to treat them. Patients may not always want reassurance from physicians, but, instead, sometimes may want physicians to be realistic.

The findings of the dissertation research bear important implications for patients who prefer paternalistic physicians (Beisecker, 1988) and “when patients are comatose, demented, or otherwise unable to participate in a medical decision, and physicians or surrogate decision makers must act paternalistically for the benefit of the patient” such paternalism may be necessary (Beisecker & Beisecker, 1993, p.45).

The findings of the dissertation challenge the often simplistic notions of patient-centered care that results in broad claims such as “since patient-centered care aims to equalize power between patients and physicians, it is possible that disparities in clinical decisions would be reduced by increasing patient involvement” (Beach, Saha, & Cooper, 2006, p. 11). Patient involvement is not synonymous with patient-centered care; patient-centered care means responding to the level of involvement desired by the patients. By studying unique cultural contexts such as Appalachian Ohio, this dissertation has shed further light on research on cultural competence, which very often focuses exclusively on minority population groups to the exclusion of mainstream populations. Although the health care experiences of underserved populations of the mainstream group may not
always be very different, often times underserved populations are excluded from a scholarly research agenda.

This dissertation also contributes to health communication research by using the Generalized Ethnocentrism Scale, the Fear of Physician Scale, and health professionals’ communication accommodation goals and strategies in a patient satisfaction survey. Although previous studies have used patients’ beliefs of racism to measure patient satisfaction (Chen, et al., 2005), ethnocentrism to measure pharmacy students’ intercultural competence (Shah, King, & Patel, 2004), or CAT goals and strategies to study health professionals’ nurturant communication (Watson & Gallois, 1998), to my knowledge, this dissertation has made a first attempt to test these concepts empirically to measure health care receivers’ perceptions of health care providers’ cultural competence in health care interactions and to measure patient satisfaction. By including additional variables (ethnocentrism, fear of physicians, and communication accommodation) that are unique to this study to operationalize cultural competence in health care, I make an important contribution to designing research generally, and to overcome challenges “for measuring cultural competence [in health care] given the requisite concreteness of measurement and the fluid nature of cultural competence” (HRSA, 2001, p. 43). This dissertation contributes to ongoing research on cultural competence in health care by including a relatively unaddressed and culturally unique population of patients and including variables beyond physicians’ perspectives. Patients’ perspectives are equally important in examining cultural competence in health care interactions, generally, and in measuring patient satisfaction, in particular. Importantly, this dissertation addresses
cultural competence in health care and the ways in which related concepts of health, communication, culture, and physician-patient relationships are seen distinctively at unique cultural contexts.

*Policy Significance*

Findings of the dissertation may help illuminate policy and decision making, especially in the health sector. By eliciting the views of three important actors in the health care process – young adults, the public, and patients – this dissertation can inform health policy making. These three population sets have contributed to an understanding of the different cultural perceptions of health care quality. The information gathered, the specific findings, and the scales developed offer individual practitioners and health organizations tools for evaluating physician-patient interactions, cultural competence, and patient satisfaction in specific contexts. In an Appalachian Ohio context, the dissertation findings offer valuable information and opportunity for health care organizations, i.e., Holzer Clinic, to provide culturally competent care that can yield patient satisfaction. Cultural competence is a practical skill that helps health care providers provide satisfactory care to health care receivers at no added expense.

*Directions for Future Research*

Although this dissertation research developed and refined instruments to assess cultural competence and patient satisfaction with patient-provider interactions, future research should more extensively examine the role of cultural differences on both health care providers and receivers’ perceptions of cultural competence in health care interactions. Because I employed a three-phase sequential investigation, the dissertation
research has proved to be replicable in new contexts with different populations. In addition to extending the study with further quantitative research, two recommendations offered by Brown, Stewart, and Ryan (2003) should be taken into consideration while designing future research on outcomes of patient-provider interactions. First, in addition to accessing patient and provider communication, researchers should examine the intersection of provider-patient interactions and outcomes for both providers and patients. Second, researchers can use a variety of methods, both qualitative and qualitative, to build on and complement each method. Accordingly, any future work in this area should use an explanatory structure. A follow-up qualitative approach can be used to complement the quantitative approach undertaken in this dissertation and to extend research on the function of cultural differences on health care provider-receiver interactions and the likely impact on evaluations of the quality of health care from health care receivers’ perspectives. As Creswell, Fetters, and Ivankova (2004) noted, “When used in combination, both quantitative and qualitative data yield a more complete analysis, and they complement each other” (p. 7), because while the former can find statistical association between variables, the latter can discern potential explanations for particular behaviors.

This kind of post-dissertation research design can take into account Giddens’s (1984) framework for social research that is at the intersection of qualitative and quantitative methods. Giddens’s (1984) concept of a “double hermeneutic,” or “the double process of translation or interpretation” (p. 284), allows us to move beyond the unproductive back and forth banter between quantitative and qualitative researchers and
to envision these two methodological orientations as complementary. The first process of interpretation shows the existence of a phenomenon and the relationship that phenomenon has with other phenomena, while the second process of interpretation discusses possible reasons for the existence of the phenomenon and the implications that that phenomenon has for other phenomena. To be specific, my post-dissertation research will employ qualitative methods of data collection and analysis for a richer understanding of the quantitative findings from the dissertation research. Findings from additional rigorous investigation will likely sensitize different stakeholders to identify available opportunities for addressing health issues with culturally competent care. The findings from post-dissertation research may increase awareness of cultural diversity for better coordination between physicians, patients, and other stakeholders, provide necessary feedback to assess the effectiveness of on-going programs and interventions, and, thereby, help them revise and redesign their approaches and policies to make their efforts more fruitful.

In addition, further research can account for and address the limitations of the three phases of this dissertation. Recognizing the need to expand the current research agenda into provider-patient encounters, Street (2003a) observed that, characteristically, either behavioral measures or perceptual procedures of communication are used to study health care provider-patient interactions. Street argued that by using both perceptual and behavioral measures, researchers could “capture both the subjective and objective elements of the [provider-patient] communication process” (p. 81). In closing, I would like to bring attention to Street’s call for using multiple measures and analytical
frameworks for future research, especially on the complex interplay of health, communication, and culture.

Summary of the Dissertation

This dissertation has spotlighted the importance of examining the role of cultural differences on health care provider-receiver interactions and their possible effect on assessments of the quality of health care. More specifically, I investigated the role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions in an Appalachian Ohio context.

Towards this end, I reviewed literature that lies at the intersection of health communication and culture and underscored the importance of understanding issues of cultural competence in health care. I examined studies that dealt with health communication in intercultural, cross-cultural, and multicultural contexts and illustrated that these different cultural settings are related in the context of health care delivery and outcome. In doing so, I emphasized the implications of ignoring or misinterpreting these distinct, yet interrelated, cultural contexts for health communication. While exploring extant approaches to cultural competence in health care, I highlighted the need to systematically study cultural competence in unique contexts, as this dissertation did in an Appalachian Ohio context. Studying cultural competence in the context of Appalachian Ohio, a medically underserved area, is significant for physician-patient interactions, health care delivery, and health outcomes. Highlighting the importance of theoretically informed work on cultural competence in health care, I used communication accommodation theory as a framework for this dissertation.
In this dissertation, I provided an explanation of and rationale for using a quantitative approach to examine the role of cultural differences in health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. I also explained why I used survey methods as the best data collection method for this dissertation research. I carried out this investigation in three phases, with the first two phases devoted to scale development and in the third phase to employ and to validate the scale. The survey questions were informed by existing literature on cultural competence and communication accommodation theory. In the first phase, I developed and pre-tested scenarios of either cultural difference or sameness between patient and provider and either physicians’ cultural competence or incompetence in health care interactions. In the second phase, I used the validated scenarios along with a survey questionnaire, which resulted in the development of a three-factor scale to measure public perception of physicians’ cultural competence. In the third phase, I used the scale along with previously validated measures of relevant constructs (i.e., ethnocentrism, fear of physicians, and health professionals’ CAT goals and strategies) to refine items to develop the patient satisfaction instrument to measure physicians’ cultural competence in health care interactions. A five-factor scale emerged as a measure for physicians’ cultural competence for patient satisfaction.

This dissertation is a first attempt at measuring patients’ perceptions of physicians’ cultural competence, generally, and in an Appalachian Ohio context, in particular. The dissertation has contributed to developing and validating new measures for health care receivers’ perceptions of health care providers’ cultural competence in
health care interactions and to refining extant measures of patient satisfaction and CAT strategies. The dissertation found support for some, but not all hypotheses, providing important insights into the research questions. Answers to the research questions have strengthened understanding of the intersections of health, communication, and culture. The answers have shed light on the extent to which cultural differences play a role in the context of Appalachian Ohio and provided an understanding of health care receivers’ perceptions of health care providers’ accommodativeness in shaping culturally competent health care. The findings of the dissertation will likely help stakeholders to better understand the needs of Appalachian Ohio residents in receiving culturally competent health care.

The findings of the dissertation have specific implications for research on cultural competence in health care, research on patient-centered care, research on culturally competent health care and race/ethnicity, research on provider and patient training in communication skills, research on patient satisfaction, for measuring cultural competence in health care, for theoretically informed work, and for future research in the areas of health, communication, and culture. Finally, future research on this topic should acknowledge and address the limitations of the three phases of this dissertation. The limitations of this dissertation, however, bring forth some promising avenues for future research that might be needed in relation to the focus of the present study.
References


Fischman, J. (2006, July, 17). Bridging the language gap: Some hospitals make non-
English speaking patients feel right at home. *U. S. News & World Report, 141*(2),
88-92.

Society, 19*, 225-250.


*American Journal of Social Science and Medicine, 42*, 1511-1519.

Journal of Nursing Research. 25*, 781-797.

Galanti, G.N. (1991). *Caring for patients from different cultures: Case studies from

New York: Longman.

White (Ed.), *Color in a white society* (pp. 1–9). Silver Spring, MD: National
Association of Social Workers.

intercultural encounters: Elaborations and extensions. In R. Wiseman (Ed.),


and ethnic congruity influence selection of a regular physician?" Journal of Community Health, 22, 247–259


Kaplan, S. H., Gandek, B., Greenfield, S., Rogers, W., & Ware, J. E., Jr. (1995). Patient and visit characteristics related to physician’s participatory decision-making style: Results from the Medical Outcomes Study. *Medical Care, 33*(12), 1176-1187


Osborne, H. (2000). In other words…it takes more than just words; culturally and linguistically appropriates materials. *On Call*. Globe Specialty Products, Inc.


SPSS for Windows, Rel. 11.5.2.1. (2003). Chicago: SPSS Inc.


Delivery Settings: A Review of the Literature. Prepared under contract with the
The Lewin Group, Inc. Retrieved August 13, 2005, from
http://www.hrsa.gov/culturalcompetence/measures/

University Press.

Van Ryan, M. (2002). Research on the provider contribution to race/ethnicity disparities
in medical care. Medical Care, 40(1), 40-151.

Van Ryn, M., & Burke J. (2000). The effect of patient race and socioeconomic status on
physician’s perceptions of patients. Social Science and Medicine, 50, 813-828.

Wade, P. & Bernstein, B. L. (1991) Culture sensitivity training and counselor’s
race: Effects on black female clients’ perceptions and attrition. Journal of
Counseling, 38, 9-15.

specific medical encounters. Medical Care, 26, 393-402.

toward patients: A communication accommodation theory approach. Health
communication, 10 (4), 343-355.

Waxler-Morrison, N., J. M. Anderson, & E. Richardson (1990), Cross-cultural caring: A

Appalachian adults. Preventing Chronic Disease, 3(4), 1-8. Retrieved January 4,


Appendix A: Selected Definitions of Cultural Competence

“[Cultural competence is] a set of procedures and activities to be used in acquiring culturally relevant insights into the problems of minority clients and the means of applying such insights to the development of intervention strategies that are culturally appropriate for these clients.” (Gallegos, 1982, p. 4).

“Cultural competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (Cross, Dennis, Isaacs, & Bazron, 1989, p. iv).

“‘Cultural competence’ [is] the demonstrated awareness and integration of three population-specific issues: health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy” (Lavizzo-Mourey, & Mackenzie, 1996, p. 919).

“Cultural competence denotes the ability to transform knowledge and cultural awareness into health and psychosocial interventions that support and sustain healthy client system functioning within the appropriate cultural context” (McPhatter, 1997, p. 261).

“‘Cultural competence’ in health care 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 (e.g. at the level of structural processes of care or clinical decision-making); and, finally devising interventions that take these issues into account to assure quality health care delivery to diverse patient
populations” (Betancourt, Green, Carrillo, J. E., & Ananeh-Firempong, O., p. 297).

“Culturally competent physicians are able to provide patient-centered care by adjusting their attitudes and behaviors to account for the impact of emotional, cultural, social, and psychological issues on the main biomedical ailment” (Hedrick, 1999; p. viii).

“Cultural competence includes being able to recognize and respond to health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy” (DHHS, 2001, p. 7).

Cultural competence is defined simply as the level of knowledge-based skills required to provide effective clinical care to patients from a particular ethnic or racial group” (DHHS, 2002, ¶ 3).

“Cultural competence is a set of values, behaviors, attitudes, and practices within a system, organization, program, or among individuals that enables people to work effectively across cultures” (DHHS, 2003, p. 12).

“Cultural competence is a developmental process that evolves over an extended period. Both individuals and organizations are at various levels of awareness, knowledge and skills along the cultural competence continuum” (Goode, T. D., & Dunne, C., 2003, p. 6).

Scenario 1

“Good afternoon Mr. Taylor. How are you doing today?” asked Dr. Gupta. What a pleasant young lady from Nepal, thought Mr. Taylor. Then he replied, “I am okay, I hope. And you?” “I am doing alright, thanks for asking. So, what brings you here Sir?” asked Dr. Gupta. “Well, doctor I am having problems with neck pain. The pain is not so severe, but it won’t just leave me alone,” said Mr. Taylor. Dr. Gupta asked, “Please tell me more about it Mr. Taylor.” Mr. Taylor thought for a moment, I wish all the doctors were good listeners as Dr. Gupta is.

Scenario 2

“Hello, I am Dr. Ashraf. How can I help you?” the doctor asked with a smile. Mrs. Williams, the patient, seems like a nice lady. She is suffering from chest pain. Dr. Ashraf spent the next 15 minutes taking her history and examining her carefully. He explained to Mrs. Williams that he would do a cardiovascular exam, run an E.K.G., a radiogram, and go from there. “That’s great,” said Mrs. Williams with a smile.

Scenario 3

After several tests, Dr. Smith was certain that Mr. Castillo had leukemia. Instead of immediately revealing the situation to Mr. Castillo, Dr. Smith thought about it more. She realized that Mr. Castillo often comes with his family. Dr. Smith took about a week to know Mr. Castillo a little better and then just asked him, “Who do you want me to talk to about your diagnosis?” Mr. Castillo was thinking how respectful Dr. Smith seems regarding his cultural values.

Scenario 4

Mrs. Singh tried to say something to Dr. Best in Hindi, but the doctor was not able to understand what she was trying to tell him. “What…umm, you will be fine! Please eat this food now,” said
Dr. Best. But, Mrs. Singh kept insisting on something that is beyond Dr. Best’s comprehension.

He paged Nurse Singer. “I do not know what she was saying! She just won’t eat the food,” Dr. Best said to the nurse. Nurse Singer replied, “Well, Mrs. Singh is from India and people there are vegetarians. I guess she wants to have vegetarian food. I will take care of it.” “Thank you, Ms. Singer,” Dr. Best expressed a sigh of relief.
Table 1

*Demographic Characteristics of Participants, Phase I (N = 175)*

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<td>8.2</td>
</tr>
<tr>
<td>$50,000-$59,999</td>
<td>23</td>
<td>7.5</td>
</tr>
<tr>
<td>$60,000-$69,999</td>
<td>16</td>
<td>5.2</td>
</tr>
<tr>
<td>$70,000-$79,999</td>
<td>15</td>
<td>4.9</td>
</tr>
<tr>
<td>$80,000 or more</td>
<td>25</td>
<td>8.2</td>
</tr>
<tr>
<td>Refused</td>
<td>9</td>
<td>2.9</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>Yes</td>
<td>272</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>9.8</td>
</tr>
<tr>
<td>Refused</td>
<td>4</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Table 4

*Factor Loadings on the Public Perception of Physician’s Cultural Competence Scale, Phase II*

<table>
<thead>
<tr>
<th>Question</th>
<th>PGCC</th>
<th>PPCCC</th>
<th>Patient Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-This doctor wants to know about the patient’s nationality.</td>
<td>0.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor wants to know about the patient’s racial background.</td>
<td>0.832</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor wants to know about the patient’s religious practices related to health issues.</td>
<td>0.658</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor wants to know about the patient’s cultural background.</td>
<td>0.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor asks the patient who makes important decisions in his/her family.</td>
<td>0.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor wants to know about the patient’s spiritual beliefs related to health issues.</td>
<td>0.770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor asks the patient about his/her food and dietary habits.</td>
<td>0.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-This doctor asks the patient if he/she personal space is an issue during physical exam.</td>
<td>0.848</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- This doctor asks the patient if he/she would feel discomfort if the doctor touches him/her during physical exam. 0.799

- This doctor wants to know if time is a concern for the patient with regard to health exam. 0.818

- This doctor wants to know if time is a concern for the patient with regard to medical treatment. 0.822

- This doctor asks the patient if he/she prefers to be addressed- Mr., Ms., or Mrs. 0.831

- This doctor asks the patient if he/she prefers to be called by first name or given name. 0.810

- This doctor wants to know about the patient’s language skills. 0.697

- This doctor wants to know about the patient’s language preference. 0.721

- This doctor considers using the help of available translator. 0.625

- This doctor tries to understand the patient’s feelings. 0.754

- This doctor tries to understand the patient’s emotions. 0.779

- This doctor wants to know the patient’s viewpoint on illness. 0.723

- This doctor wants to know the patient’s viewpoint on treatment goals. 0.591
- The time spent with the doctor you saw. 0.789
- Explanation of what was done for you. 0.848
- The technical skills of the doctor you saw. 0.862
- The personal manner of the doctor you saw. 0.853
- The visit overall. 0.810

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalue</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.117</td>
<td>26.770</td>
</tr>
<tr>
<td></td>
<td>2.222</td>
<td>4.534</td>
</tr>
<tr>
<td></td>
<td>5.437</td>
<td>11.096</td>
</tr>
</tbody>
</table>

Table 5

*Factor Loadings on the Physician’s Cultural Competence for Patient Satisfaction, Phase III*

<table>
<thead>
<tr>
<th>Question</th>
<th>PGCC-Macro</th>
<th>PGCC-Proxemics/Chronemics</th>
<th>PGCC-Language</th>
<th>PPCCC</th>
<th>Patient Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-My doctor wants to know about my nationality.</td>
<td>0.793</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-My doctor wants to know about my racial background.</td>
<td></td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-My doctor wants to know about my religious practices related to health issues.</td>
<td></td>
<td></td>
<td>0.818</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-My doctor asks me who makes important decisions in my family.</td>
<td></td>
<td></td>
<td></td>
<td>0.623</td>
<td></td>
</tr>
<tr>
<td>-My doctor asks me if I would feel discomfort if the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
doctor touches me during the physical exam. 0.589

-My doctor wants to know if time is a concern for me with regard to the health exam. 0.651

-My doctor wants to know if time is a concern for me with regard to medical treatment. 0.725

-My doctor wants to know about my language skills. 0.683

-My doctor wants to know about my language preference. 0.702

-My doctor considers using the help of available translator. 0.647

-My doctor tries to understand my feelings. 0.793

-My doctor tries to understand my emotions. 0.811
- My doctor wants to know my viewpoint on illness. 0.801
- My doctor wants to know my viewpoint on treatment goals. 0.750
- The time spent with the doctor you saw. 0.849
- Explanation of what was done for you. 0.896
- The technical skills of the doctor you saw. 0.903
- The personal manner of the doctor you saw. 0.844
- The visit overall. 0.894

| Eigenvalue | 5.248 | 1.408 | 1.041 | 1.475 | 7.186 |
| % of Variance | 20.993 | 5.631 | 4.164 | 5.902 | 28.743 |

Table 6

*Intercorrelations between Measures of Cultural Competence and Patient Satisfaction, Phase II*

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PGCC</td>
<td>---</td>
<td>0.652**</td>
<td>0.145</td>
</tr>
<tr>
<td>2. PPCCC</td>
<td>---</td>
<td>0.162*</td>
<td></td>
</tr>
<tr>
<td>3. Patient Satisfaction</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *Correlation significant at .05 level (2-tailed). **Correlation significant at .01 level (2-tailed). PGCC: Physician’s Global Cultural Competence. PPCCC: Physician’s Patient-Centered Cultural Competence.
Table 7

*Intercorrelations between Measures of Cultural Competence and Patient Satisfaction,*

*Phase III*

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethno</td>
<td>---</td>
<td>.096</td>
<td>.209*</td>
<td>-.023</td>
<td>.117*</td>
<td>-.233**</td>
<td>-.224**</td>
</tr>
<tr>
<td>2. FOP</td>
<td>---</td>
<td>-.013</td>
<td>-143*</td>
<td>.036</td>
<td>-.122*</td>
<td>-.166**</td>
<td></td>
</tr>
<tr>
<td>3. PGCC-Macro</td>
<td>---</td>
<td>.442**</td>
<td>.626**</td>
<td>.144*</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PGCC-Proxemics/Chronemics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGCC-Proxemics</td>
<td>---</td>
<td>.500**</td>
<td>.274*</td>
<td>.203**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGCC-Chronemics</td>
<td>---</td>
<td>.181**</td>
<td>.070</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* **p < .01, *p < .05.
6. PCCCM --- .596**

7. Patient Satisfaction ---

Table 8

*Summary of Hierarchical Regression Analysis for Variables Predicting Patient Satisfaction*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.005</td>
<td>.003</td>
<td>-.092</td>
</tr>
<tr>
<td>Sex</td>
<td>.106</td>
<td>.121</td>
<td>.054</td>
</tr>
<tr>
<td>Race</td>
<td>.020</td>
<td>.053</td>
<td>.024</td>
</tr>
<tr>
<td>Education</td>
<td>-.067</td>
<td>.043</td>
<td>-.106</td>
</tr>
<tr>
<td>Income</td>
<td>.011</td>
<td>.023</td>
<td>.033</td>
</tr>
<tr>
<td>Insurance</td>
<td>.050</td>
<td>.175</td>
<td>.017</td>
</tr>
<tr>
<td>Cross</td>
<td>.041</td>
<td>.031</td>
<td>.080</td>
</tr>
<tr>
<td>Block $R^2$</td>
<td></td>
<td></td>
<td>.032</td>
</tr>
</tbody>
</table>

**Block 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethno</td>
<td>-.148</td>
<td>.102</td>
<td>-.085</td>
</tr>
<tr>
<td>FOP</td>
<td>-.189</td>
<td>.101</td>
<td>-.106</td>
</tr>
<tr>
<td>PGCC-Macro</td>
<td>-.162</td>
<td>.117</td>
<td>-.092</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Proxemics/Chronemics</td>
<td>.153</td>
<td>.111</td>
<td>.086</td>
</tr>
<tr>
<td>PGCC-Language</td>
<td>.030</td>
<td>.118</td>
<td>.017</td>
</tr>
<tr>
<td>PPCCC</td>
<td>.696</td>
<td>.103</td>
<td>.389</td>
</tr>
<tr>
<td>Block $R^2$</td>
<td></td>
<td></td>
<td>.239</td>
</tr>
</tbody>
</table>

Table 9

Analysis of Variance for Patient Satisfaction of Persons with High Levels of Ethnocentrism as Compared to Persons with Low Levels of Ethnocentrism

<table>
<thead>
<tr>
<th>Mean of persons with high levels of ethnocentrism</th>
<th>SD</th>
<th>Mean of persons with low levels of ethnocentrism</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.80</td>
<td>0.85</td>
<td>2.12</td>
<td>0.90</td>
<td>9.60</td>
<td>1,297</td>
<td>.002</td>
</tr>
</tbody>
</table>
Table 10

*Analysis of Variance for Patient Satisfaction of Persons with High Levels of Fear of Physician as Compared to Persons with Low Levels of Fear of Physician*

<table>
<thead>
<tr>
<th>Mean of persons with high levels of fear of physician</th>
<th>SD</th>
<th>Mean of persons with low levels of fear of physician</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.81</td>
<td>0.88</td>
<td>2.10</td>
<td>0.89</td>
<td>7.84</td>
<td>1, 301</td>
<td>.005</td>
</tr>
</tbody>
</table>
Table 11

*Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Macro as Compared to Physicians Perceived to Express Low Levels of PGCC-Macro*

<table>
<thead>
<tr>
<th>Mean of physicians with high levels of PGCC-Macro</th>
<th>SD</th>
<th>Mean of physicians with low levels of PGCC-Macro</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.96</td>
<td>0.93</td>
<td>1.98</td>
<td>0.87</td>
<td>0.07</td>
<td>1, 299</td>
<td>.794</td>
</tr>
</tbody>
</table>

Table 12

*Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Proxemics/Chronemics as Compared to Physicians Perceived to Express Low Levels of PGCC-Proxemics/Chronemics*

<table>
<thead>
<tr>
<th>Mean of physicians with high levels of PGCC-Proxemics/Chronemics</th>
<th>SD</th>
<th>Mean of physicians with low levels of PGCC-Proxemics/Chronemics</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.13</td>
<td>0.95</td>
<td>1.87</td>
<td>0.84</td>
<td>6.32</td>
<td>1, 302</td>
<td>.012</td>
</tr>
</tbody>
</table>

*Note. PGCC-Proxemics/Chronemics: Physician’s Global Cultural Competence related to Proxemics/Chronemics.*
Table 13

Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PGCC-Language as Compared to Physicians Perceived to Express Low Levels of PGCC-Language

<table>
<thead>
<tr>
<th>Mean of physicians with high levels of PGCC-Language</th>
<th>SD</th>
<th>Mean of physicians with low levels of PGCC-Language</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.02</td>
<td>0.95</td>
<td>1.95</td>
<td>0.86</td>
<td>0.40</td>
<td>1, 299</td>
<td>.529</td>
</tr>
</tbody>
</table>

Note. PGCC-Language: Physician’s Global Cultural Competence related to Language issues.
Table 14

*Analysis of Variance for Patient Satisfaction of Physicians Perceived to Express High Levels of PPCCC as Compared to Physicians Perceived to Express with Low Levels of PPCCC*

<table>
<thead>
<tr>
<th>Mean of physicians with high levels of PPCCC</th>
<th>SD</th>
<th>Mean of physicians with low levels of PPCCC</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.42</td>
<td>1.67</td>
<td>0.76</td>
<td>61.89</td>
<td>1, 301</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note.* PPCCC: Physician’s Patient-Centered Cultural Competence.
Table 15

*Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Treating the Patient as an Equal”*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.32</td>
<td>0.50</td>
<td>2.09</td>
<td>0.72</td>
<td>2.90</td>
<td>0.94</td>
<td>3.24</td>
<td>0.99</td>
<td>4.00</td>
<td>1.41</td>
<td>48.96</td>
<td>.000</td>
</tr>
<tr>
<td>PGCC-Macro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macro</td>
<td>1.44</td>
<td>0.50</td>
<td>1.42</td>
<td>0.50</td>
<td>1.29</td>
<td>0.46</td>
<td>1.56</td>
<td>0.53</td>
<td>1.50</td>
<td>0.71</td>
<td>0.75</td>
<td>4, 297</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td><strong>PGCC-Macro</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PGCC-Proxemics/Chronemics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronemics</td>
<td>1.31</td>
<td>0.47</td>
<td>1.45</td>
<td>0.50</td>
<td>1.42</td>
<td>0.50</td>
<td>1.60</td>
<td>0.52</td>
<td>2.00</td>
<td>0.00</td>
<td>2.41</td>
<td>4.300</td>
</tr>
<tr>
<td><strong>PGCC-Language</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>1.44</td>
<td>0.50</td>
<td>1.46</td>
<td>0.50</td>
<td>1.28</td>
<td>0.46</td>
<td>1.60</td>
<td>0.52</td>
<td>1.50</td>
<td>0.71</td>
<td>1.13</td>
<td>4.297</td>
</tr>
<tr>
<td><strong>PPCCC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.14</td>
<td>0.35</td>
<td>1.44</td>
<td>0.50</td>
<td>1.81</td>
<td>0.40</td>
<td>1.90</td>
<td>0.32</td>
<td>1.50</td>
<td>0.71</td>
<td>18.71</td>
<td>4.299</td>
</tr>
</tbody>
</table>

Table 16

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Maintaining a Good Relationship with the Patient”

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>sig</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient</td>
<td>1.29</td>
<td>0.58</td>
<td>2.12</td>
<td>0.68</td>
<td>2.78</td>
<td>0.83</td>
<td>3.65</td>
<td>0.77</td>
<td>1.80</td>
<td>---</td>
<td>.000</td>
<td>.448</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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Table 17

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Treating the Patient as an Individual”

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Table 18

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Asking Questions of the Patient”

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Table 19

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Reassuring the Patient”

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**Proxemics/Chronemics**

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Table 20

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Showing Liking for the Patient”

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Table 21

*Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Reducing the Patient’s Anxiety”*

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Proxemics/Chronemics

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PGCC-

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PPCCC

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Table 22

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Expressing Himself/Herself Clearly to the Patient”

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**Proxemics/Chronemics**

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**PGCC-**

**Language**

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**PPCCC**

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Table 23

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Checking to See if the Patient Understands Him/Her”

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Proxemics/Chronemics

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### PGCC-

Language

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Table 24

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Handling Conversation Competently”

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Table 25

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Looking Comfortable with the Patient”

<p>|        | 1   | 2   | 3   | 4   | 5   | M   | SD  | M   | SD  | M   | SD  | M   | SD  | M   | SD  | F   | df  | sig  | ES  |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| Patient|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
|        | 1.29| 0.63| 2.06| 0.75| 2.71| 0.86| 3.11| 1.36| 1.00| 0.00| 31.55| 4, 300 | .000 | .296|
| PGCC-  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| Macro  | 1.40| 0.49| 1.44| 0.50| 1.33| 0.48| 1.56| 0.53| 1.00| 0.00| 0.94 | 4, 297 | .443 | .012|</p>
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Table 26

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Controlling Conversation”

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Table 27

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC-Proxemics/Chronemics, PGCC-Language, and PCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Deciding on Topics Talked about”

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Table 28

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Table 29

Analysis of Variance for Patient Satisfaction, PGCC-Macro, PGCC Proxemics/Chronemics, PGCC-Language, and PPCCC among Different Perceived Levels of Physicians Using the CAT Strategy of “Intruding on Patient’s Privacy”

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Patient Satisfaction

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</table>

Appendix D: Survey Questionnaire in Phase One

(This survey should not be used without the author’s permission.)

Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET 1 2 3 4 5 SOUR

Demographic questions: These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? _______________

2. What is your sex?
   a. Male
   b. Female

3. What racial category best describes you?
   a. European-American/White
   b. African-American/Black
   c. Native American
   d. Asian-American
   e. Hawaiian/ Pacific Islander
   f. Other (please indicate): _____

4. Are you of Hispanic descent?
   a. Yes
   b. No

5. What is your level of education?
   a. Less than 8th grade
   b. Some high school
   c. High school graduate
   d. Some college
   e. College degree
   f. Some graduate school
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000
   b. $10,000-$19,999
   c. $20,000-$29,999
   d. $30,000-$39,999
   e. $40,000-$49,999
   f. $50,000-$59,999
   g. $60,000-$69,999
   h. $70,000-$79,999
   i. $80,000 or more

7. Do you have health insurance?
   a. Yes
   b. No
   If yes, which one?
Please read the following scenario or story.

**Scenario 1**

“Good afternoon Mr. Taylor. How are you doing today?” asked Dr. Gupta. What a pleasant young lady from Nepal, thought Mr. Taylor. Then he replied, “I am okay, I hope. And you?” “I am doing alright, thanks for asking. So, what brings you here Sir?” asked Dr. Gupta. “Well, doctor I am having problems with neck pain. The pain is not so severe, but it won’t just leave me alone,” said Mr. Taylor. Dr. Gupta asked, “Please tell me more about it Mr. Taylor.” Mr. Taylor thought for a moment, I wish all the doctors were good listeners as Dr. Gupta is.

Based on this story, please circle the answer you think is best.

1. This physician is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

2. This patient shares my cultural values.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

3. This scenario is believable.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

4. Situations like this happen in a physician’s office.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

5. I found this message easy to read.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

6. I understood what was happening in this situation.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

7. This patient is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

8. This physician shares my cultural values.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

9. I share a lot in common with this physician.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

10. I share a lot in common with this patient.
    a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree
Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET 1 2 3 4 5 SOUR

**Demographic questions:** These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? ____________

2. What is your sex?
   a. Male  
   b. Female

3. What racial category best describes you?
   a. European-American/White  
   b. African-American/Black  
   c. Native American  
   d. Asian-American  
   e. Hawaiian/ Pacific Islander  
   f. Other (please indicate): ______

4. Are you of Hispanic descent?
   a. Yes  
   b. No

5. What is your level of education?
   a. Less than 8th grade  
   b. Some high school  
   c. High school graduate  
   d. Some college  
   e. College degree  
   f. Some graduate school  
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000  
   b. $10,000-$19,999  
   c. $20,000-$29,999  
   d. $30,000-$39,999  
   e. $40,000-$49,999  
   f. $50,000-$59,999  
   g. $60,000-$69,999  
   h. $70,000-$79,999  
   i. $80,000 or more

7. Do you have health insurance?
   a. Yes  
   b. No
If yes, which one?
   i. Medicaid  iv. PPO
   ii. Medicare  v. Traditional insurance
   iii. HMO  vi. Other (please indicate): ____

8. How many times have you visited a physician in the past year? ________________

Please read the following scenario or story.

Scenario 2

“All, I am Dr. Ashraf. How can I help you?” the doctor asked with a smile. Mrs. Williams, the patient, seems like a nice lady. She is suffering from chest pain. Dr. Ashraf spent the next 15 minutes taking her history and examining her carefully. He explained to Mrs. Williams that he would do a cardiovascular exam, run an E.K.G., a radiogram, and go from there. “That’s great,” said Mrs. Williams with a smile.

Based on this story, please circle the answer you think is best.

1. This physician is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

2. This patient shares my cultural values.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

3. This scenario is believable.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

4. Situations like this happen in a physician’s office.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

5. I found this message easy to read.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

6. I understood what was happening in this situation.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

7. This patient is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

8. This physician shares my cultural values.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

9. I share a lot in common with this physician.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

10. I share a lot in common with this patient.
    a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree
Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET 1 2 3 4 5 SOUR

**Demographic questions:** These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? ________________

2. What is your sex?
   a. Male   b. Female

3. What racial category best describes you?
   a. European-American/White
   b. African-American/Black
   c. Native American
   d. Asian-American
   e. Hawaiian/ Pacific Islander
   f. Other (please indicate): _____

4. Are you of Hispanic descent?
   a. Yes   b. No

5. What is your level of education?
   a. Less than 8th grade
   b. Some high school
   c. High school graduate
   d. Some college
   e. College degree
   f. Some graduate school
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000
   b. $10,000-$19,999
   c. $20,000-$29,999
   d. $30,000-$39,999
   e. $40,000-$49,999
   f. $50,000-$59,999
   g. $60,000-$69,999
   h. $70,000-$79,999
   i. $80,000 or more

7. Do you have health insurance?
   a. Yes   b. No
   If yes, which one?
i. Medicaid  iv. PPO  
ii. Medicare  v. Traditional insurance  
iii. HMO  vi. Other (please indicate): _____

8. How many times have you visited a physician in the past year? __________________

Please read the following scenario or story.

Scenario 3

After several tests, Dr. Smith was certain that Mr. Castillo had leukemia. Instead of immediately revealing the situation to Mr. Castillo, Dr. Smith thought about it more. She realized that Mr. Castillo often comes with his family. Dr. Smith took about a week to know Mr. Castillo a little better and then just asked him, “Who do you want me to talk to about your diagnosis?” Mr. Castillo was thinking how respectful Dr. Smith seems regarding his cultural values.

Based on this story, please circle the answer you think is best.

1. This physician is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

2. This patient shares my cultural values.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

3. This scenario is believable.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

4. Situations like this happen in a physician’s office.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

5. I found this message easy to read.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

6. I understood what was happening in this situation.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

7. This patient is like me.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

8. This physician shares my cultural values
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

9. I share a lot in common with this physician.
   a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree

10. I share a lot in common with this patient.
    a. Strongly Agree  b. Agree  c. Not sure  d. Disagree  e. Strongly Disagree
Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

<table>
<thead>
<tr>
<th>Candy is…</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>SOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWEET</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Demographic questions:** These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? ______________

2. What is your sex?
   a. Male
   b. Female

3. What racial category best describes you?
   a. European-American/White
   b. African-American/Black
   c. Native American
   d. Asian-American
   e. Hawaiian/ Pacific Islander
   f. Other (please indicate): _____

4. Are you of Hispanic descent?
   a. Yes
   b. No

5. What is your level of education?
   a. Less than 8th grade
   b. Some high school
   c. High school graduate
   d. Some college
   e. College degree
   f. Some graduate school
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000
   b. $10,000-$19,999
   c. $20,000-$29,999
   d. $30,000-$39,999
   e. $40,000-$49,999
   f. $50,000-$59,999
   g. $60,000-$69,999
   h. $70,000-$79,999
   i. $80,000 or more

7. Do you have health insurance?
   a. Yes
   b. No

If yes, which one?
Please read the following scenario or story.

Scenario 4

Mrs. Singh tried to say something to Dr. Best in Hindi, but the doctor was not able to understand what she was trying to tell him. “What…umm, you will be fine! Please eat this food now,” said Dr. Best. But, Mrs. Singh kept insisting on something that is beyond Dr. Best’s comprehension. He paged Nurse Singer. “I do not know what she was saying! She just won’t eat the food,” Dr. Best said to the nurse. Nurse Singer replied, “Well, Mrs. Singh is from India and people there are vegetarians. I guess she wants to have vegetarian food. I will take care of it.” “Thank you, Ms. Singer,” Dr. Best expressed a sigh of relief.

Based on this story, please circle the answer you think is best.

1. This physician is like me.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

2. This patient shares my cultural values.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

3. This scenario is believable.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

4. Situations like this happen in a physician’s office.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

5. I found this message easy to read.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

6. I understood what was happening in this situation.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

7. This patient is like me.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

8. This physician shares my cultural values.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

9. I share a lot in common with this physician.
   a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree

10. I share a lot in common with this patient.
    a. Strongly Agree     b. Agree     c. Not sure     d. Disagree     e. Strongly Disagree
Ohio University Consent Form
Phase One

Title of Research: Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care
Principal Investigator: Rukhsana Ahmed
Department: School of Communication Studies

Federal and university regulations require signed consent for participation in research involving human subjects. After reading the statements below, please indicate your consent by signing this form.

Explanation of Study
Cultural competence is the adaptation towards understanding of cultural difference. It is gaining support as a powerful and necessary strategy for dealing appropriately with cultural differences in the health care context. Although some efforts have been made to develop instruments to help healthcare professionals and organizations assess their cultural competence, less attention has been paid to measure healthcare receivers’ experience of the healthcare professionals’ and organizations’ cultural competence. The proposed study is part of an attempt to develop and validate patient satisfaction survey to assess cultural competence in health care. You will read a brief scenario or story, and then asked to answer some questions about that scenario. It will take about 10 minutes.

Risks and Discomforts
This study will not pose any risk or discomfort to participants. Potential participants will be assured that involvement in the study is strictly voluntary and that they may decline participation at any point.

Benefits
Participants will receive no direct benefit from participation. However, the information that they will share can contribute to effective patient-provider communication for themselves.

Confidentiality and Records
Participants can be assured that the investigator will carefully and completely protect their contributions to this study. All records will only be accessed by the primary investigator and the faculty advisor, and they will be destroyed upon completion of the study.
**Compensation**
Participants will not receive any financial compensation. However, they may be offered course credit. An alternative (comparable) activity/assignment will be offered to students who will not participate in the survey to obtain the credit.

**Contact Information**
If you have any questions regarding this study, please contact the researcher, Rukhsana Ahmed, by phone (740-593-4833) or e-mail (ra346093@ohio.edu). You can also contact the advisor, Dr. Benjamin Bates, by phone (740-593-9163) or e-mail (batesb@ohio.edu).

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature________________________ Date___________

Printed Name________________________
Debriefing Form

Thanks for participating in the research study titled “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” Through participation you have allowed the researcher to use your survey responses as data. Your participation also permits the researcher to use your answers to pilot message and to validate and refine a patient satisfaction survey to assess cultural competence in health care. Your responses may be published in journal article or presented in conferences. Your identity, however, will remain confidential and your answers will be published in aggregate form only.

By participating in the study you have made significant contribution to understanding the deep and complex links between culture, communication, and the physician-patient relationship. Although there are no immediate benefits for you, your participation in the research is likely to highlight the impact of culture on physician-patient relationships. The results of the survey can help further research on developing parameters and specifics of cultural competence interventions for quality health care delivery and outcome.
Appendix E: Survey Questionnaire in Phase Two

(This survey should not be used without the author’s permission.)

Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET 1 2 3 4 5 SOUR

Demographic questions: These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? ________________

2. What is your sex?
   a. Male  
   b. Female

3. What racial category best describes you?
   a. European-American/White  
   b. African-American/Black  
   c. Native American  
   d. Asian-American  
   e. Hawaiian/ Pacific Islander  
   f. Other (please indicate): _____

4. Are you of Hispanic descent?
   a. Yes  
   b. No

5. What is your level of education?
   a. Less than 8th grade  
   b. Some high school  
   c. High school graduate  
   d. Some college  
   e. College degree  
   f. Some graduate school  
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000  
   b. $10,000-$19,999  
   c. $20,000-$29,999  
   d. $30,000-$39,999  
   e. $40,000-$49,999  
   f. $50,000-$59,999
g. $60,000-$69,999  h. $70,000-$79,999  i. $80,000 or more

7. Do you have health insurance?
   a. Yes                       b. No
   If yes, which one?
   i. Medicaid                  iv. PPO
   ii. Medicare                 v. Traditional insurance
   iii. HMO                     vi. Other (please indicate): ____

8. How many times have you visited a physician in the past year? __________________

Please read the following scenario or story.

Scenario 1

“Good afternoon Mr. Taylor. How are you doing today?” asked Dr. Gupta. What a pleasant young lady from Nepal, thought Mr. Taylor. Then he replied, “I am okay, I hope. And you?” “I am doing alright, thanks for asking. So, what brings you here Sir?” asked Dr. Gupta. “Well, doctor I am having problems with neck pain. The pain is not so severe, but it won’t just leave me alone,” said Mr. Taylor. Dr. Gupta asked, “Please tell me more about it Mr. Taylor.” Mr. Taylor thought for a moment, I wish all the doctors were good listeners as Dr. Gupta is.

Based on this story, please circle the answer you think is best.

1. This doctor wants to know about the patient’s nationality.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

2. This doctor wants to know about the patient’s racial background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

3. This doctor wants to know about the patient’s religious practices related to health issues.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

4. This doctor wants to know about the patient’s cultural background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

5. This doctor asks the patient who makes important decisions in his/her family.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

6. This doctor wants to know about the patient’s spiritual beliefs related to health issues.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree
7. This doctor asks the patient about his/her food and dietary habits.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

8. This doctor asks the patient if he/she personal space is an issue during physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

9. This doctor asks the patient if he/she would feel discomfort if the doctor touches him/her during physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

10. This doctor wants to know if time is a concern for the patient with regard to health exam.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

11. This doctor wants to know if time is a concern for the patient with regard to medical treatment.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

12. This doctor asks the patient if he/she prefers to be addressed- Mr., Ms., or Mrs.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

13. This doctor asks the patient if he/she prefers to be called by first name or given name.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

14. This doctor wants to know about the patient’s language skills.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

15. This doctor wants to know about the patient’s language preference.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

16. This doctor considers using the help of available translator.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

17. This doctor tries to understand the patient’s feelings.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

18. This doctor tries to understand the patient’s emotions.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

19. This doctor wants to know the patient’s viewpoint on illness.
a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

20. This doctor wants to know the patient’s viewpoint on treatment goals.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

21. This doctor can interpret the patient’s non-verbal cues.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

22. This doctor can interpret the patient’s body-language.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

23. This doctor wants to resolve any misunderstandings with the patient.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

Your satisfaction with physicians: In terms of your satisfaction with physicians, how would you rate each of the following?

1. Length of time waiting to get an appointment.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

2. Convenience of the location of the doctor’s office.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

3. Getting through to the office by phone.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

4. Length of time waiting at the office.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

5. The time spent with the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

6. Explanation of what was done for you.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

7. The technical skills of the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

8. The personal manner of the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

9. The visit overall.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor
10. Interaction with nursing staff.
   a. Excellent b. Very good c. Good d. Fair e. Poor

11. Interaction with non-nursing staff (receptionist).
   a. Excellent b. Very good c. Good d. Fair e. Poor

**Your understanding of culture:** In terms of your understanding of culture, how would you rate each of the following?

1. Visitors to America will naturally want to adopt our customs as soon as possible.
   a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree

2. Generally speaking, the way we do things in my home town is the best way to do things in most other places as well.
   a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree

3. Foreigners have a responsibility to learn our customs when they come to the United States.
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4. Most people in the world really wish they could become American citizens.
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5. In reality members of other cultures cannot adequately copy the characteristics of American culture.
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6. It is wrong for visitors to our country to refuse to adapt to our customs when they come here.
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7. The rapid influx of immigrants into the USA will eventually ruin our country.
   a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree

8. American usage of time in business is better than in Africa or South America.
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9. The Asian practice of honoring the elderly is interesting but not very practical.
   a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree

10. It would be better if English were spoken as a universal language.
    a. Strongly agree b. Agree c. Not sure d. Disagree e. Strongly disagree

11. No country has done more for the advancement of civilization than the USA.
12. It is unwise to trust a foreigner until you know him better.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

13. South Americans are usually poor because they are lazy.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

15. Americans tend to be smarter than the Japanese.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree
Thank you for participating in the research project, “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” I appreciate your interest. You will be reading a brief scenario or story and responding to a number of questions about that scenario. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET          1          2           3            4          5          SOUR

Demographic questions: These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? _______________

2. What is your sex?
   a. Male   b. Female

3. What racial category best describes you?
   a. European-American/White   e. Hawaiian/ Pacific Islander
   b. African-American/Black   f. Other (please indicate): _____
   c. Native American
   d. Asian-American

4. Are you of Hispanic descent?
   a. Yes   b. No

5. What is your level of education?
   a. Less than 8th grade   e. College degree
   b. Some high school   f. Some graduate school
   c. High school graduate   g. Graduate or terminal degree
   d. Some college

6. What is your yearly household income?
   a. Less than $10,000   b. $10,000-$19,999   c. $20,000-$29,999
   d. $30,000-$39,999   e. $40,000-$49,999   f. $50,000-$59,999
   g. $60,000-$69,999   h. $70,000-$79,999   i. $80,000 or more

7. Do you have health insurance?
   a. Yes   b. No
If yes, which one?

i. Medicaid          iv. PPO
ii. Medicare         v. Traditional insurance
iii. HMO            vi. Other (please indicate): ____

8. How many times have you visited a physician in the past year? ________________

Please read the following scenario or story.

Scenario 2

“Hello, I am Dr. Ashraf. How can I help you?” the doctor asked with a smile. Mrs. Williams, the patient, seems like a nice lady. She is suffering from chest pain. Dr. Ashraf spent the next 15 minutes taking her history and examining her carefully. He explained to Mrs. Williams that he would do a cardiovascular exam, run an E.K.G., a radiogram, and go from there. “That’s great,” said Mrs. Williams with a smile.

Based on this story, please circle the answer you think is best.

1. This doctor wants to know about the patient’s nationality.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

2. This doctor wants to know about the patient’s racial background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

3. This doctor wants to know about the patient’s religious practices related to health issues.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

4. This doctor wants to know about the patient’s cultural background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

5. This doctor asks the patient who makes important decisions in his/her family.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

6. This doctor wants to know about the patient’s spiritual beliefs related to health issues.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

7. The doctor asks the patient about his/her food and dietary habits.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree
8. This doctor asks the patient if he/she personal space is an issue during physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

9. This doctor asks the patient if he/she would feel discomfort if the doctor touches him/her during physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

10. This doctor wants to know if time is a concern for the patient with regard to health exam.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

11. This doctor wants to know if time is a concern for the patient with regard to medical treatment.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

12. This doctor asks the patient if he/she prefers to be addressed- Mr., Ms., or Mrs.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

13. This doctor asks the patient if he/she prefers to be called by first name or given name.
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14. This doctor wants to know about the patient’s language skills.
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15. This doctor wants to know about the patient’s language preference.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

16. This doctor considers using the help of available translator.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

17. This doctor tries to understand the patient’s feelings.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

18. This doctor tries to understand the patient’s emotions.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

19. This doctor wants to know the patient’s viewpoint on illness.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

20. This doctor wants to know the patient’s viewpoint on treatment goals.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree
21. This doctor can interpret the patient’s non-verbal cues.
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22. This doctor can interpret the patient’s body-language.
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23. This doctor wants to resolve any misunderstandings with the patient.
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**Your satisfaction with physicians:** In terms of your satisfaction with physicians, how would you rate each of the following?

1. Length of time waiting to get an appointment.
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5. The time spent with the doctor you saw.
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6. Explanation of what was done for you.
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7. The technical skills of the doctor you saw.
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8. The personal manner of the doctor you saw.
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Your understanding of culture: In terms of your understanding of culture, how would you rate each of the following?

1. Visitors to America will naturally want to adopt our customs as soon as possible.
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2. Generally speaking, the way we do things in my home town is the best way to do things in most other places as well.
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3. Foreigners have a responsibility to learn our customs when they come to the United States.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

4. Most people in the world really wish they could become American citizens.
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5. In reality members of other cultures cannot adequately copy the characteristics of American culture.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

6. It is wrong for visitors to our country to refuse to adapt to our customs when they come here.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

7. The rapid influx of immigrants into the USA will eventually ruin our country.
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8. American usage of time in business is better than in Africa or South America.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

9. The Asian practice of honoring the elderly is interesting but not very practical.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

10. It would be better if English were spoken as a universal language.
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11. No country has done more for the advancement of civilization than the USA.
    a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

12. It is unwise to trust a foreigner until you know him better.
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13. South Americans are usually poor because they are lazy.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

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15. Americans tend to be smarter than the Japanese.
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When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

Candy is…
SWEET           1          2          3          4          5          SOUR

**Demographic questions:** These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? _______________

2. What is your sex?
   a. Male
   b. Female

3. What racial category best describes you?
   a. European-American/White
   b. African-American/Black
   c. Native American
   d. Asian-American
   e. Hawaiian/ Pacific Islander
   f. Other (please indicate): _____

4. Are you of Hispanic descent?
   a. Yes
   b. No

5. What is your level of education?
   a. Less than 8th grade
   b. Some high school
   c. High school graduate
   d. Some college
   e. College degree
   f. Some graduate school
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000
   b. $10,000-$19,999
   c. $20,000-$29,999
   d. $30,000-$39,999
   e. $40,000-$49,999
   f. $50,000-$59,999
   g. $60,000-$69,999
   h. $70,000-$79,999
   i. $80,000 or more

7. Do you have health insurance?
   a. Yes
   b. No

If yes, which one?
Please read the following scenario or story.

Scenario 3

Mrs. Singh tried to say something to Dr. Best in Hindi, but the doctor was not able to understand what she was trying to tell him. “What…umm, you will be fine! Please eat this food now,” said Dr. Best. But, Mrs. Singh kept insisting on something that is beyond Dr. Best’s comprehension. He paged Nurse Singer. “I do not know what she was saying! She just won’t eat the food,” Dr. Best said to the nurse. Nurse Singer replied, “Well, Mrs. Singh is from India and people there are vegetarians. I guess she wants to have vegetarian food. I will take care of it.” “Thank you, Ms. Singer,” Dr. Best expressed a sigh of relief.

Based on this story, please circle the answer you think is best.

1. This doctor wants to know about the patient’s nationality.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

2. This doctor wants to know about the patient’s racial background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

3. This doctor wants to know about the patient’s religious practices related to health issues.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

4. This doctor wants to know about the patient’s cultural background.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

5. This doctor asks the patient who makes important decisions in his/her family.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

6. This doctor wants to know about the patient’s spiritual beliefs related to health issues.
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7. The doctor asks the patient about his/her food and dietary habits.
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15. Americans tend to be smarter than the Japanese.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree
Ohio University Consent Form
Phase Two

Title of Research: Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care
Principal Investigator: Rukhsana Ahmed
Department: School of Communication Studies

Federal and university regulations require signed consent for participation in research involving human subjects. After reading the statements below, please indicate your consent by signing this form.

**Explanation of Study**
Cultural competence is the adaptation towards understanding of cultural difference. It is gaining support as a powerful and necessary strategy for dealing appropriately with cultural differences in the health care context. Although some efforts have been made to develop instruments to help healthcare professionals and organizations assess their cultural competence, less attention has been paid to measure healthcare receivers’ experience of the healthcare professionals’ and organizations’ cultural competence. The proposed study is part of an attempt to develop and validate patient satisfaction survey to assess cultural competence in health care. You will read a brief scenario or story, and then asked to answer some questions about that scenario. It will take about 20 minutes.

**Risks and Discomforts**
This study will not pose any risk or discomfort to participants. Potential participants will be assured that involvement in the study is strictly voluntary and that they may decline participation at any point.

**Benefits**
Participants will receive no direct benefit from participation. However, the information that they will share can contribute to effective patient-provider communication for themselves.

**Confidentiality and Records**
Participants can be assured that the investigator will carefully and completely protect their contributions to this study. All records will only be accessed by the primary investigator and the faculty advisor, and they will be destroyed upon completion of the study.

**Compensation**
If participants complete the survey, they will receive $4 gift certificate.
Contact Information
If you have any questions regarding this study, please contact the researcher, Rukhsana Ahmed, by phone (740-593-4833) or e-mail (ra346093@ohio.edu). You can also contact the advisor, Dr. Benjamin Bates, by phone (740-593-9163) or e-mail (batesb@ohio.edu).

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature____________________ Date__________

Printed Name_________________
Debriefing Form

Thanks for participating in the research study titled “Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care.” Through participation you have allowed the researcher to use your survey responses as data. Your participation also permits the researcher to use your answers to pilot message and to validate and refine a patient satisfaction survey to assess cultural competence in health care. Your responses may be published in journal article or presented in conferences. Your identity, however, will remain confidential and your answers will be published in aggregate form only.

By participating in the study you have made significant contribution to understanding the deep and complex links between culture, communication, and the physician-patient relationship. Although there are no immediate benefits for you, your participation in the research is likely to highlight the impact of culture on physician-patient relationships. The results of the survey can help further research on developing parameters and specifics of cultural competence interventions for quality health care delivery and outcome.
Appendix F: Survey Questionnaire in Phase Three

(This survey should not be used without the author’s permission.)

Thank you for participating in the research project, “Assessing the Role of Cultural Differences on Health Care Receivers’ Perceptions of Health Care Providers’ Cultural Competence in Health Care Interactions.” I appreciate your interest. As you complete the survey, please make sure that you mark each answer clearly, and that you read and understand the instructions for each section.

When appropriate, please answer the following questions by circling the number that best represent your response. For example, if the question was “Candy is…,” and most of the candy you think was sweet, but some candy you thought of was sour, you might answer like this:

<table>
<thead>
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**Demographic questions:** These items are about you personally. Please know that all information is confidential. Responses to these questions will be used only to compare different responses of different people.

1. What is your age? _____________

2. What is your sex?
   a. Male
   b. Female

3. What racial category best describes you?
   a. European-American/White
   b. African-American/Black
   c. Native American
   d. Asian-American
   e. Hawaiian/ Pacific Islander
   f. Other (please indicate): ______

4. Are you of Hispanic descent?
   a. Yes
   b. No

5. What is your level of education?
   a. Less than 8th grade
   b. Some high school
   c. High school graduate
   d. Some college
   e. College degree
   f. Some graduate school
   g. Graduate or terminal degree

6. What is your yearly household income?
   a. Less than $10,000
   b. $10,000-$19,999
   c. $20,000-$29,999
   d. $30,000-$39,999
   e. $40,000-$49,999
   f. $50,000-$59,999
   g. $60,000-$69,999
   h. $70,000-$79,999
   i. $80,000 or more
7. Do you have health insurance?
   a. Yes                          b. No
   If yes, which one?
   i. Medicaid       iv. PPO
   ii. Medicare      v. Traditional insurance
   iii. HMO           vi. Other (please indicate): ____

8. How many times have you visited a physician in the past year? ________________

9. Where were you born?
   State: _______________________
   City/County: __________________

Based on your most recent experience with a physician, please rate each of the following:

1. Was your physician from the Appalachian region?
   a. Yes  b. No  c. Do not know

2. Was your physician:
   a. European-American/White   e. Hawaiian/ Pacific Islander
   b. African-American/Black    f. Other (please indicate): ____
   c. Native American
   d. Asian-American

3. My physician is from the U.S.
   a. Yes  b. No  c. Do not know

4. My doctor wants to know about my nationality.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

5. My doctor wants to know about my racial background.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

6. My doctor wants to know about my religious practices related to health issues.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

7. My doctor wants to know about my cultural background.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

8. My doctor asks me who makes important decisions in my family.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

9. My doctor wants to know about my spiritual beliefs related to health issues.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

10. My doctor asks me about my food and dietary habits.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree
11. My doctor asks me if personal space is an issue during the physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

12. My doctor asks me if I would feel discomfort if the doctor touches me during the physical exam.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

13. My doctor wants to know if time is a concern for me with regard to the health exam.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

14. My doctor wants to know if time is a concern for me with regard to medical treatment.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

15. My doctor asks me if I prefer to be addressed as Mr., Ms., or Mrs.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

16. My doctor asks me if I prefer to be called by my first name or given name.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

17. My doctor wants to know about my language skills.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

18. My doctor wants to know about my language preference.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

19. My doctor considers using the help of an available translator.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

20. My doctor tries to understand my feelings.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

21. My doctor tries to understand my emotions.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

22. My doctor wants to know my viewpoint on illness.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

23. My doctor wants to know my viewpoint on treatment goals.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

**In terms of your satisfaction with the most recent physician visit, how would you rate each of the following?**

1. The time spent with the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor
2. Explanation of what was done for you.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

3. The technical skills of the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

4. The personal manner of the doctor you saw.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

5. The visit overall.
   a. Excellent  b. Very good  c. Good  d. Fair  e. Poor

Based on your most recent experience with a physician, please rate each of the following:

1. My doctor encourages me to ask questions.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

2. My doctor gets to know me as individual.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

3. My doctor understands my concerns.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

4. My doctor develops good relationship with me.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

5. My doctor reduces my anxiety.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

6. My doctor reassures me.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

7. My doctor obtains information from me.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

8. My doctor listens to me.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

9. My doctor controls the consultation.
   a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

10. My doctor ensures I understood what he/she said.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree

11. My doctor puts across his/her own point of view.
    a. Strongly agree  b. Agree  c. Not sure  d. Disagree  e. Strongly disagree
12. My doctor explains symptoms to me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

13. My doctor treats me as an equal.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

14. My doctor maintains a good relationship with me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

15. My doctor treats me as an individual.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

16. My doctor asks questions of me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

17. My doctor shows liking for me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

18. My doctor expresses himself/herself clearly to me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

19. My doctor checks to see if I understand him/her.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

20. My doctor handles conversation competently.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

21. My doctor looks comfortable with me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

22. My doctor controls the conversation.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

23. My doctor decides on the topics talked about.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

24. My doctor talks down to me.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

25. My doctor intrudes on my privacy.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

26. My doctor lets me express my opinion.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree
Based on your feeling when you communicate with your physician, how would you rate each of the following?

1. When communicating with my physician, I feel tense.
   a. Not at all     b. Somewhat     c. Moderately so     d. Very much so     e. Always

2. When communicating with my physician, I feel calm.
   a. Not at all     b. Somewhat     c. Moderately so     d. Very much so     e. Always

3. When communicating with my physician, I feel jittery.
   a. Not at all     b. Somewhat     c. Moderately so     d. Very much so     e. Always

4. When communicating with my physician, I feel nervous.
   a. Not at all     b. Somewhat     c. Moderately so     d. Very much so     e. Always

5. When communicating with my physician, I feel relaxed.
   a. Not at all     b. Somewhat     c. Moderately so     d. Very much so     e. Always

In terms of your understanding of culture, how would you rate each of the following?

1. Most other cultures are backward compared to my culture.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

2. My culture should be the role model for other cultures.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

3. Lifestyles in other cultures are just as valid as those in my culture.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

4. Other cultures should try to be more like my culture.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

5. People in my culture could learn a lot from people in other cultures.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

6. Most people from other cultures just don't know what's good for them.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

7. I respect the values and customs of other cultures.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

8. Other cultures are smart to look up to our culture.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree

9. Most people would be happier if they lived like people in my culture.
   a. Strongly agree     b. Agree     c. Not sure     d. Disagree     e. Strongly disagree
10. People in my culture have just about the best lifestyles of anywhere.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

11. Lifestyles in other cultures are not as valid as those in my culture.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

12. I do not cooperate with people who are different.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

13. I do not trust people who are different.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

14. I dislike interacting with people from different cultures.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree

15. I have little respect for the values and customs of other cultures.
   a. Strongly agree   b. Agree   c. Not sure   d. Disagree   e. Strongly disagree
Ohio University Consent Form
Phase Three

Title of Research: “Assessing the Role of Cultural Differences on Health Care Receivers’ Perceptions of Health Care Providers’ Cultural Competence in Health Care Interactions.”
Principal Investigator: Rukhsana Ahmed
Department: School of Communication Studies

Federal and university regulations require signed consent for participation in research involving human subjects. After reading the statements below, please indicate your consent by signing this form.

Explanation of Study
Cultural competence is the adaptation towards understanding of cultural difference. It is gaining support as a powerful and necessary strategy for dealing appropriately with cultural differences in the health care context. Although some efforts have been made to develop instruments to help healthcare professionals and organizations assess their cultural competence, less attention has been paid to measure healthcare receivers’ experience of the healthcare professionals’ and organizations’ cultural competence. The proposed study is to develop and validate patient satisfaction survey to assess cultural competence in health care. You will be asked to answer a set of questions. It will take about 20 minutes.

Risks and Discomforts
This study will not pose any risk or discomfort to participants. Potential participants will be assured that involvement in the study is strictly voluntary and that they may decline participation at any point.

Benefits
Participants will receive no direct benefit from participation. However, the information that they will share can contribute to effective patient-provider communication for themselves.

Confidentiality and Records
Participants can be assured that the investigator will carefully and completely protect their contributions to this study. All records will only be accessed by the primary investigator and the faculty advisor, and they will be destroyed upon completion of the study.

Compensation
If participants complete the survey, they will receive $5 gift card.
**Contact Information**
If you have any questions regarding this study, please contact the researcher, Rukhsana Ahmed, by phone (740-593-4833) or e-mail (ra346093@ohio.edu). You can also contact the advisor, Dr. Benjamin Bates, by phone (740-593-9163) or e-mail (batesb@ohio.edu).

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature________________________ Date____________

Printed Name______________________
Debriefing Form

Thanks for participating in the research study titled “Assessing the Role of Cultural Differences on Health Care Receivers’ Perceptions of Health Care Providers’ Cultural Competence in Health Care Interactions.” Through participation you have allowed the researcher to use your survey responses as data. Your participation also permits the researcher to use your answers to pilot message and to validate and refine a patient satisfaction survey to assess cultural competence in health care. Your responses may be published in journal article or presented in conferences. Your identity, however, will remain confidential and your answers will be published in aggregate form only.

By participating in the study you have made significant contribution to understanding the deep and complex links between culture, communication, and the physician-patient relationship. Although there are no immediate benefits for you, your participation in the research is likely to highlight the impact of culture on physician-patient relationships. The results of the survey can help further research on developing parameters and specifics of cultural competence interventions for quality health care delivery and outcome.
Appendix G: This appendix contains IRB for Phase One, Two, and Three

A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2 research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care

Project Director: Rukhsana Ahmed

Department: Communication Studies

Advisor: Benjamin Bates

Robin Stack, Human Subjects Research Coordinator
Office of Research Compliance

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.
A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2 research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: Developing and Validating Patient Satisfaction Survey to Assess Cultural Competence in Health Care

Project Director: Rukhsana Ahmed

Department: Communication Studies

Advisor: Benjamin Bates

Robin Stack, Human Subjects Research Coordinator
Office of Research Compliance

Date 7/18/06

*The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.*
A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2. research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: Assessing the Role of Cultural Differences on Health Care Receivers' Perceptions of Health Care Providers' Cultural Competence in Health Care Interactions

Project Director: Rukhsana Ahmed

Department: Communication Studies
Advisor: Benjamin Bates

Rebecca Cale, Associate Director, Research Compliance
Institutional Review Board

Date: 10/13/06

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.
Appendix H: This appendix contains Permission Letter from Holzer Clinic and Research Award Letters

August 21, 2006

Benjamin R. Bates, Ph.D.
Assistant Professor
Ohio University
Scripps College of Communication
Lasher Hall 009
Athens, OH 45701-2979

Reference: Research Project

Dear Dr. Bates:

This letter is to confirm our discussion held this date regarding our support of Rukhsana Ahmed's research project, "Role of Culture in Physician-Patient Relationships." As stated, we are very comfortable working with Ms. Ahr the Ohio University graduate school in order to support the study as described in the documentation we received.

I look forward to working with you.

Sincerely,

[Signature]

G. Patrick Connors, FACHE
Associate Administrator for Operations

GPC:tkb
From "James W. Dearing" <dearingj@ohio.edu>
To ra34692@ohio.edu
Cc venrick@ohio.edu, hale@ohio.edu
Subject Summer Research Award
Sent Mon, 29 May 2006 11:50:14 -0400

Congratulations Rukhsana:

In response to your application for a 2006 COMS Summer Research Award, the School of Communication Studies is pleased to award you up to $850.00 in expense reimbursement toward the research work outlined in your proposal.

Please note that this award is less than you requested; nevertheless, it is all we can afford. If the amount above will not allow you to conduct your work, let me know ASAP, so that we may allocate it to another applicant. Also, acceptance of this award obligates you to write and deliver by September 30, 2006, a 1-2 page memo to the director of graduate studies summarizing your work.

Please contact Ms. Julie Venrick concerning how to proceed to reimbursed for expenses this Summer.

Again, congratulations!

Cordially,
Jim Dearing
The n for “strongly disagree” is 1, however SPSS can correct for this to show the general trend in ANOVA.