Some want to learn more about culture, and some don’t:

Cultural sensitivity development of baccalaureate nursing students

A Dissertation

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Dedication:

This work is dedicated to those women who showed me what culture was all about as they invited me into their lives for their pregnancy and birth. Without your teachings I would not have known of the need for this work.
Abstract

Culture is of critical importance to the practice of nursing due to the potential for misunderstandings and misperceptions of the part of patients, families, and nurses. To avoid problems, nurses must have excellent intercultural sensitivity and intercultural competence. In spite of the potential for a “cookbook” approach to providing care for diverse patients, nurses must avoid stereotyping. Nursing students should be learning intercultural communication skills, and developing intercultural sensitivity during their nursing education. This study was undertaken to determine how intercultural sensitivity develops in baccalaureate nursing students during their second semester of nursing coursework, which is the first semester containing regular clinical experiences with patients in acute care settings. Additionally, this study seeks to understand what it is that nursing students see as culture, what cultural sensitivity is, and what helps to develop cultural sensitivity. A mixed methods approach was utilized with participant focus groups and writings combined with the Intercultural Development Inventory.
# Table of Contents

Acknowledgements...........................................................................................................i  
Dedication.........................................................................................................................ii  
Abstract.............................................................................................................................iii  
Table of Contents...............................................................................................................iv  
List of Tables ....................................................................................................................viii  
List of Figures...................................................................................................................ix  

## CHAPTER 1: “Cultural sensitivity is such a broad term.”  

1 Introduction...................................................................................................................  
   Culture Means Different Things to Different People....................................................2  
   Culture is Important in Nursing because we all Have Culture....................................3  
   The Twin Cities: Home to Increasing Diversity..........................................................5  
   Increasing Capability of Accommodating Culture.......................................................8  
   Overview of Methodology...........................................................................................10  
   Collection of the Data................................................................................................11  
   What the Literature holds on Intercultural Competence............................................11  
      Intercultural competence- What is it?.................................................................12  
      Cultural competence in nursing........................................................................15  
      How is intercultural competence measured and assessed?......................................19  
      Teaching cultural diversity...................................................................................24  
      Promoting intercultural competence......................................................................33  
      Factors that inhibit intercultural competence.......................................................38  
      Problems and gaps were in the literature...............................................................42  
   Conclusion: beginning assumptions.........................................................................45  

## CHAPTER 2: METHODOLOGY:  

1 Research Questions.....................................................................................................48  
   A Significant Study?..................................................................................................48  
   IDIs, Writings, and Focus Groups............................................................................49  
   Mixed Methods Explored.........................................................................................49  
   Mixed Methods in Nursing Research........................................................................51  
   A Phenomenological Stance....................................................................................53  
   Role of the Researcher..............................................................................................55  
   Recruiting Junior Nursing Student Participants......................................................55  
   Description of the Sample.......................................................................................58  
   Collection of Quantitative Data................................................................................58  
   Collection of Qualitative Data..................................................................................59  
   Quantitative Data Analysis......................................................................................62  
   Qualitative Data Analysis.........................................................................................63  
   Impact of Researcher Identity...................................................................................64  

## CHAPTER 3: QUANTITATIVE DATA ANALYSIS: “I just don’t know how to do everything for all the different cultures yet.”  

IDI Demographics.........................................................................................................65
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>65</td>
</tr>
<tr>
<td>Previous experience in another culture</td>
<td>67</td>
</tr>
<tr>
<td>Looking at age and experience</td>
<td>68</td>
</tr>
<tr>
<td>Educational level</td>
<td>70</td>
</tr>
<tr>
<td>Region of formative years</td>
<td>72</td>
</tr>
<tr>
<td>Nationality and ethnic background</td>
<td>73</td>
</tr>
<tr>
<td>Items on the IDI</td>
<td>76</td>
</tr>
<tr>
<td>Orientation</td>
<td>76</td>
</tr>
<tr>
<td>Perceived score, developmental score, and PSDS gap</td>
<td>77</td>
</tr>
<tr>
<td>Scale scores</td>
<td>80</td>
</tr>
<tr>
<td>Cluster scores</td>
<td>87</td>
</tr>
<tr>
<td>Sub-cluster scores</td>
<td>90</td>
</tr>
<tr>
<td>Age as a Variable</td>
<td>92</td>
</tr>
<tr>
<td>Changes in Scores from Early to Late IDI</td>
<td>95</td>
</tr>
<tr>
<td>Orientation scores</td>
<td>95</td>
</tr>
<tr>
<td>Changes in perceived and developmental scores</td>
<td>96</td>
</tr>
<tr>
<td>PSDS gap score changes</td>
<td>97</td>
</tr>
<tr>
<td>Scale score changes</td>
<td>100</td>
</tr>
<tr>
<td>Cluster score changes</td>
<td>101</td>
</tr>
<tr>
<td>Sub-cluster score changes</td>
<td>103</td>
</tr>
<tr>
<td>Need for Analysis of White-Only Participants</td>
<td>105</td>
</tr>
<tr>
<td>White-only scales, perceived &amp; developmental scores and PSDS gap</td>
<td>106</td>
</tr>
<tr>
<td>White-only cluster and sub-cluster scores</td>
<td>107</td>
</tr>
<tr>
<td>Caring for a Patient from a Different Cultural Background</td>
<td>109</td>
</tr>
<tr>
<td>Patient from different culture and scale, perceived, developmental &amp; gap scores</td>
<td>110</td>
</tr>
<tr>
<td>Quantitative Findings - What do the Results Indicate?</td>
<td>115</td>
</tr>
<tr>
<td>Demographics</td>
<td>115</td>
</tr>
<tr>
<td>Orientation and perceived, developmental, and PSDS gap scores</td>
<td>118</td>
</tr>
<tr>
<td>Scale scores</td>
<td>119</td>
</tr>
<tr>
<td>Cluster scores</td>
<td>120</td>
</tr>
<tr>
<td>Sub-cluster scores</td>
<td>121</td>
</tr>
<tr>
<td>White-only analysis</td>
<td>122</td>
</tr>
<tr>
<td>Caring For a patient from a different culture</td>
<td>122</td>
</tr>
<tr>
<td>Conclusion</td>
<td>122</td>
</tr>
<tr>
<td>CHAPTER 4: QUALITATIVE FINDINGS: “I expect growing diversity and need to be sensitive about these differences”</td>
<td>124</td>
</tr>
<tr>
<td>“Culture is a way of life, the way a group of people live.”</td>
<td>124</td>
</tr>
<tr>
<td>Source of culture</td>
<td>126</td>
</tr>
<tr>
<td>Inter- and intra-group differences</td>
<td>128</td>
</tr>
<tr>
<td>Interesting misunderstanding</td>
<td>129</td>
</tr>
<tr>
<td>“Just be aware that there is more than one culture.”</td>
<td>131</td>
</tr>
<tr>
<td>“Everyone is different.”</td>
<td>134</td>
</tr>
</tbody>
</table>
“The nurse needs to change how things were done.” ........................136
“Who the person is and their thoughts.” .................................137
“They might not accept what the nurse wants to do.” ..................138
“It shows respect.” ...............................................................139
“We need to personalize care.” .................................140
“So we can give the best care.” ........................................141

More Variety in Why Culture is Important ..................................142
“I just wish I could learn more about every culture.” .................143
“I just felt so inadequate!” ..............................................144
“She looked just like me—it was such a neat feeling!” ..............148
“There were a lot of differences between me and the patient.” ....149
“She didn’t speak much English, so I couldn’t ask her questions.” ..151
“I think we learned a lot about culture this year, but I want to learn more” .... 152

Domains of learning................................................................153
Types of Learning Activities.....................................................155
What Does the Literature Say about Classroom Activities?........156
“Any little interaction is helpful in opening my eyes more.” ........157
Past Experiences and Hopes for the Future.........................158
Peers as a tool for use.........................................................159

“There were a lot of issues on campus.” ..............................160
“I don’t want to do it wrong and offend someone.” ..............161
Bad example.........................................................................162
“We should be learning more.” ........................................163
“The faculty and patients were mostly white.” ......................164

In Conclusion........................................................................165

CHAPTER 5: COMPARISON OF FINDINGS.......................................167
Demographics........................................................................167
What Culture is and Why it is Important..............................167
Comparison of Qualitative Data and Participants’ IDI Stages........170
Ethnocentric participant examples......................................170
Ethnorelative participant examples......................................170
Minimization participant examples....................................170
Further comparisons of verbal statements and IDI stage........172
Writings and IDI Stage.........................................................173

Conclusion.............................................................................175

CHAPTER 6: DISCUSSION: “What did you learn about us?” ..........181
Implications for the DMIS & IDI in Nursing.........................182
Implications for Nurse Educators.................................183
Implications for nursing course construction..........................184
Implications for nursing faculty development......................186

CHAPTER 7: STRENGTHS AND LIMITATIONS OF THE STUDY.............188
Strengths, or What Went Well..............................................188
Limitations, or What Didn’t Go as Well as Intended..............188
List of Tables

Table 1: Age and Experience at Early IDI .......................................................... 69
Table 2: Educational Level Total Sample ........................................................... 71
Table 3: Educational Level Analytical Sample ..................................................... 71
Table 4: Region of Formative Years .................................................................... 73
Table 5: Changes in Self-described Nationality and Ethnic Background ............... 75
Table 6: T-test of PS, DS, and Gap Scores at Early IDI ....................................... 79
Table 7: Scale Scores of Analytical Sample at Early IDI ..................................... 81
Table 8: Early DD Scale Scores ........................................................................ 82
Table 9: Early R Scale Scores ........................................................................... 83
Table 10: Early M Scale Scores ......................................................................... 84
Table 11: Early AA Scale Scores ....................................................................... 85
Table 12: Early EM Scale Scores ....................................................................... 86
Table 13: Early Scale Scores by Group ............................................................... 86
Table 14: T-tests of Early Scale Scores ................................................................. 87
Table 15: Cluster Scores of Analytical Sample at Early IDI ................................. 88
Table 16: Early Cluster Scores by Group ............................................................. 88
Table 17: T-tests of Early Cluster Scores .............................................................. 89
Table 18: Sub-Cluster Scores of Analytical Sample on Early IDI ........................ 90
Table 19: Sub-Cluster Scores by Group on Early IDI ......................................... 91
Table 20: T-tests of Early Sub-Cluster Scores .................................................... 91
Table 21: ANOVA of Age with Scale, PS, DS & Gap Scores at Early IDI ............ 93
Table 22: ANOVA of Age with Cluster and Sub-Cluster Scores ........................... 94
Table 23: Comparison of Group Changes on PS & DS Scores ........................... 96
Table 24: T-tests of Changes in PS & DS Scores ................................................ 97
Table 25: Changes in PSDS Gap Scores by Group .............................................. 98
Table 26: T-tests of Changes in PS DS Gap Scores ............................................. 99
Table 27: T-tests of Scale Changes ................................................................. 101
Table 28: T-tests of Cluster Score Changes ......................................................... 103
Table 29: T-tests of Sub-Cluster Score Changes ................................................ 104
Table 30: Ethnicity or Race in 2 Categories ....................................................... 105
Table 31: Scales, PS, DS, & Gap Scores of White Students ............................... 106
Table 32: T-test of Scale, Perceived, Developmental & Gap Score Changes of White Students ................................................................. 107
Table 33: White-Only Cluster and Sub-Cluster Changes .................................... 108
Table 34: T-tests of Cluster and Sub-Cluster Scores of White Students ............. 109
Table 35: Patient from Different Culture ............................................................ 110
Table 36: Patient from Different Culture and Changes of Scale, Perceived Developmental & Gap Scores ................................................................. 111
Table 37: T-tests Patient from Different Culture with Scale, PS, DS, & Gap Scores .............................................................................................................. 112
Table 38: Patient from Different Culture Changes in Cluster and Sub-Cluster Scores ........................................................................................................... 113
Table 39: T-tests Patient from Different Culture and Cluster & Sub-Cluster Scores ...... 114
List of Figures

Figure 1: DMIS and IDI .......................................................... 15
Figure 2: Movement in mindset ............................................. 23
Figure 3: Data analysis technique ........................................... 66
Figure 4: Age at early IDI .................................................... 66
Figure 5: Early experience in another culture .......................... 68
Figure 6: Total sample regions .............................................. 72
Figure 7: Individual orientations at early IDI .......................... 77
Figure 8: Early PS & DS both groups .................................... 78
Figure 9: Early PSDS gap both groups ................................. 79
Figure 10: Orientation changes both groups ........................... 96
Figure 11: Changes in perceived and developmental scores ...... 97
Figure 12: PSDS gap score changes both groups ..................... 98
Figure 13: Changes in perceived, developmental, & gap scores .... 99
Figure 14: Scale changes across groups ................................. 100
Figure 15: Cluster changes both groups ................................. 102
Figure 16: Sub-cluster score changes of both groups ............... 104
Figure 17: Student responses: What is culture? ....................... 126
Figure 18: What is cultural sensitivity .................................... 132
Figure 19: Why is culture important in nursing? ..................... 135
Figure 20: Caring for diverse patients ................................. 144
Figure 21: Characteristics of diverse patient encounters .......... 149
Figure 22: Helped develop cultural sensitivity ........................ 152
Figure 23: Domains of learning ............................................ 154
Figure 24: Types of cultural learning activities ........................ 155
Figure 25: Would help cultural sensitivity development .......... 157
Figure 26: Hinders cultural sensitivity ................................. 162
Chapter 1
“Cultural sensitivity is such a broad term.”

Teaching about issues of culture is a complex topic in nursing education, primarily because there are multiple perspectives on the intersections of nursing and culture. One student summed up this complexity as “Cultural sensitivity is such a broad term.”

Additionally, confusion exists due to the plethora of terms used in the nursing literature to describe essentially the same concept: cultural competence (Campinha-Bacote, 1999; Jeffreys, Bertone, Douglas, Newman, 2007; Lipson, 1996; Meleis, 1999; Sealey, Burnett, Johnson, 2006; Suh, 2004), multiculturalism (Nairn, Hardy, Parumal, & Williams, 2004), diversity (American Association of Colleges of Nursing, 2001; Newman & Williams, 2003), cultural diversity (Spector, 2004), cross-cultural learning (Moch, Long, Jones, Shadick & Solheim, 1999), cultural sensitivity (Drake, 2004), transcultural nursing (Andrews & Boyle, 1999; Giger & Davidhizar, 2004; Purnell & Paulanka, 1998), intercultural competence (Koskinen & Tossavainen, 2004) cultural awareness (Krainovich-Miller, et al., 2008; Rew, Becker, Cookston, Khosropour, & Martinez, 2003). Further complexity is added by the additional terms used in other higher education disciplines such as intercultural sensitivity (Altshuler, Sussman & Kachur, 2003; Mahoney & Schamber, 2004). Not unexpectedly, this multiplicity leads to confusion as well as competing and contradictory definitions.

The overall objective of teaching nursing students about issues of culture, regardless of the chosen term to define the concept, is to have nursing faculty and students alike develop an awareness of, interest in, and sensitivity to aspects of their own and other cultures. This self-awareness and awareness of difference can then develop into an
understanding of how one’s cultural background and the cultural background of the patient
impact the provision and receipt of health care.

The same concepts apply to nurse educators. Faculty must gain an understanding of
how their cultural background impacts how and what they teach and expect from students.
Simultaneously faculty must know the cultural backgrounds of their diverse students, and
incorporate the values and beliefs of those students into the provision of education. The
diverse cultural values and beliefs of both the faculty and the students must be synthesized
into a coherent and symbiotic whole that actively values and incorporates issues of culture
into successful nursing education. Accomplishing this symbiotic whole implies neither
homogeneity nor consensus. On the contrary, differences in values, beliefs, and
perspectives will remain; however, those differences will be overtly identified and will be
respected and accepted.

“Culture Means Different Things to Different People”

To understand intercultural communication, one must first understand what culture
is. Sir Edward Taylor, a British anthropologist, was the first to use the term culture in 1871
to describe complex group beliefs, actions, and habits (Andrews & Boyle, 1999, p. 3).
Although hundreds of definitions exist, the predominant view is that culture is learned
from and shaped by familial, social and spiritual/religious influences beginning in very
early childhood.

Culture includes both subjective aspects such as meanings, symbols, traditions,
beliefs, customs, values, practices, worldview, time orientation and our relationship to
nature as well as products like music and art. Culture is a group’s shared series of
patterned behavioral responses that come in part from past generations, a sort of framework for life, and has an important influence on how we think and act, our decision making and problem solving. Culture creates a kind of mental programming that impacts all the realms of our life. Most of our daily practices and life rituals are culturally based. But it is important to remember that culture is not stagnant; culture is dynamic and adaptive to world changes (Bennett, 1998; Galanti, 2004; Giger & Davidhizar, 2004; Kottak & Kozaitis, 1999; Purnell & Paulanka, 1998; Rodriguez, 1999; Teekens, 2003; Ting-Toomey, 2005).

Consideration of culture as dynamic can be interpreted as an understanding that the culture of our parents’ generation has many similarities to the culture of our children’s generation, but the latter has incorporated the world of today into their cultural perspective. Our children’s generation will likely value the same ideals as their grandparents, such as independence, honesty, hard work, and family, celebrate in much the same manner with the same festive foods, follow similar religious traditions, and use many of the same sayings. But the younger generation will have adapted and incorporated electronic technology into their life such as listening to an iPod in the car instead of the radio, using a tablet or smart phone instead of a paper calendar, and daily use of computers for tasks like paying bills, balancing the checkbook, and written and visual/verbal communication with family and friends.

“Culture is Important in Nursing Because We All Have Culture”

The issue of culture is particularly important to nursing students for multiple reasons. First, culture impacts how a person views their health, from the cause of the
disease or problem to what will cure it or make it go away (Spector, 2004). The way a patient processes the medical information given to them is culturally determined. Culture determines who makes the health care decisions in a family, what treatment methods were acceptable, what is done to preserve and promote health on a daily basis, and perceptions of causation of illness. Cultural values and beliefs impact patients’ understanding and acceptance of routine or specialized medical and nursing care. The ability to cope with an illness has cultural roots. The decision to follow through with or forgo recommended treatments, which will impact overall health outcomes, comes from a patient's culturally influenced beliefs. (Julia, 1995; Lipson, 1996; Rodriguez, 1999; Ulrey & Amason, 2001).

When patients interact with the health care system, their cultural practices have significant impact on the situation. Every health care interaction between a provider and a patient involves at least three and sometimes four cultures: the personal/familial cultural background of the provider, the personal/familial cultural background of the patient, the health care setting culture, and often the culture of traditional or folk medicines that the patient uses (Fitzgerald, 1992, p. 39).

Culturally diverse patients often present with beliefs and practices that are unfamiliar to mainstream US white allopathic health care professionals. Patients may not accept biology as the cause of pathology, but instead will hold religious-magical or fatalistic perspectives on causation. The health care practices of culturally diverse patients may include folk medicine, herbs or other botanicals, and traditional healing methods (Chachkes & Christ, 1998). If nurses were unaware of cultural differences, the potential
exists for either insulting the patient or having an inaccurate understanding of their beliefs and practices. Vace, DeVaney, & Wittmer (1995) describe it this way:

Acute disparities are compounded when a helper with a lack of cognitive knowledge about a special subgroup interacts with a confused and bewildered group member…A lack of cognitive understanding makes one more prone to impose one’ own values. In contrast, knowledgeable helping professionals can be catalysts in the process of helping others develop an appreciation of the different subgroups found in America as well as facilitating improved individual functioning within the groups themselves (p. 2).

The popular book by Anne Fadiman The Spirit Catches You and You Fall Down (1997) provides vivid examples of how traditional Hmong spirituality beliefs affect the acceptance & understanding of a child’s diagnosis of epilepsy, and the family’s intermittent acceptance of allopathic medical treatment. Many mistakes were made by the medical and nursing staff as they misinterpret the family’s verbal and non-verbal communication based on ethnocentric assumptions that the family believes, thinks, and responds like a mainstream U.S. American family.

The Twin Cities: Home to Increasing Diversity

The Minneapolis-St. Paul metropolitan area is home to a wealth of diverse cultures, and this diversity has occurred rather quickly. In Minnesota the predominant ethnic groups prior to the 1970s were German & Scandinavian. This changed rapidly in the late 1970s, when the Minneapolis-St. Paul area had an influx of refugees and immigrants from Southeast Asia secondary to the Vietnam War. The greatest numbers of new arrivals were
Hmong, with sizable populations of Vietnamese, Cambodian, and Laotian descent as well. St. Paul is believed to have the largest urban Hmong population outside of China (Center for Cross Cultural Health, 1998).

Substantial numbers of persons from Mexico and Central American countries began arriving in the 1970s, and those numbers continue to steadily increase. The 1980s saw additional increases in these populations, especially among the Hmong as peoples dispersed by the U.S. government across the country in an effort to not overburden one geographic area with the economic needs of refugees began to find family and clan members, and moved to live near their clan. The number of foreign born residents increased nearly 50% between 1970 & 1980 (Gibson & Lennon, 1999b).

In the 1990s Minnesota became home to large populations of African immigrants and refugees, primarily from Somalia and Liberia, as a result of civil wars and political unrest. The percentage of Minnesota residents born in Africa nearly doubled between 1980 & 1990 (Gibson & Lennon, 1999a). This increase in racial and ethnic diversity as a result of greater numbers of refugees and immigrants arriving in Minnesota continues.

The late 1990s saw the majority of new arrivals from Russia, Bosnia, & Somalia (MN Department of Health Office of Refugee Health, 2007). Recent arrivals to Minnesota include people from Nigeria, Kenya, Ethiopia, Eritrea, Ghana and Russia. Some of the newest groups of refugees have been ethnically Karen from Burma (also known as Myanmar) and from the Sudan (Lutheran Social Services, 2007). An estimated 14% of new arrivals to Minnesota come as refugees, which is over 3 times the national average of 4% (Center for Cross Cultural Health, 1998). Based on 2006 community census
information, 14.8% of Minneapolis and 13.8% of St. Paul residents were foreign born, compared to a national average of 12.5% (US Census Bureau, 2006).

This increase among the diversity in Minnesotans has created a greater cultural diversity among the patient populations that baccalaureate nursing students care for in clinical settings. However, the majority of nurses and nursing students are Caucasian: 81.8% of practicing nurses in the US self-reported as Caucasian in 2004, compared to 67.9% of the US population (Health Resources Services Administration, 2004).

The junior nursing class cohort of 2007 at the institution for which the author teaches is approximately 37% students of color (a record for this institution) which has the potential to increase cultural awareness and possibly cultural sensitivity among student peers. Anecdotal data suggests that the diversity among nursing students is higher at the author’s institution than other baccalaureate programs in Minnesota. However, only one full time and one part time faculty member and one lab assistant were persons of color; the majority of nursing faculty being white is a common phenomenon among nursing education.

Racial and ethnic diversity is often the most obvious aspect of culture to nursing students new to working within cultural diversity. In this study, culture was defined broadly, including religious tradition, sub-groups within ethnic or racial groups, sexual orientation, and age group. However, it was anticipated that students would most often identify and discuss their experiences, and the cultural differences and similarities of their clinical patients that were of different racial or ethnic backgrounds from themselves.
Increasing Capability of Accommodating Culture

Milton Bennett defines the development of intercultural sensitivity as “the construction of reality as increasing capable of accommodating cultural difference” (1993, p. 24). The Developmental Model of Intercultural Sensitivity (DMIS), developed using concepts from cognitive psychology and constructivism, describes the movement or growth of an individual through stages as he/she experiences and seeks to learn about cultural differences. The DMIS has been used most extensively in corporate training to facilitate intercultural development and in higher education to a lesser degree, but has not often been utilized in nursing or other health profession education. In part this fact arises from a call from within nursing education to discount research from outside the field of nursing education because of the belief that nursing education is unique and other (including higher education) research is not applicable (Ironside, 2001). This has led to an insular view on how to educate nurses. Another aspect of this issue is that the creation of a nurse educator most often begins with a clinical practitioner; clinical expertise lands the job in education and the ability to teach develops on the job. The majority of nurse educators do not have degrees in education, but rather have earned advanced degrees in clinical nursing and nursing research. And while this practice has increased the body of nursing knowledge, the development of nurse educators has lagged behind.

Baccalaureate nursing students are the future leaders of the profession of nursing. Many will become clinical nurse managers of care units of hospitals and outpatient services. In addition, the United States population is becoming increasingly culturally diverse (Gibson & Lennon, 1999b). Culture has significant implications during health care.
These factors combined were the reason that intercultural sensitivity is a critical issue for baccalaureate nursing students (Purnell & Paulanka, 1998; Spector, 2004). Galanti (2004) describes the intersection of diverse cultures and US health care as “the cultural differences that create conflicts and misunderstandings and that may result in inferior medical care” (p. 1) while Giger & Davidhizar (2004) state “nurses must develop an understanding about culture and its relevance to competent care” (p. 4).

Nursing education has a moral obligation to prepare graduates to be prepared to care for diverse patients as the cultural diversity of the US increases. Although the mandate to improve cultural aspects of nursing education came from the American Nurses Association in 1986, when guidelines on diversity in nursing education were developed and published, the debate within the profession continues regarding how effective nursing education has been in this effort, including what should be taught and by whom (Campinha-Bacote, 2006). Campinha-Bacote looked at the past 20 years of nursing education as a “progressive ongoing transformative process” (p. 244) that will continue to improve the outlook for both diverse nursing students and patients.

Cultural sensitivity is not natural. It is not part of our primate past, nor has it characterized most of human history (Bennett, 1993). Cross-cultural contact usually has been accompanied by bloodshed, oppression, or genocide. The continuation of this pattern in today’s world of unimaginined interdependence is not just immoral or unprofitable—it is self-destructive. Yet in seeking a different way, we inherit no model from history to guide us.
Overview of Methodology

A mixed methods study was utilized to delve into the lived experience of junior baccalaureate nursing students and understand the process of a nursing student’s progress toward intercultural sensitivity while learning to provide clinical care. The use of Hammer’s Intercultural Development Inventory (IDI) allowed quantitative measurement of intercultural sensitivity development (Hammer & Bennett, 1999). Focus groups, reflective writings, and student interviews informed the author of the thought processes of students. The combination provided a multidimensional view of how intercultural sensitivity develops in baccalaureate nursing student, from which recommendations may be made for future educational practices. A phenomenologic stance was used to attempt to fully understand the experience of students in their second semester of nursing coursework as relates to cultural sensitivity development.

29 student participants were recruited from the junior class in nursing cohort of 92 using multiple methods: an email during January break, an email the first week of the semester, and an announcement made in class the first week of the semester. The goal was to recruit at least 25 participants. Those students who did not wish to participate were not be penalized in any way.

Participants enrolled in NURS3500 the first half of the semester were referred to as Group 1; Participants enrolled in NURS3400 the first half of the semester were referred to as Group 2. The goal of recruitment was for half of the participants to be in Group 1 and half in Group 2. NURS3400: Nursing Care of the Family is a course in which the investigator teaches about one-third of the didactic content and has half of the students in
clinicals. This course is a half-semester in length; half of the juniors in nursing were enrolled in this course during each half of Winter Semester 2008. All participants were female, as only females were in the junior cohort.

Group 1 students were taught Bennett’s Developmental Model of Intercultural Sensitivity (DMIS) during the first class session of the course. A handout summarizing the DMIS was given to students. DMIS stages were referred to throughout the discussion of content in subsequent class sessions.

**Collection of the Data**

The IDI was given to both groups at the beginning of the study (the early IDI). Individual IDI results were given to Group 1 participants on a one-to-one basis so that students can be aware of their intercultural sensitivity and potentially see growth towards ethnorelativity through the semester. These meetings to discuss IDI results were audiotaped, and the audiotapes transcribed. Both groups of participants also completed the IDI at the end of the semester (the late IDI). Participants from Group 1 also participated in a focus group meeting at the end of the semester. The focus group meetings were also audiotaped and the tapes transcribed. Group 1 students were asked to write two guided reflections, one at the beginning of the semester and one near the end of the semester.

**What the Literature Holds on Intercultural Competence**

A review of the literature was undertaken on what intercultural competence is, why intercultural competence is important to nursing, measuring intercultural sensitivity, teaching cultural diversity, the student experience of learning cultural sensitivity, and factors that promote or inhibit intercultural competence.
**Intercultural competence—what is it?** Intercultural competence can be viewed as a lifelong process of becoming. Understanding what culture is, and how culture shapes one’s life is the first step toward intercultural competence. An interculturally competent person is able to interact successfully across differences (Salisbury & Goodman, 2009). The journey to intercultural competence includes the development of critical self-awareness regarding one’s own cultural background, and then moves to understanding of and respect for cultural otherness (Gray & Thomas, 2006, p. 81.) The learning of skills such as intercultural communication skills is one aspect of intercultural competence, but attitude is a much bigger determinant in achieving intercultural competence. In nursing education, intercultural competence is of paramount importance because of the influences of culture on health and health care.

Milton Bennett outlined intercultural growth in skill and ability as the Developmental Model of Intercultural Sensitivity (DMIS) in 1993 (Bennett, 1993). The DMIS was developed as a framework to explain how individuals respond to cultural differences. The model builds on phenomenologic concepts from cognitive psychology, including personal construct theory and constructivism. The DMIS describes the development of cognitive structures that develop in response to interaction with cultural difference. As an individual encounters cultural challenges, there is an increased complexity of the intercultural experience, which in turn creates increased intercultural responsiveness. Developing the ability to construe cultural differences in meaningful ways is the basis for growth in intercultural sensitivity (Hammer, Bennett, & Weisman, 2003, p.423.) One’s behaviors and attitudes in response to cultural difference will portray one’s
current level of personal growth in cultural sensitivity, thus providing an accurate indication of one’s worldview.

Bennett (1993) describes a continuum of six stages or dimensions of intercultural sensitivity development. The first three stages were broadly categorized as ethnocentric wherein “one’s own culture is experienced as central to reality in some way” (p. 12.) The second three stages were categorized as “ethnorelative, meaning that one’s own culture is experienced in the context of other cultures” (p.12.) The stages are dynamic. Movement will occur throughout one’s life, largely in response to the cultural differences encountered. One can move forward and back in the ethnocentric stages, or toward a more ethnorelative stage, or forward and back within the ethnorelative stages.

The first of the stages is denial of cultural differences, where individuals have no or only broad categories for cultural differences. The second stage is defense against cultural difference, where one’s own culture is seen as the only good culture; cultural differences have been recognized and determined to be negative; defenses have been erected to eliminate the threat that these differences pose to one’s self-esteem and identity. The third stage is minimization of cultural difference, in which similarities between one’s own and other cultures were over generalized, and were viewed as harmless. The fourth stage is acceptance of cultural difference. In this stage, differentiation and elaboration of cultural categories has occurred, and the differences were deemed important and should be respected. The fifth stage is adaptation to cultural difference, when the worldview is expanded to include constructs from other worldviews, and the experience of another culture yields perception and behavior appropriate to that culture. The sixth stage is
integration of cultural difference; one’s identity has changed as one’s self incorporates aspects of two or more cultures.

The Intercultural Development Inventory (IDI) is a Likert-type scale paper/pencil tool with 50 items which participants indicate their opinion via one of five options ranging from “agree” to “disagree”. The IDI was developed to measure intercultural development as described by the six stages of the DMIS (see Figure 1). The IDI Version 2 (utilized for this study) measures intercultural development within five scales which help to explain the phenomenology of becoming more culturally sensitive (Hammer, 2008, pg. 251). IDI Version 2 results were presented with both the initial six stages (denial, defense/reversal, minimization, acceptance, adaptation, and integration [either encapsulated or constructive marginality]) and the five scales (denial/defense via the DD scale, reversal as the R scale, minimization as the M scale, acceptance/adaptation as AA scale, and encapsulated marginality via the EM scale).
Accomplishing intercultural sensitivity is a developmental process, and changes our self-identity as we encounter cultural difference (Fahim, 2002). Through these encounters we see bits and pieces of ourselves reflected back to us, which gives us the opportunity to view ourselves from a different perspective. It is the critical reflection on this comparison of self to others that helps us redefine ourselves within an intercultural context. This process of becoming interculturally competent is and should be considered to be life-long (Teufel, 1999).

**Cultural competence in nursing.** Although vagaries exist as to how intercultural competence should be defined, measured or assessed in nursing education, the need for achieving intercultural competence is understood. The goal is to be able to respectfully and effectively work with patients from diverse cultures. It is a nurse’s professional, ethical and social responsibility to become culturally competent, to provide nursing care that encourages respect for cultural difference (Caufield, 2005). The process of becoming culturally sensitive must be introduced and overtly taught in nursing education in order for nursing students to achieve the goal of providing culturally competent care (Masters, 2009; Stolder, Hydo, Zorn, & Bottoms, 2007).

Because intercultural competence begins with self-awareness derived from critical reflection on the culturally unique background from which we have come, nursing
education must consistently incorporate reflection and the need for self-awareness. This obligation extends far beyond simply teaching cultural awareness to develop curiosity about cultural differences. Development of intercultural competence requires a commitment to the process, and requires intentional action (Gray & Thomas, 2006). Nursing students must be guided to develop a sense of honor and respect for cultural otherness, and come to accept and understand that many worldviews exist.

Culturally competent nursing care applies this knowledge of and respect for cultural difference through the demonstration of behaviors, attitudes, and intercultural communication skills (Lipson, 1996). The outcome of culturally competent nursing care is fitting recommended care into the world of the patient.

The interculturally competent nurse will understand not just the basic concepts of culture such as rules, roles, and values, but will also identify how such issues as gender identity, family structure including power and status, and parenting roles and practices impact the individuals and the family’s wellness and their interactions with the health care system (Rodriquez, 1999). The provision of culturally competent health care must include cultural issues outside of race and gender, with sensitivity “to differences individuals have in their experiences and backgrounds re: sexual orientation, socioeconomic situation, ethnicity, heritage and cultural background; and how those experiences inform the responses of those people, and the process of caring for them” (Meleis, 1999, p.11). Nursing students must be taught how to develop the skill of understanding the patient’s viewpoint from the perspective of the patient’s cultural background in nurse-patient interactions to avoid a judgmental ethnocentric perspective (Julia, 1995). An emphasis
must be made on avoiding stereotyping (St. Clair & McKenry, 1999; Ulrey & Amason, 2001).

Camphina-Bacote (1999) holds that cultural competence is beyond a mere set of skills, but instead is a “process where the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client” (p. 203). This perspective requires providers to see themselves as becoming culturally competent, not as being culturally competent-it is the process that is most important. This process begins with the desire to experience cultural differences and learn more about diverse cultures, and progresses with growing awareness of the cultures of patients and the cultural differences they present including both culture-general and culture-specific knowledge and skills in working with different cultures including intercultural communication skills (Wenger, 1995). Dean (2001) views the process slightly differently, seeing an acceptance of one’s lack of cultural competence as the goal rather than achievement of competence (p. 624).

If we view intercultural communication as those skills needed to appropriately and adequately communicate with persons from a culture different from one’s own, then we can see that this skill is especially important in health care: at the very least, nurses are members of the health care profession culture while their patients were not (Ulrey & Amason, 2001). Add to this cultural difference the frequency of nurse-patient interactions among persons from different cultural groups and the need for intercultural communication skills multiplies. The use of appropriate terminology, providing information with the patients cultural perspective in mind, and knowing who the person of power in the room is
so that communication can be aimed both to that person as well as to the patient are examples of intercultural communication that will improve comprehension and acceptance of medical care, and lead to better outcomes (Galanti, 2004; Rosenbaum, 1996). When health care professionals misinterpret a patient’s communication costly misdiagnosis or cultural insults can occur. Thus the impetus is on the provider, not the patient, to ensure communication has taken place (Luckman, 1999).

Patients who do not follow through with recommended treatment plan are often labeled non-compliant, when the problem often lies in inadequate communication between provider and patient (Charonko, 1992). The issue of informed consent also arises as an intercultural issue: can consent truly be informed if the explanation of possible complications or alternatives does not come from the same cultural perspective of the patient? Health education is another arena where intercultural communication is mandatory (Luquis, Perez & Young, 2006). The values, lifestyle, demographics, and behavioral characteristics of the individual or group must be thoroughly understood when developing an educational plan so that the program that will be accepted by the target population. If an educational presentation or program is incompatible with the values of the target audience, the education will be ignored or rejected leading to a lack of change (Rao & Svenkrud, 1998).

A first step in achieving intercultural sensitivity is to begin by engaging in communication with culturally diverse people about their culture. Communication for understanding must take place, not simply the “foods and festivals” approach to cultural awareness (Jackson, 2003). As individuals choose to interact with people from diverse
cultures, an increased confidence in intercultural skills will occur. This in turn facilitates greater ease in additional intercultural interactions, and allows the development of professional relationships with persons from diverse backgrounds. There is no simplistic recipe that can be applied to learning intercultural competence.

**How is intercultural competence measured and assessed?** Attempts to assess intercultural competence have been made since 1985 when Nishida looked at the correlation between Japanese university students’ cross cultural adaptation and communication skills (Dinges & Baldwin, 1996, p. 114). Over the years studies have been conducted to examine intercultural communication competence, to identify what intercultural competence consists of, and to understand intercultural adjustment in students or business people abroad (Altshuler, et al., 2003; Bennett, 1993; Bhawuk & Brislin, 1992; Bond, Kardong-Edgren, & Jones, 2001; Giger & Davidhizar, 2004; Krainovich-Miller, et al., 2008; Rew, et al., 2003). The purpose of the tools developed to measure or assess intercultural competence is to help individuals understand their current level of intercultural competence so they can seek out the opportunities to progress further along the continuum toward intercultural competence (Campinha-Bacote, 1999; Davis & Finney, 2006; Hammer, 2008).

The studies looking specifically at intercultural competence hold the greatest interest here. Wiseman, et al. found university students studying abroad who held ethnocentric attitudes had less culture specific knowledge of the host culture, while greater culture general knowledge related with greater host culture specific knowledge (1989, in

Interpersonal communication and adjustment to different culture were found to be culture-specific skills, while dealing with societal differences, establishing of interpersonal relationships, and understanding of others were culture-general skills. The length of time that university students had studied abroad was found by Martin in 1987 (in Dinges & Baldwin, 1996) to correlate to the degree of intercultural competence as evidenced by higher perceptions of self-awareness and cultural awareness and communication facilitation skill (p. 114).

Intercultural and intracultural communication competence was examined in 1989 by Martin and Hammer who found that skills in nonverbal behavior, topical verbal behavior, and conversation management behaviors were most related to communication competence (in Dinges & Baldwin, p. 114-115). The students in the study identified eye contact, careful listening, smiling, and use of gestures as the nonverbals that improved communication. Since non-verbal communication is culturally determined, and eye contact is not a universally accepted appropriate behavior, it appears that the majority of participants were likely to be of Northern European descent.

The impact of respondents’ reactions to stressful intercultural work situations was observed and measured by Dinges and Lieberman (1989). Findings indicated that the more stressful the situation (hiring, firing, and promotion) combined with what other personnel were involved were greater determining factors of participants’ response than was the individual participants’ overall intercultural competence (p. 115).
The interplay of intercultural sensitivity, intercultural communication, and anxiety of health care providers providing care for patients from diverse cultural backgrounds different from that of the provider was studied by Ulrey and Amason (2001). They found a positive relationship between cultural sensitivity and effective intercultural communication in the health care setting when the provider and patient come from different cultural backgrounds. Not surprisingly, the providers that reported experiencing the greatest levels of anxiety regarding working with diverse patients had measurably less effective intercultural communication (p. 458). Because intercultural communication is one facet of intercultural competence, understanding the level of stress when using inadequate intercultural communication is one more indicator of intercultural competence.

An individual’s level of intercultural sensitivity as applied to the concepts of individualism and collectivism is what the Intercultural Sensitivity Inventory (ICSI) seeks to measure (Bhawuk & Brislin, 1992). The ICSI was found to be valid and reliable in measuring the adaptation of behavior by individuals based on their location in either an individualistic or a collectivist culture (p. 431). Three or more years of cross-cultural experience was found to increase the intercultural sensitivity, as were a greater number of ethnic foods that have been eaten. Although it can be debated that intercultural sensitivity relates to the awareness stage of intercultural competence development, because of the relationship between the two, the ICSI is a helpful tool for assessing intercultural competence.

The categories of attributes associated with positive adaptation in cross-cultural situations were examined through Kelley and Meyers Cross-Cultural Adaptability
Inventory (CCAI), initially developed in 1987. The CCAI examines four dimensions that describe an individual’s construal of cross-cultural adaptability: flexibility/openness looks at open-mindedness and non-judgmental attitudes, emotional resilience examines ability to remain emotionally positive in the presence of unfamiliar cultural influences, perceptual acuity seeks to understand intercultural communication skills, and personal autonomy assesses ability to remain true to sense of self while simultaneously interacting with cultural influences. The instrument has been examined and found to be reliable, but little evidence is available in the literature regarding validity (Davis & Finney, 2006; McGee, Darby, Connolly, & Thomson, 2004, Montagliani & Giacolone, 1998). However, Davis & Finney (2006) studied the psychometric properties of the CCAI, and found the tool does not accurately measure the four characteristics, calling it “misspecified” without a solution for correction (p. 327). Obviously, these findings bring into question the wisdom of using the tool, and the applicability of an individual’s results. No additional literature was found with a date more recent than 2006.

The Intercultural Development Inventory (IDI) measures individuals’ levels of intercultural sensitivity and was found to be reliable (Bennett & Hammer, 1998). When Paige, et al. (2003) examined the IDI empirically, the authors determined that the IDI measures the DMIS to “a considerable degree” but more accurately measures five overlapping aspects of the original six stages (p. 476):

1. An ethnocentric stage that combines denial and defense.
2. A minimization stage consisting of physical universalism aspects.
3. A minimization stage consisting of transcendent universalism aspects.
4. An adaptation stage containing both cognitive and behavioral aspects.

5. A purely behavioral adaptation stage.

Another way to consider development along the intercultural continuum is a successive movement from limited perceived complexity of cultural difference to a high degree of awareness and skill around issues stemming from cultural diversity (Hammer, 2008). An individual approaching cultural differences from a monocultural mindset (based in and acting from the perspective of one’s own culture) would be at the denial to minimization stages of this continuum, while an individual approaching cultural differences from an intercultural mindset (consideration and actions were based in multiple cultural perspectives determined by the context of the situation) would be in the acceptance and adaptation stages (p. 247). This is depicted in Figure 2.

<table>
<thead>
<tr>
<th>Denial</th>
<th>Defense/ Reversal</th>
<th>Minimization</th>
<th>Acceptance</th>
<th>Adaptation</th>
</tr>
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<tbody>
<tr>
<td><strong>Monocultural Mindset</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Intercultural Mindset</strong></td>
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*Figure 2.* Movement in mindset. The overlapping stages of the intercultural continuum.

The IDI has been tested and found to be reliable, to contain content and construct validity, and to have little or no social desirability bias (Hammer, et al., p. 436). Those desiring to administer the IDI must attend a Qualifying Seminar for administration and interpretation of the IDI. (The author participated in the April 1999 Qualifying Seminar.) The IDI has been the topic of over 15 master’s theses, over 15 doctoral dissertations, and
over 60 articles and book chapters (Paige, 2008). One such study applied the IDI to measuring change in intercultural sensitivity among physicians in training by Altshuler, et al. (2003). Participants were found to have higher than expected minimization scores, which may be due to medical education emphasizing biology as determinant of illness (p. 338). The author’s unpublished work on short term courses abroad indicates an improvement in intercultural sensitivity development as measured by the IDI when the DMIS is used as a framework for cultural difference and a basis for critical self-reflection.

The IDI has also been used with college age student populations in non-medical settings as well. Changes in intercultural sensitivity development of students taking general education courses with a focus on diversity were examined by Mahoney and Schamber (2004). Student writings prior to and after the general education courses of interest were analyzed qualitatively, and coded for evidence of DMIS stage, which revealed improvement after the courses were completed (the IDI was not utilized in this study). Geography students were assessed via the IDI to determine if their DMIS became less ethnocentric following participation in a Latin American celebration on campus; their results also showed decreased ethnocentrism.

**Teaching cultural diversity.** Teaching concepts of diversity, teaching to care for diverse patients, and teaching diverse students are not mutually exclusive aspects, but instead overlap and interweave in nursing and other health profession education. It is a critically important foundation for nursing faculty and nurses providing care to become aware of how our own cultural backgrounds impact who we were and what we do as we interact with culturally diverse students and patients, whose response in turn is based on
the influences of their cultural backgrounds (Fahim, 2002; Jackson, 2003; Stolder, et al., 2007).

Further, it is hypocritical to think that nursing students can become culturally sensitive and competent without faculty overtly addressing the life perspectives of the culturally diverse nursing student population (Sealey, et al., 2006; Tucker-Allen, 2005). If the culture of the diverse student population is ignored, then it is likely that nursing students will come to view the cultural aspects of patients as interesting but irrelevant to the actual implementation of nursing care.

Cultural aspects of nursing care began to be incorporated into nursing education in 1986 when the American Nurses Association developed guidelines on diversity in nursing education (Campinha-Bacote, 2006). How effective nursing education has been in this effort, including what should be taught and by whom, continues to be debated within the profession. Campinha-Bacote (2006) looked at the past 20 years of nursing education as a “progressive ongoing transformative process” (p. 244) that will continue to improve the outlook for both diverse nursing students and patients.

One perspective on teaching intercultural care is that of Duffy (2001), who advocates for the use of critical reflection by nurses and nursing students to ask themselves where their preconceived ideas have originated and to ask why questions of our cultural beliefs to broaden our perspective in the effort to facilitate cultural awareness and competence. Duffy holds that digging into one’s beliefs to examine their existence and to question their origins will lead to reformulation of our context for understanding, appreciating, and interacting with cultural difference (p. 489).
Foreign exchange programs or service learning abroad were the most commonly studied activities to increase cultural sensitivity and competence among health profession students. Students of nursing, occupational therapy, physiotherapy, health education, and speech pathology from Finland, the UK, Australia, and the US have been engaged in service learning programs or international study with clinical experiences. The host countries include the UK (Zorn, et al., 1995; Koskinen & Tossavainen, 2004), Finland (Konskinen & Tossavainen, 2003), Malta (Dean, 2005), the Dominican Republic (Haloburdo & Thompson, 1998), Nicaragua (Haloburdo & Thompson, 1998), the Netherlands (Haloburdo & Thompson, 1998), Kenya (Drake, 2004), Honduras (Wood & Atkins, 2006), Vietnam (Whiteford & McAllister, 2007).

A few of the programs required foreign language proficiency; some were situated such that the students were a racial and ethnic minority during the experience while in others the students travel to countries where students do not look different and speak the primary language of the country. The length of the programs ranged from 2 weeks to 6 months, and all included some preparatory work related to cultural differences prior to departure.

The results of these programs all indicated a positive result as indicated by the Measurement of Epistemological Reflection (Zorn, et al., 1995); personal and professional growth with increased empirical knowledge (Haloburdo & Thompson, 1998); increased cultural sensitivity and competence (Drake, 2004; Wood & Atkins, 2006); understanding of the power and economic complexities of a Communist developing country (Whiteford & McAllister, 2007); the role of intercultural desire, awareness, knowledge, encounters
and skill in development of intercultural competence (Koskinen & Tossavainen, 2003); and understanding the differences between host country and US health care systems (Dean, 2005).

Most of these studies were qualitative reporting rich descriptions of student experiences and how students felt during and after their experiences; only one offered quantitative measurement of their outcomes. The results were mostly reported as student descriptions focusing on the intercultural event that led to their increased awareness of culture in such a way that the experience with otherness was the change agent or impetus for growth. And while these rich descriptions thoroughly explain the student experience, no recommendations were given for bringing cultural sensitivity student learning into the classroom. The studies on foreign experiences find that having contact with cultural diversity while away from home is the only activity students found helpful in developing intercultural knowledge. The center of these descriptions is the experiences with otherness and the feelings that resulted. No pre-departure or post-experience classroom learning activities were presented as having had an impact on the intercultural learning.

Domestic diversity activities were less commonly studied (Jeffreys, et al., 2007; Kavanagh, 1998; Moch, et al, 1999; Newman & Williams, 2003). The outcomes of nursing, health educator, and nurse practitioner students providing health care and teaching to Hmong, Native American, and Spanish-speaking patients have been examined.

The findings of these qualitative studies described students having increased awareness of cultural differences and culturally based health beliefs, improvement of Spanish language skills, and growth of leadership skills. Again, these studies provided rich
narratives of students’ experiences while working with diverse patients outside of the classroom environment. Several students in fact reported that they found the experiences transformational, and as having been life changing (Jeffreys, et al., 2007; Kavanagh, 1998; Masin & Tischenko, 2007; Moch, et al., 1999).

Utilizing domestic diversity as examples and opportunities for health professions student interactions with diverse patients works to increase their intercultural sensitivity and skills (Masin & Tischenko, 2007). Further, when done in a setting near the educational institution, the students gained appreciation for the breadth of diversity in their own community. For many students this was completely new knowledge, as their lives have been insular up to this point. For others it was an opportunity to expand existing knowledge and to clarify misconceptions and misunderstandings.

Classroom practices to increase cultural sensitivity development were apparently little studied, as evidenced by the few reports in the literature. The dearth of studies in this area is likely due to the fact that few health profession programs include courses that primarily aim to develop student cultural awareness and sensitivity. Luquis, Perez & Young found that fully 87% of health educator programs refer students to other departments to learn cultural competence (2006). Only 14% of health educator faculty state they were prepared to teach cultural competency (p. 236-238). Similarly, a mere 3% of nursing faculty were deemed to have adequate preparation to teach their students about culturally appropriate nursing care (Sealey, et al., 2006, p. 138). Of the rare studies on classroom practices was Underwood’s (2006) use of critical reflection as a teaching tool with undergraduate nursing students to increase their knowledge about specific racial and
ethnic groups. Students aired their questions about issues of culture in a safe environment, followed by reflection upon their questions and the learning that happens outside of class. Nursing students were found to hold the most misconceptions and questions on the areas of: immigration/migration/relocation of populations, ethnic identity, biologic variations, race relations, and communication (p. 286).

Relating to this study’s questions on developing cultural sensitivity was but one report examining British medical students’ perceptions of race, ethnicity, and culture (Roberts, Sanders, & Wass, 2008). Findings were similar to those of this work: the white British students expressed fear related to being offensive in a variety of settings including discussions of race or ethnicity, particularly within settings comprised of racially and ethnically diverse individuals. The study included no recommendations for either decreasing student fears of offensiveness or improvement in cultural sensitivity.

Teaching students to care for culturally diverse patients is yet another aspect of teaching cultural diversity. Sealey, et al. (2006) sought to understand the “existing low levels of cultural competence” of nursing students (p. 139). They found that one facet of being able to teach to care for culturally diverse patients is the cultural competence of faculty members. In order for nursing faculty to effectively teach cultural diversity, faculty themselves must exhibit cultural sensitivity and be culturally competent. Using Campinha-Bacotes (1998) framework of cultural competence, nursing faculty were found to most likely be culturally aware, the first level of cultural competence (p.138). Because cultural awareness is a building block to developing full cultural competence, this finding is both expected and positive. Only 3% of nursing faculty were found to have adequate
preparation for teaching nursing students about culture (p. 138). It must be noted however that this statistic was based on formal preparation for teaching transcultural nursing as the only appropriate training for teaching about culture. Thus these findings were highly biased towards the acceptance of transcultural nursing as the gold standard for the understanding of culture in nursing, a bias that is not held by all nurses.

The specific art and act of teaching students to care for diverse patients has been explored in a variety of ways and settings. An eclectic model has been used by Kleiman, Fredrickson and Lundy (2004) for teaching a heterogeneous group of nursing students about the cultural influences on the patient-nurse relationship. The model incorporates a combination of didactic, problem based experiential, and clinical activities to help students understand that cultures were dynamic. Students report that they were able to compare and contrast similarities and differences between cultures and understand an individual’s cultural beliefs and practice, and apply that knowledge to the nursing care of their clinical patients (p. 252). Learning these skills helps students becoming aware of behavioral cues of patients, which in turn helps students avoid prejudicial care by acknowledging the cultural complexity of an individual. Stereotyping is avoided with this approach as students gain an understanding of how the intersecting influences on the nurse-patient relationship will make each encounter unique (p. 253). And although nursing students often profess to wanting to learn primarily culture-specific skills, their ego-defensiveness can impact their learning (Bond, et al., 2001, p. 307.)

As nurse educators incorporate issues of culture into the teaching of nursing, an honest look at the disparities of health outcomes that racial minorities in the United States
experience must also be addressed (Ratliff, 1995, p. 176). To exclude this cultural dimension of health care is to downplay the effects of culture on one’s life. One real but often neglected economic facet of health care is the profit inherent to institutions when they attract and adequately care for a diverse patient population, which creates the need for a more culturally diverse health care staff (Ratliff, 1995; Yehieli & Grey, 2005).

The growing diversity of nursing students is complicated by the fact that the vast majority of US nurses are White (U.S. Census bureau, in Health Resources Services Administration [HRSA], 2004, p. 1). Thus, few role models are available for diverse students. Adding to this predominance of whiteness in nursing is the vast majority (91.3%) of nursing faculty self-identify as European-American (American Association of Colleges of Nursing, 2001). This influence of Whiteness on nursing as a profession and nursing education must be considered when teaching nursing students to care for diverse patients.

To successfully teach this increasingly culturally diverse nursing student population, faculty first must be culturally self-aware and then understand the cultural background of their students. Understanding what the rewards are and what potential conflicts may arise as a result of increasing diversity leads back to awareness of and valuing the differences between cultures.

None of these aspects of culture stand alone in nursing education and nursing care; it is vital for nurse educators, nursing students, and nurses in practice to understand, value, and incorporate this complexity into the rich fabric of nursing. However, negative attitudes among nursing faculty toward minority students remain deleterious to diverse students’ academic success (Tucker-Allen, 2005, p.3), thus nurse educators have a
responsibility to teach each student in the way that best facilitates their academic performance.

Developing cultural competence requires dialogue with students to understand their cultural background as well as an acknowledgement of the student as a unique individual (Wood, Saylor & Cohen, 2009). A relationship must be developed between faculty and diverse students. An understanding of the life responsibilities that students hold outside the academic setting is essential for faculty to understand so that appropriate strategies for success can be recommended.

Faculty must overtly demonstrate respect to students to facilitate the development of an environment that allows for mutual learning of faculty about students and vice versa. Because faculty are viewed by students as role models, faculty cultural competence assists in the academic success of diverse students as well as facilitates cultural competence in all nursing students (Newman & Williams, 2003; Rew, et al., 2003; Tucker-Allen).

But perhaps even more important than faculty cultural competence is the issue of institutional commitment to diverse nursing students’ success: the degree of commitment to student success is evident in the institution’s budget. Although an individual or small group of faculty in a nursing education program can make a difference in the success of diverse students, those efforts were severely limited by the institutions funding of services and programs designed for and available to the culturally diverse student. Because higher education has historically been provided by and offered to Caucasians, the typical higher education institution has the imperative to utilize additional funds to meet the educational needs of and facilitate the success of culturally diverse students. Terhune (2006)
encourages organizations seeking to increase diversity to instead ask themselves what cultural or ethnic group is missing and why, and then consider what the consequences (positive and negative) would be if those missing became present (p. 142). To do so will reveal the true level of dedication of the organizations’ respect for and value of diversity. Organizational change will happen more effectively if first individuals were guided to use critical reflection to look inward at their assumptions, and then move to a respectful group discussion of otherness. And although doing so may be unsettling, this process can effectively liberate individuals from old preconceptions, while facilitating organizational change.

**Promoting intercultural competence development.** As our society changes and becomes more ethno culturally diverse, postsecondary education has the responsibility to prepare students for working within this diversity. Nursing is a socially organized profession due to the interplay of science and technology with interpersonal relationships (Benner, 2000). The increased cultural diversity in US society is an interpersonal relationship issue, and as such requires attention to keep the practice current with societal changes (Newman & Williams, 2003). Nursing students increasingly demand to be prepared for the “real” world after graduation; intercultural competence will be required outside the classroom. By making cultural sensitivity an integrated aspect of nursing education, students will connect the concepts of culture to culturally diverse clients, leading to their increased intercultural competence as practicing nurses.

The concepts of collectivism and individualism are complex enough to explain many cultural differences, but understandable to nursing students. Simply put, collectivist
cultures are those that value family/group cohesion and maintenance of respect for the family/group over the desires of the individual, while individualistic cultures view the individuals rights, actions, and respect as more important than the groups (Bhawuk & Brislin,1992).

Traditional Asian cultures, such as the Japanese and Chinese, are commonly used as examples of collectivist cultures. Multigenerational families living together is the norm, showing respect for family through priorities and actions is much more important than socializing as an individual and inter-group harmony and accomplishment is favored over individual competition in employment situations.

The United States is seen as the most individualistic country in the world (Triandis, Brislin, & Hui, 1988). Individuals’ rights were more important socially and legally than family cohesion, young adults were expected to become financially independent and live on their own away from their family of origin, the infirm and elderly were more likely to be placed in an assisted care or long-term facility than to be cared for at home by family members, and individual accomplishment is the pinnacle of status and far more important than family time spent together.

Health care decision making from the collectivist perspective can be viewed as the group deciding together what option has the best outcome for the group as a whole. Individualistic decision making often involves no one except the patient receiving information or assisting in the decision; emotional support or opinion may be sought by the individualist, but the decision ultimately is made exclusively by the patient. Mainstream Caucasian US nursing students can easily identify and apply these concepts to the values
and decision making of culturally diverse others, thereby gaining an ethnorelative understanding of the other (Javid & Javidi, 1991).

The late 1990s and early 2000s saw an explosion in nursing textbooks relating to issues of culture. These texts often had catchy titles such as *What Language Does your Patient Hurt In?* (Salimbene, 2000), others include *Caring for Patients from Different Cultures* (Galanti, 2004), *Transcultural Health Care: A Culturally Competent Approach* (Purnell & Paulanka, 1998), and *Cultural Diversity in Health and Illness* (Spector, 2004). These texts all contain some culture-general content, from the perspective of healthcare, and therefore both stimulate interest in and facilitate nursing students’ learning about what culture is, and the importance of culture in health care.

Topics include cultural heritage, expression of pain, health traditions, cross-cultural or transcultural communication, folk medicine, and methods to assess a patient’s cultural background and traditions to better perform nursing care. Additionally, the majority of the texts contain substantial information on specific cultural groups, defined broadly as people from the Middle East (Salimbene, 2000), Arab Americans (Purnell & Paulanka, 1998), the Black population (Spector, 2004), and Chinese Americans (Chin, 1996) or narrowly as in German Americans (Spector, 2004) and Gadsup Akuna of the Eastern Highlands of New Guinea (Leininger, 1991).

The availability of such texts gives nursing students from monocultural backgrounds a starting place to learn the basics of cultural competence. And a framework for assessing the cultural background of patients provides a starting point for students to learn to ask questions of patients about their cultural beliefs and practices. Once students
begin to ask these questions, their confidence in asking about culture will grow, with the potential for students to seek out experiences and information to lead to full blown intercultural competence.

The Office of Minority Health of the U.S. Department of Health and Human Services has fourteen guidelines for Culturally and Linguistically Appropriate Health Care Services (CLAS). These guidelines were developed in 2001 with collaboration and input from health care professions including the author. Four of the guidelines have become mandates for institutions receiving Medicaid funding while the rest remain recommended guidelines. The aim of CLAS is health care facilities and institutions, but the guidelines were also applicable to individuals who provide health care to diverse patients. The goal of CLAS is to improve the intercultural communication between health care providers and culturally diverse patients (U.S. Department of Health & Human Services, Office of Minority Health, 2001). The first guideline states: “Health care organizations should ensure that patients/consumers receive from all staff members effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language (p.7).” Thus, intercultural communication is viewed as occurring in verbal, visual and written language interactions.

The guidelines put the impetus on the provider, not the patient to ensure communication has taken place. Judgment is avoided when this guideline is applied through the incorporation of respect with the patient’s cultural preference. Although mandates will not inherently lead to effective change, the presence of CLAS in health care institutions will increase nurses’ awareness of the types of actions that should be
undertaken to increase the cultural appropriateness of health care and health education. Increased awareness may lead to increased curiosity, which in turn can lead to the pursuit of improved intercultural skills and competence.

A current trend in nursing education is in the adoption of narrative pedagogy. Narrative pedagogy emphasizes self-awareness through critical reflection, which is easily adapted to include issues of cultural sensitivity and cultural competence (Ironside, 2001). Self-awareness includes understanding and acceptance of one’s own culture in relationship to the cultures of others. This self-awareness should include a continuous process of self-reflection; self-reflection can then translate into culturally respectful behaviors, which ultimately facilitates intercultural competence development (Furness, 2005).

The campus of the average U.S. University or college has become increasingly diverse due to three factors: greater inclusion and academic success of domestic students of color, more immigrants and refugees from non-European backgrounds seeking higher education, and increasing numbers of international students (Althen, 1994). Traditional Caucasian American students encounter diverse students in public spaces on campus, in residence halls, as student workers, at social activities, and in co-curricular activities. Nursing is no exception. And although most nurses are White, there is a growing trend towards a more diverse nursing student population. Diversity is becoming the norm. Contact with cultural otherness is often a first step in increasing cultural sensitivity, leading to cultural competence. Teaching within an international student body is in itself a practice in intercultural communication (Teekens, 2003). The more intercultural communication taking place between domestic and international faculty and students, the
greater the potential for intercultural competency to develop (Furness, 2005). But the assumption that mere contact with cultural otherness will increase intercultural educational outcomes is professional racism (Gay, 2000). Students of nursing must be taught that culture is important, that it is a dynamic and interactive force in life. But acceptance of difference is insufficient to assist in developing intercultural competence; concrete actions in teaching were necessary to create movement.

**Factors that inhibit intercultural competence.** One aspect of the lack of cultural sensitivity inclusion in nursing education is the simple fact that the majority of nurses in the US are from a Caucasian background. The current population of nursing students is somewhat more diverse, but the influence of Whiteness on nursing as a profession and nursing education must be considered when teaching nursing students to care for diverse patients.

Much of what is written about improving cultural sensitivity and competence of nursing students is based on multicultural education, which attempts to celebrate diversity but often ends up serving “as a medium to emphasize difference and conflict” (Nairn, et al., 2004, p. 191). A multicultural perspective views cultural sensitivity as a professional issue. However, an anti-racist perspective sees the political issues in society as a whole. A set of anti-racist recommendations were presented by Nairn et al. that exceed pedagogical stance (2004). These recommendations range from curriculum to policies and procedures to training students in cross-cultural communication skills to increasing the numbers of racial and ethnic minority students to critiquing textbooks for racial bias (p. 194).
Unfortunately, these recommendations are neither mandated nor commonly used in nursing education.

As described previously, the majority of studies regarding nursing students’ cultural sensitivity development focus on study or service learning abroad. The author sees two problems with this approach: first, this eliminates those students who lack the funding to cover the expenses of traveling abroad or have family obligations which they cannot abandon; second it implies that experiencing foreign diversity is the only way to develop culturally appropriate skills. The first problem eliminates those students for whom finances were tight from developing their intercultural skills. The second issue is more problematic in its assertion that domestic diversity is not important, which in turn can be interpreted as those persons within the US who are racially, culturally, ethnically, or religiously diverse do not really experience their lives any differently than majority White Christian Americans.

Domestic diversity as relates to health care is a critically important issue. The US population experiences significant health care disparities ranging from increased frequency of preterm birth to increased mortality from cardiovascular disease or cancer among the non-white population (Nelson, 2002, p. 666). Thus discounting domestic diversity as a valid way to develop intercultural skills and sensitivity also discounts the statistical evidence of non-White health care disparities. The Twin Cities, with its increasingly diverse population, presents many opportunities exist to learn about cultures and develop one’s intercultural sensitivity and skills. Zorn et al. (1995) have suggested that the “degree
of diversity is less a contributing factor to cognitive development than simply the presence of diversity” (p. 70).

The short term courses abroad and international nursing exchange programs described previously share the problem of potentially creating or reinforcing stereotypes. In the Honduran program of Wood and Atkins (2006), the encounters with missing equipment has the potential to increase the dichotomous view that U.S. health care is always of high quality, while low quality health care is always provided in developing countries, as well as the possibility of increasing stereotypes and prejudice. The author does not describe whether or not this aspect of the clinical encounters was addressed in reflections or discussion. The United Kingdom semester abroad experience (Glass, 2006) has the same issue. In addition, problems may be encountered with these programs because “although principles may be uniformly aligned, they translate into different practices” (Drake, p. 387). There is a tendency to view the norms that one is used to in their home country as best practice, which inevitably creates a polarized view wherein practices that are different are deemed therefore less valuable (p. 387). Thus although experiencing cultural difference is necessary to create intercultural sensitivity growth, those experiences of nursing students must be guided to prevent or correct stereotyping.

Duffy (2001) describes the focus of traditional nursing education as an emphasis on the need for students to identify differences between their own personal cultural group and another group. This reliance on differences tends to lead to distinct and artificial boundaries, and creates a “cookbook” approach to cultural care, in which all persons from a certain culture were assumed to have the same beliefs and needs (p. 489). In addition,
typical nursing education has a focus on the local issues of culture, with a tendency to ignore the global. Duffy advocates critical reflection by nurses and nursing students to ask themselves where their preconceived ideas have originated and to ask why questions of our cultural beliefs to broaden our perspective. Duffy holds that digging into one’s beliefs to examine their existence and to question their origins will lead to reformulation of our context for understanding, appreciating, and interacting with cultural difference.

Cultural diversity has been a hot topic in nursing education since the 1990s, but little has changed for diverse students in nursing education (Tucker-Allen, 2005, p. 3). In spite of institutions of nursing education and nursing professional organizations having joined forces to increase faculty and student diversity, Terhune sees these efforts as having become “stagnant,” (2006, p. 142). Terhune reports that commonly an institution will combine a modicum of cultural sensitivity training with some low key efforts at the recruitment of diverse students and faculty. The diverse new students and faculty were then often left to fend for themselves. This practice allows the results of those minimal efforts to

…stew slowly over low heat. The low heat represents thoughts, attitudes, and behaviors that have gone undetected, unchecked, and unchallenged. As with any pot that sits unattended, the water of good thoughts and intentions evaporates causing the pot to burn and eventually explode (Terhune, 2006, p.142).

Other problems and gaps in the literature. Other than the studies examining student experiences with otherness during courses and service learning abroad, none of the
studies report asking students what they feel has been or would be beneficial to their developing intercultural competence. And although the obvious potential problem with this approach is that what students want does not necessarily lead to growth in a particular area, studying what students found helpful would help faculty formulate classroom and clinical learning experiences. Similarly, none of the studies examined approach the development of intercultural sensitivity from the perspective of what classroom experiences or assignments the students found to be most helpful in the journey toward culturally competent care. Students provided descriptions of their interactions with otherness, but do not explicate what it was within that interaction that facilitated their intercultural learning. Although it is always interesting to understand the scene and situation of learning, and the feelings the experience engenders, it may be more helpful to determine what about that experience facilitated learning. Student outcomes as measured by grades and success rates on national licensure exams are commonly reported in education for the health professions, and students routinely provide end of course evaluations. Why then are there no studies that overtly look at what propels students forward in their intercultural competence specifically from the perspective of the student? This student perspective of what facilitates learning would shed light on our assumptions regarding our curricula, teaching strategies, and learning experiences.

Another gap is the reliance on qualitative research strategies, with none of the studies utilizing mixed methods. Thus the research is missing the depth of understanding and triangulation of findings offered by mixed methods. Although it may be easier to conduct mono-method research, the increased understanding of results afforded by mixed
methods should convince health profession education researchers to expand their tool kit in the interest of determining what works best to facilitate cultural sensitivity and competence of students.

The largest gap is a lack of research on classroom practices to facilitate cultural sensitivity development. The question should not be where to take students to gain intercultural competence, but what can we do while we have students in the classroom? All health profession education includes classroom time, and some of that time could and should be utilized to teach issues of cultural diversity. Not all education programs are situated in a locale with racial and ethnic diversity; not all students can afford the cost or time to leave campus for another location. And further, not all faculty have the energy or resources to develop and administer off-campus courses on top of busy teaching, research, service, and writing schedules combined with family life.

All health professions admit to a need to improve the cultural competence of their students so they can work effectively within a multicultural patient population after graduation. If we profess that all students in the healthcare professions must be culturally competent at graduation, we must avoid dichotomizing students into those who have the time and money to go abroad to learn cultural competence skills and those who do not. This does not preclude such strategies as service learning within domestic diverse populations, but all teaching strategies must be equally available to all students. Study abroad programs do provide a type of learning that is difficult if not impossible to mimic domestically, and should not be abolished as the experiences students gain abroad will
enrich their lives greatly. But we must be vigilant that study abroad programs not become
the sole source of education on working with cultural differences.

As described previously, short-term immersion programs are increasingly used to
effectively increase cultural competence of nursing students. Having studied abroad also
facilitates the students’ providing culturally appropriate care to culturally diverse patients
in the US (Drake, 2004). Although the majority of the research looks at nursing
coursework abroad, it must be remembered that domestic diversity is increasingly more
common, easier to access, closer to home and provides ample opportunity for students to
become culturally competent. The entire US population is changing away from a White
majority, which means nursing students will likely be providing care for culturally diverse
patients in or near their hometown.

When planning and implementing student experiences with diverse patients, faculty
must take care to avoid reinforcing ethnic and racial stereotypes. It is vital that students
become aware of their personal cultural backgrounds including a thorough examination of
the effect their background has had in their lives (Gray & Thomas, 2006). If nursing
students rely solely on the differences between cultures without simultaneous cultural self-
awareness, a one sided and shallow understanding of otherness will result. Faculty should
incorporate critical reflection combined with open and nonjudgmental discussion of
student experiences to facilitate students’ achievement of a deepened sensitivity to and
understanding of how to care for culturally different patients.

**Conclusion: Beginning Assumptions.** Intercultural competence as a process is
critical to the profession of nursing. First, however, nurse educators must accept the need
for inclusion of intercultural content, and begin the journey towards intercultural competence on a personal basis. Domestic cultural diversity provides ample opportunity for students to work with culturally diverse patients; study abroad is not absolutely essential.

Use of the DMIS in nursing is appropriate because of the emphasis on development, which equates to process (Drake, 2004). The nursing process is the basis for assessing patients and planning their care. Thus nursing professionals and students will be familiar with the idea of progression through steps or stages to achieve an outcome, which in this case would be intercultural competence. The DMIS provides a framework for self-understanding that students can easily understand. Incorporation of the concepts of collectivism and individualism facilitates understanding the perspectives, values, and belief systems of patients (or co-workers or peers) coming from a cultural background outside of mainstream white U.S. America.

The IDI fits well in nursing education because of the perspective that culture is dynamic due to global influences, and consists of both differences and similarities. Nursing education is inherently phenomenologic, and thus development in affective domains including intercultural sensitivity is expected. The increasing diversity of the US at large, health care patient populations and nursing students needs to be overtly addressed in nursing education. Providing the DMIS as a framework for making sense of change in intercultural sensitivity as measured by the IDI provides something concrete for students to hold, understand, and apply. Validity and reliability have been proven. The tool is relatively easy to administer (although interpretation is more complex and time
consuming), and the print-outs of results contain adequate detail to facilitate learning but without causing confusion. Producing graduates who are interculturally competent is a goal for nursing education. The IDI is a good starting point for achieving this goal.

Nursing as a profession is making progress toward understanding the need for intercultural competence as a basic skill requirement of practicing nurses. Nursing education is incorporating self-awareness and movement toward interculturalism into the process of becoming a nurse. But achieving the goal of all nursing faculty and students achieving intercultural competence remains a long-term and lofty goal. Achievement of this goal, however, is long past due. The literature presents many resources which nursing education can begin to implement. Nursing faculty attitudes must adjust to see the value of cultural sensitivity for themselves, for traditional nursing students who are members of the racial and ethnic majority, for the increasingly diverse nursing student population, and for an ever more diverse patient population. Teaching methodologies must reflect the population of students and patients, not simply remain based on the way things have been done for years. Achieving these changes will significantly improve health care in the US, and will be a major factor in eliminating health outcomes disparities. As the largest sector of health care professionals, nursing is poised to institute changes in education that have the power to transform the health of the United States. Quite simply, the time for cultural sensitivity development in nursing is now.
Chapter 2
Methodology

Research Questions

The purpose of this study was to identify the process that nursing students go through as they become more culturally sensitive and to determine if Bennett’s (1993) Developmental Model of Intercultural Sensitivity (DMIS) would facilitate baccalaureate nursing students’ becoming more culturally sensitive.

The questions that were being studied include:

1) What were nursing students’ understandings and experiences with cultural sensitivity?
   a) How did students understand culture?
   b) Why did students feel cultural sensitivity is important in nursing?
   c) What had been student experiences while caring for a patient from a different culture?

2) What did nursing students find helpful or hindering in their development of cultural sensitivity?
   a) How did students experience racism?
   b) Did students IDI scores increase during their first semester of clinicals?

A Significant Study? This study was the first undertaken to examine and understand the development of cultural sensitivity in junior baccalaureate nursing students while engaged in their second semester of coursework, which is their first full semester of clinicals in which students care for patients in an acute care setting. Although others have examined intercultural sensitivity development of nursing students abroad (Drake, 2004),
this study was the first undertaken during regular coursework at their home institution of higher education. As described above, consideration of culture is an important facet of providing nursing care. In the Twin Cities, the rapid and continuing expansion of cultural diversity among the patient population creates a high need for both culturally appropriate nursing care and an understanding of how this develops in the baccalaureate nursing student.

**IDIs, Writings, and Focus Groups**

To better understand the process of a nursing student’s progress toward intercultural sensitivity, a mixed methods study with a quantitative dominant data collection was used. Milton Bennett’s (1993) Developmental Model of Intercultural Sensitivity (DMIS) is the framework from which to understand intercultural sensitivity. A phenomenologic stance was used to attempt to fully understand the experience of students in their second semester of nursing coursework as relates to cultural sensitivity development. The quantitative data comes from the Intercultural Development Inventory Version 2 (IDI V-2). Qualitative data comes from focus groups and reflective writings by participants.

**Mixed Methods Explored**

Mixed methodologies were selected for this study to achieve a depth of understanding not provided by mono-method study. Johnson and Onwuegbuzie (2004) define mixed methods research as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, method, approaches, concepts, or language into a single study” (p. 17). The combining of quantitative and qualitative
provides a richer understanding of the research question than either approach could provide alone. Mixed methods researchers in no way seek to eliminate quantitative or qualitative research, but instead use the potency and effectiveness of one method to overcome the drawbacks and weak points of the other, which in turn leads to an “expansive and creative form of research” (p. 17).

The author has chosen the approach that best addressed each aspect of the research questions, combined them to obtain an end result that provides a thorough understanding of all the dynamics that impact the complexity of phenomenon under study, ultimately creating a superior product. The ability to combine numerical quantitative data with textual qualitative data increases the quality of multifaceted data, and is especially applicable to the phenomenon of development (Yoshikawa, Weisner, Kalil, & Way, 2008). Capraro and Thompson (2008) argue that not only is mixed methods a thorough and advantageous way to approach research, but also “necessary to solve education problems and to address educational research questions” (p. 248).

Mixed methods presented with verbal and visual formats also facilitate the understanding of results to readers from diverse learning styles (Kolb, 1981). The qualitative results will likely register best with “Diversers”, while the quantitative data will likely be more meaningful to “Assimilators” (p. 237-240). In addition, production of this mixed method study has facilitated the authors growth beyond her “Converger” learning style with a preference for “Active Experimentation” learning and into “Reflective Observation” (through analysis of data) and “Abstract Conceptualization” (through drawing conclusions from data) toward more of a “Diverger” learning style. This
expansion into non-dominant learning styles is consistent with Integration, Kolbs third stage of the human growth process (p. 244-245).

**Mixed Methods in Nursing Research**

In nursing, mixed methods research is a generally accepted practice, although as in other disciplines and professions there are those proponents who hold that best research results can only be determined through single method research.

Mixed methods research is criticized by Giddings and Grant (2007) as a cover of what is really positivistic research, and not a true melding of methods. Price (2009) is but one author who holds that mono-method research is limiting and advocates for the use of mixed methods stating that “tensions have long existed between qualitative and quantitative research and the debate needs to move beyond which is best given that both approaches alone are insufficient” (p. 273).

Integrating the knowledge of both decision making and practice is the result of mixed methods research (Flemming, 2007). Mixed methods hold the advantage that experiential and intuitive knowledge can be captured through qualitative methods while numerical data (which is the basis of most evidenced-based practice) can be analyzed quantitatively (p. 42).

Nursing is described as a complex profession with complex educational issues and problems; the attempt to develop new knowledge within nursing education is not well served by mono-method research by Young (2008) who encourages “researchers employ multiple methods in their approach to the development of knowledge” (p. 99). An important issue within nursing education is the application of research to theory production
and practice; Weaver and Olson (2006) hold that mixed methods of research will assist in reducing the discrepancies between research, theory, and practice because of the breadth and depth of findings afforded by mixed methods (p. 466-467). The goal of this mixed method study is exactly that: rich results leading to the development of new knowledge that can be practically applied to nursing education.

Hermeneutics as an approach within mixed method design overtly includes consideration of how the researchers identity and experiences influence communication to achieve greater clarity of understanding (VonZwek, Paterson, & Pentland, 2008). This study utilizes hermeneutics so that the author’s background and experiences are considered while the research questions and methodologies are developed in an effort to reduce potential intimidation of participants by the author, and to better pull out what participants have experience to understand their intercultural sensitivity development. Further explication of the authors role as researcher appears later in this section.

The presentation of the results of mixed methods research most often includes textual description of the qualitative data and tables of quantitative data. Onwuegbuzie and Dickinson argue for reversing these to obtain textual description of quantitative data from tables, and creation of tables from textual qualitative data to prevent “data overload” (2008, p. 220). Additionally, they encourage creativity in developing visual displays of data beyond the average bar graph to include use of color and newer 3-D graphics so that results can be presented visually in a manner that is both more powerful to the reader and easier to comprehend (p. 221). Visual representations are also advocated by Marquart, Li, and Zercher (1997) as a means to explicate the processes undertaken in data analysis of a
mixed methods studies. This study has undertaken to utilize visual representations of qualitative data through the use of various types of figures to compliment the potentially verbosity inherent to qualitative analysis.

Although quantitative research has long dominated many disciplines as the gold standard, the use of quantitatively-based terminology when presenting the qualitative portion of this mixed methods study is avoided. For the qualitative aspect of mixed methods “goodness” is a more precise term than “rigor”; “credibility” substitutes for internal “validity”; “transferability” is more applicable than “external validity”; “dependability” replaces “reliability”; and “confirmability” is better descriptor than “objectivity” (Tobin & Begley. 2004, p.390-392). The author has utilized this terminology in the Comparison of Findings and Discussion of results (Chapters 5 and 6).

A Phenomenological Stance

The use of phenomenology facilitates the researcher’s ability to understand an experience from the perspective of the one experiencing the phenomenon. The basis of phenomenology is “the intent is to understand the phenomena in their [participants’] own terms — to provide a description of human experience as it is experienced by the person herself” (Bentz & Shapiro, 1998, p. 96). Thus because the goal of this study is to gain understanding of what it is like for nursing students as they become interculturally sensitive, phenomenology is a good fit here. Phenomenology stems from the belief that an individual’s experiences and life events influence both how the individual interacts with the world and also how the individual makes meaning in life. The significance of the experiences and life events to the individual is what is of interest to the phenomenologist.
Understanding of nursing students’ experiences and life events as relates to their intercultural sensitivity development has been sought in this work through both student writings and participant focus groups. The social experiences of the participant’s life are used to construct a view of the participant’s reality. Analysis of the words of a participant is based on what the words “reference, correspond with, or stands for in the real world” (Holstein & Gubrium, 1998 in Denzin and Lincoln, 1998, p. 140). Thus, fully understanding the lived experience is the goal of the method and description of the lived experience is the outcome (Davis, 1991; Groenewald, 2004; Holstein & Gubrium, 1998; Mapp, 2008). To accomplish full comprehension of the lived experience of nursing students as relates to their intercultural sensitivity development has been the goal of this work, and has been at least partially achieved.

Historically, the development of phenomenologic research is ascribed to Husserl after World War I, when he sought to understand an individual’s unique experience only as perceived by that individual. Heiddeger further developed the method to include the researcher physically being with the individual being studied to better understand and depict the individuals interactions within the world. Sartre and Merleau-Ponty are given credit for further expanding phenomenology. The method was accepted and used in the 1920s to 1940s, and then abandoned until the 1970s when phenomenologic praxis was developed, which resulted in greater acceptance and wider use (Groenewald, 2004).

Phenomenology as the study of experience has been utilized in nursing education research for the purpose of gaining understanding of experiences: first experiences are depicted, then clarified; comprehension is achieved through interpretation of identified
themes and patterns (Lindsay, 2006, p.42; Shattel, 2007, p. 572-3). The use of a
phenomenologic perspective facilitates nursing educators to go beyond making
assumptions and instead seek to truly understand the experiences of students. Once
understanding is achieved, changes can be made to curricula and teaching strategies to
facilitate accomplishment of a desired learning outcome. This holds true with the current
study: the overall goal is to understand student experiences of culture and developing
intercultural sensitivity so that modifications can be made to nursing education which will
make possible further intercultural sensitivity development.

**Role of the Researcher**

The role of the researcher in a phenomenologic mixed method study is complex.
The researcher’s personal experiences and background influence what is seen when
looking in at a process. Through the observation, the researcher becomes a part of the
phenomenon being studied, which in turn prevents a truly objective understanding of any
observed experience or process (Davis, 1991, p. 7).

**Recruiting Junior Nursing Student Participants**

A voluntary self-selected convenience method of sampling was used. Participants
were recruited from the junior class of the day baccalaureate nursing program beginning
the first week of the second semester of nursing coursework. This semester consists of two
half-semester clinical courses; students were in one clinical course for the first half of the
semester and the other clinical course during the second half of the semester. Formal
Human Subjects permission was obtained both from the institution where the author was a
doctoral student and the institution where the research was conducted.
Recruitment proved to be more difficult than anticipated, and required more time and strategies than planned. The first step was a mass email during January term prior to the onset of the semester the study was to be conducted. This email explained the basics of the research and that the study would take place in Winter Semester. Next, in the first week of the semester another email was sent out reading in part “Are you interested in issues of culture? Are you interested in nursing research? The author is performing a study on how junior nursing students feel about and understand culture. The topic of the study is cultural sensitivity development of baccalaureate nursing students.” The anticipated time commitment and study activities were also explained. The third step in recruiting was having the following printed notice handed to students at the end of a class session in which the author does not teach:

**Research study on culture**

Are you interested in issues of culture? Please participate in the author’s doctoral research study on cultural sensitivity. Meet in J111 at 12:30 on Thursday, January 31 for more information and to take a paper-pencil survey. The survey will take 20 minutes or less to complete.

Additionally, posters put on the walls and doors of the portion of the classroom building used by the Nursing Department. The wording “Are you interested in culture?” proved to be problematic: several Caucasian students made comments to the author about not being able to participate because they were white. Thus a statement specifying that students from all cultural backgrounds, ethnicities, and races was added to a second version of the posting: “All juniors in nursing are encouraged to attend. Students from all cultural
backgrounds, ethnicities, and races are needed for this study.” The number of participants was still too small following those recruitment activities, so the author requested nursing faculty teaching or supervising clinical experiences with the junior students to read or summarize the following announcement to students during a class or seminar session early in the semester:

As you’ve heard, the author is studying culture in nursing. Students from both 3400 and 3500 are invited. The total time commitment will be about 2 hours, spread over the entire semester. The author is having an open-house style introductory meeting and pizza lunch beginning at 12:15. Please stop in at any time to hear more about the author’s project. You are not expected to come for the entire open house, just for a few minutes to eat pizza, learn about the project, and take a short survey. If you are wondering why the author herself hasn’t spoken about this, it is because she is not allowed to do so by the Human Subjects protection board. Because she is one of your teachers, her directly contacting you could be considered coercive. Please give serious consideration to joining this study. The results of this study will help St. Kate’s nursing faculty better understand the student experience. You will have the satisfaction of knowing that you helped advance nursing education research.

Students were offered lunch of pizza or Chinese food at these introductory meetings. The study was explained to students, and 2 copies of the consent form were given to each student. Those students who provided written consent (see Appendix B) were then asked to complete the Intercultural Development Inventory (IDI). Twenty-nine students agreed to
participate in the study. Seventeen of the students were enrolled in the course in which the treatment was to take place, and therefore were assigned as Group 1; twelve students were enrolled in a different course during the DMIS explanation and discussion treatment, and therefore were assigned to Group 2.

**Description of the Sample**

The total sample consisted of 29 students. Twenty eight fully completed the preliminary IDI; one student left statements blank and attempts to contact her to obtain the final questions were unsuccessful. Of these twenty eight students, seventeen were in Group 1, and eleven were in Group 2. At the end of the study, the analytical group consisted of fifteen students in Group 1 and eight students in Group 2. The remaining five students withdrew from the study. Of those lost to follow up, some were unsuccessful in their semester course work and withdrew from the nursing program, and some chose to not continue their participation in the study. The most common reason given by those students who notified the author via email of their withdrawal was time. Of the five students lost to follow up, four were Caucasian and one was Asian. Their ages were primarily in the category of 18 to 21 years.

**Collection of Quantitative Data**

The data section of the IDI consists of 50 statements to which participants indicated their agreement using a Likert-type scale ranging from 1 to 5 in which 1 indicates “disagree” and 5 is “agree”. The IDI scores were reported for each individual and for the group as a whole. The first listing is orientation as relates to the dimensions of the DMIS with perceived score, and developmental score. Next is the Worldview Profile, consisting
of five scales. Developmental issues were presented as the five scale scores plus any clusters and sub-clusters contained within that scale. Group statistical profiles can also be obtained which list standard deviation, median, and mean for every item on the IDI, along with the scale, cluster, and sub-cluster scores.

Twenty nine participants were given the IDI at the beginning of the semester after obtaining written informed consent. This initial IDI (the early IDI) was obtained in small group settings of 4 to 12 students; lunch had been provided for students during the discussion of the study and the consent form. Twenty eight of the IDIs were complete and could be analyzed; one was incomplete and attempts to contact the student for completion were unsuccessful. Group 1 had 17 participants, and Group 2 had 11 for the early IDI. At the end of the semester students were again administered the IDI, most often in small group settings with lunch provided, although some students completed it alone. Group 1 had 15 participants and Group 2 had 8 for the late IDI. When students had questions about interpreting an individual item on the IDI the author avoided a direct interpretation, and instead replied “what does it mean to you?”

Collection of Qualitative Data

The first week of the semester students in the maternal-child health course (consisting of half of the junior nursing class cohort) were asked to write responses to two questions: “What is culture?” and “Why is culture important in nursing?” Students hand wrote their responses in an anonymous fashion without identifying information on the paper. The author collected the responses and had each question typed verbatim into a Word document. 42 responses to each question were obtained.
Beginning about two weeks later, and following scoring of the individual IDIs, interviews were held with about half (9 of 17) of Group 1 participants due to participant time constraints. These students were given their individual IDI results with the two handouts that were included on the proprietary IDI scoring/interpreting software from the Intercultural Communication Institute to explain their IDI results. The first, “Interpreting your Intercultural Development Inventory (IDI) profile” is a three page handout gives an overview of what an individual’s results mean. Also included on this handout is an interpretation of the IDI graph of the individuals results, an overview of the scales (DD, R, M, AA, and EM), and explication of resolved (an area that is no longer perplexing or problematic for the individual, because the area has been thought about and meaning has been made regarding the area), in transition (in which the individual is still considering and uncertain about) and unresolved issues (those area in which the greatest growth can take place through consideration of specific aspects of the area). Additionally, the handout on IDI scales was also given to Group 1 participants. This handout has one page devoted to each of the stages of the DMIS (denial, defense, reversal, minimization, acceptance, adaptation: cognitive frame shifting, adaptation: behavioral frame shifting and encapsulated marginality), and goes into greater depth on what that stage includes attitudinally and behaviorally, with suggestions for experiences that will facilitate movement toward ethnorelativism included.

Near the end of the semester Group 1 participants were asked to reflectively write a response to three questions: 1) How do my cultural expectations facilitate culturally sensitive care? 2) How do my cultural expectations present barriers to culturally sensitive
care? 3) What can I do to remove those barriers? Responses were collected either
electronically, or if hand-written the response was entered into Word to become an
electronic document. Only five participants provided these reflective writings. Group 2, as
the control group, was not asked to participate in reflective writings.

Group 1 students participated in semi-structured focus group meetings at the end of
the semester. Focus groups ranged from three to eight participants. The first meeting was
based on a set of seven questions:

1. How would you describe cultural sensitivity?
2. Describe your reaction on the content on culture that you have had while in the
   nursing program. Please include comments from any of your nursing classes.
3. What in your nursing education has increased your sensitivity to issues related to
culture?
4. What in your college education as a whole has influenced your sensitivity to issues
   of culture?
5. What at the college decreased your cultural sensitivity?
6. Did you take care of someone from a different culture this semester? What kind of
   challenges did that hold, what did you feel about it and what would you do
differently?
7. What do you think would facilitate your becoming more culturally sensitive?

During the first focus group meeting (which was comprised of all Asian participants), it
occurred to the author that one question was missing that could help inform both the
student experience for women of color as well as a glimpse into the overall level of cultural
sensitivity development of students, faculty and staff at the educational institution of the study. Thus an eighth question was added “What have your experiences of racism been at the College?” The audio of each focus group session was recorded. Each session’s recording was then manually transcribed into a Word document.

**Quantitative Data Analysis**

The IDIs were hand entered into the proprietary IDI scoring/results software, which is owned by the author. (It should be noted that the IDI is now available in an online version, which eliminates the need for this first step.) Although the software is designed to be utilized in conjunction with an automated test scoring machine, no machine compatible with the software could be located at either the institution where the research was performed or at the University of Minnesota. The IDI software provides results in tables using Access software. The data tables on Access were then exported into Excel. Initial data analysis was undertaken using Excel, looking for measures of central tendency (mean, median, and standard deviation) of the early and late scale and cluster scores and PSDS gap of individuals and both groups to identify movement toward ethnocentrism.

Specifically, the D/D Scale scores were compared, along with the scores of the denial cluster (including disinterest summary, and avoidance summary), and defense cluster. The R scale scores were similarly examined. The M scale scores were compared, along with the similarity and universalism cluster which make up the M scale. The A/A scales were also compared, including the acceptance, adaptation cluster (including the cognitive and behavioral summaries). The EM scale scores were also examined in the same fashion. The group data was determined to be most important to the study, but individual data was also
examined for correlation with qualitative data. From this initial analysis tables were developed in Word with the central tendency data. The Excel data was then exported into SPSS software for analysis by professional statistician C. Skay. Frequencies of scale and cluster scores and PSDS gap were analyzed for central tendency, as were change scores. T-tests and independent samples tests were calculated, and ANOVA was undertaken.

**Qualitative Data Analysis**

Audiotaped IDI interviews and focus groups were transcribed into Word documents. Reflective writings were compiled by question into Word documents. These transcripts and the reflective writings combined became the 51 pages of raw textual data to be analyzed. Hard copies of the Word documents were manually examined through multiple readings by the author.

Repeating ideas (Auerbach & Silverstein, 2003, p. 37-38) were color-coded by hand underlining or highlighting of sections of the text. In addition, notes were sometimes hand written in the left margins both regarding repeating ideas or questions the author had about the text. The color coding facilitated the authors visual style of searching for statements “relevant for answering the research question” (Mayring, 1983, in Flick, 1998, p.193).

The writings on why culture is important to nursing provides a good example of this process: the statements talking about culture is important because of the differences among cultures were highlighted lavender, statements describing culture as influencing patient response to care were highlighted green, cultures impact on decision making was highlighted in blue, and understanding culture as important to show respect or honor were
underlined with red. Twelve different colors of highlighting or underlining were utilized in the data analysis. Some phrases represented more than one idea. One case in point was the statement “the nurse’s understanding of the patients culture helps you understand how to better get the person to a higher level of wellness.” This statement includes both the repeating idea of “the patient’s response to care” as well as “treating the patient the best way.”

One example note is “but why is that important?” written next to the students statements “culture gives diversity in the workplace, making each worker and patient different” and “[culture] is important in nursing because there is a lot of diversity and cultural differences in regards to every patient.” The note helped the author see that although students had expressed that culture equals differences the question posed to them was why culture is important in nursing.

Next, the repeating ideas were entered into Excel spread sheets. The first column was the actual phrasing used by participants. Additional columns depended on the topic of the text and included such topics as what IDI stage the phrase indicated, the nursing course or activity involved, the ethnic background of the participant making the statement. The repeating ideas were then analyzed for themes (Flick,1998, p.196-197; Patton, 2002, p.453; Auerbach & Silverstein, 2003, p.37-38).

Some data sets were of a complexity that up to 80 lines on a single Excel sheet was utilized, or multiple sheets within an Excel file were necessary to fully analyze the data. Question 6, which addressed the experience of caring for someone from a different culture during clinicals, was one example of needing multiple sheets. The initial reading of the text
revealed multiple categories of statements, and each category had sufficient text to require a separate sheet. The categories of statements with an exemplar from each were: patient characteristics (such as English fluency or the lack thereof), problems encountered (no interpreter present), participants’ feelings (frustration), actions taken (used pictures and audio tapes in the patients language), and student observations about the experiences (can provide comfort in spite of a language barrier).

Hard copies of all the Excel spread sheets were then printed, and next attached to large pieces of foam core. This step created a large visual depiction of the data, which in turn allowed for easy comparison of sections so that relationships between the sections were apparent. Using this method also created the ability to physically cut and paste and move around the data to determine which theme best fit.

Once all the repeating ideas had been assigned to themes, the Excel spread sheets were cut and pasted and moved on the foam core and rearranged by theme. The narrative was then created with the theme (on foam core) literally within the visual field of the author during the writing process. Although this method requires adequate space, it fit the author’s visual learning style.

As the narrative was created, tables and other graphics were developed to visually depict the qualitative findings. Similarly, narrative descriptions of the quantitative findings were developed (Marquart, et al., 1997). Figure 3 depicts the overall process of the data analysis and creation of the narrative of this research.
Figure 3. Data analysis technique. The multistep process used to analyze both qualitative and quantitative data.
Impact of Researcher Identity

My many life roles impact my perspectives, from being a white middle class woman to my professional experiences as a registered nurse, Certified Nurse-Midwife, and Certified Nurse Educator. Every aspect of my identity: class, race, gender, sexual orientation and ethnicity necessarily impact my research (Denzin & Lincoln, 1998, p. 22). My responsibility as a researcher is to be aware of how each aspect of my identity may impact my understanding of the results of the research. As a white woman, I must be aware of how I am reading and hearing the work of my students. I must be aware of ethnocentric tendencies, and be conscious of the cultural background of participants so as to not misunderstand or misinterpret their meanings. I must understand the perspective of the current college student is consumer based, and questioning of the validity of the education and the instructor. I also have a great desire to understand the cultural backgrounds of my students, and must be careful to not let that interest become a favoritism towards those who come from cultural backgrounds different from myself. As a registered nurse and certified nurse-midwife I have great interest in understanding the impact of culture on health. As such, I must remember that not all of my students will have had much contact with cultural otherness, and will not see cultural diversity the way that I do.
Chapter 3

Quantitative Data Findings:

“I just don’t know how to do everything for all the different cultures yet.”

IDI Demographics

The first section of the IDI asks individuals to identify their name and six other topics: gender, age (in 7 categories), amount of previous experience living in another culture (in 8 categories), educational level (in 6 categories), nationality and ethnic background as a fill in the blank response, what world region the individual lived in during their formative years to age 18 years (in 10 categories), with three optional questions. The optional question was only utilized for the late IDIs to determine which participants had cared for a patient from a different cultural background.

To gain a better understanding of the participants, the first step of analysis was to look at five of the six demographic items. The sixth item, a question on gender, did not require analysis as all participants were female. This is due to the fact that the entire junior nursing student cohort was female.

Age. The age demographic on the IDI is reported in unequal interval categories. The age span within most categories is nine years, but the most common category of the study sample fell into a category with a three year age span (18-21). Because the sample is from a group of college juniors, it would be anticipated that participants’ ages would be mostly between 20 and 25, which would be reported in two age categories: 18 to 21 and 22 to 30. The total sample ages fell into four categories between 18 to 21 years (50% of participants) to 51 to 60 years (one individual or 3.6% of participants). 78.6% of
participant ages were between 18 and 30. Within the analytical sample, ages ranged across three categories, with no participants over the age of 40 (see Figure 4).

*Figure 4.* Age at early IDI. Age of participants in Groups 1 and 2 at early IDI.

Analysis of the differences in age of the analytic sample by group was undertaken; Group 2 is significantly younger than Group 1 (chi-square=9.885; df=2; p=.007). Additionally, when looking at the results of age, it must be considered that the eight years in the category 22 to 30 is much larger than the three years in the 18 to 21 category, which results in less understanding of participants’ actual age. Were age categories between 18 and 30 evenly spaced and consisting of fewer years, a better understanding of the ages would be obtained. The findings would be only slightly different for Group 2 because only one participant in the total sample was in the 22 to 30 category and the rest of the participants were in the 18 to 21 category.
**Previous experience in another culture.** Amount of previous experience living in another culture had categories ranging from never to over 10 years. This item proved problematic due to differences in how individuals interpreted the statement.

One example of how interpretation impacted this finding is that different responses were obtained from six participants on the early and the late IDIs. The changes ranged from a decrease of three categories (early IDI indicating 7 to 11 months of experience and late IDI indicating none) to an increase of five categories (early IDI indicating 3 to 6 months of experience and late IDI indicating over 10 years.) These changes were present among white students and students of color, and across age categories. The author contacted those individuals who indicated differences on their scores to clarify their interpretation, and discovered that some participants (both white and of color) had interpreted this to mean time they had spent outside of the country of their birth, while some participants of color considered their entire lives to be living in two cultures simultaneously because they had to function both in the culture of their home (which included speaking a language other than English for about half of the participants) and in the mainstream white U.S. American culture.

On the front page of the IDI is a section entitled Defining “Culture.” The following statement is presented: “Each of us has a worldview that is related to participation in one or more culture groups. These groups were typically defined by national and/or ethnic boundaries, but they may also represent other affiliations.” Based on this statement, either interpretation of participants would be valid. Although the operational definition of this
construct had the potential to impact the outcome, ultimately the construct held questionable validity.

For purposes of analysis the author defined experience as time outside the country in which formative years were spent. One year was viewed as the amount of time required to become fully comfortable in another culture based on the stages of culture shock (Adler in Brown & Halloway, 2008; Torbiorn, in Brown & Halloway; McLachlan & Justice, 2009). Figure 5 presents participants experience across groups; no significant differences were present between the groups for the analytical sample (chi-square = 2.139, df = 2, p = .343).

![Experience in another culture](image)

*Figure 5.* Experience in another culture. Years of experience in another culture at early IDI for both Groups 1 and 2.

**Looking at age and experience.** Because intercultural experiences occur over time, age could potentially increase experience with cultural differences, which in turn could lead to higher scale and cluster scores. The question here was whether older
participants would have higher levels of experience based simply on life experiences of age. Therefore, analysis of the relationship of age category with experiences was explored. Although age category increased with experience category, with the exception of the oldest participant having no experience, the finding was not statistically significant for the total sample presented in Table 1 (chi-squared=4.035, df=6, p=.672) nor for the analytic sample (chi-squared=1.386, df=4, p=.847). The lack of significance between age & experience was surprising, and likely a result of the small sample size.

Table 1

Age and Experience at Early IDI

<table>
<thead>
<tr>
<th>AGE AT</th>
<th>EXPERIENCE IN ANOTHER CULTURE IN 3 CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 NONE</td>
</tr>
<tr>
<td>18-21</td>
<td>Count</td>
</tr>
<tr>
<td>Early IDI</td>
<td>%</td>
</tr>
<tr>
<td>22-30</td>
<td>Count</td>
</tr>
<tr>
<td>%</td>
<td>37.5%</td>
</tr>
<tr>
<td>31-40</td>
<td>Count</td>
</tr>
<tr>
<td>%</td>
<td>20.0%</td>
</tr>
<tr>
<td>51-60</td>
<td>Count</td>
</tr>
<tr>
<td>%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
</tr>
<tr>
<td>%</td>
<td>42.9%</td>
</tr>
</tbody>
</table>
Educational level. The demographic section on educational level categories also proved to be problematic for the sample participants, as indicated by five changes on educational level from early to late IDI. The education categories on the IDI include: did not complete High School, High School graduate, college graduate, M.A. degree or equivalent graduate degree, Ph.D. degree or equivalent level graduate degree, and other (please specify). Participants with changes were contacted to clarify what they mean by the different educational levels on their early and late IDIs. It became apparent that the main issue was that several students had graduated from community college or technical college prior to their current college career; participants indicated that they considered that degree to be either a college degree or in the “other” category, and were not consistent in their description across their IDIs. This confusion is understandable based on the IDIs available descriptors. For purposes of analysis the author used the educational category which participants with differences on the early and late IDI indicated during personal communication with the subject, using the definition of college graduate as only those with a 4-year degree. Tables 2 and 3 present educational level of the total sample and the analytical sample.
Table 2

*Educational Level Total Sample*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>HS</td>
<td>22</td>
<td>78.6</td>
<td>78.6</td>
</tr>
<tr>
<td></td>
<td>COLLEGE</td>
<td>3</td>
<td>10.7</td>
<td>89.3</td>
</tr>
<tr>
<td></td>
<td>MASTERS</td>
<td>1</td>
<td>3.6</td>
<td>92.9</td>
</tr>
<tr>
<td></td>
<td>OTHER</td>
<td>2</td>
<td>7.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>28</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Although for the analytical sample the groups did not have statistically significant educational levels (chi-square=3.407; df=2; p-value=.182), because the p-value is less than .20 there is a trend toward a difference in educational level by group. This trend is present because all of the participants in Group 2 were in the lowest educational level category while some Group 1 participants had additional education beyond high school.

Table 3

*Educational Level Analytical Sample*

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Count</th>
<th>EDUCATION LEVEL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HS</td>
<td>COLLEGE</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>66.7%</td>
<td>20.0%</td>
<td>13.3%</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>.0%</td>
<td>.0%</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>78.3%</td>
<td>13.0%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>
**Region of formative years.** Region on the IDI indicates categorically which world region they had spent their formative years; nine world regions and “other” were the options from which to choose. Participants of the total sample indicated three regions: North America, Africa, and Asia (see Figure 6).

![Total sample regions](image)

*Figure 6. Total sample regions. Which regions formative years were for total sample.*

However, in the late sample, the two students indicating they had grown up in Asian changed their responses to North America. The analytical sample thus contained only two regions: North American and Africa (see Table 4).
### Table 4

**Region of Formative Years**

<table>
<thead>
<tr>
<th>REGION</th>
<th>NORTH AMERICA</th>
<th>AFRICA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP 1 Count</td>
<td>13</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>86.7%</td>
<td>13.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>GROUP 2 Count</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>%</td>
<td>100.0%</td>
<td>.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total Count</td>
<td>21</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>%</td>
<td>91.3%</td>
<td>8.7%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Student comments during interviews and discussions led the author to believe that the latter responses were more accurate. The reason for the changes can be ascribed to an all too common phenomenon among nursing students: skimming instructions resulting in misunderstanding and incorrect responses.

Of interest is looking at the regions of the Group 1 and Group 2 analytical sample. Group 2 consists of participants who all spent their formative years in North America, while Group 1 has two participants who spent their formative years in Africa. These findings were not statistically significant due to small sample sizes (chi-squared=1.168; df=1; p=.280). But of concern is the two students have lived on two continents: they may have had more intercultural contact than their peers who grew up in North America, and their increased intercultural contact could influence their IDI results.

**Nationality and ethnic background.** Nationality and ethnic background is a “fill in the blank” item on the IDI. Group 1 described their nationality and ethnic background
on their early IDI using a variety of terms. Initial interviews with participants yielded additional information, as students were asked how they self-identify racially and ethnically. 55.5% (15 of 27) participants self-identified as other than white. One student was not included because no further clarifying information could be obtained as to how she self-identified. This finding may relate to the previously discussed issue that white students appeared to perceive that they were ineligible for the study. But the percentage of participants of color was much higher that the nursing class cohort in the study, which is comprised of 37% students of color. Having 37% of students in nursing being women of color is of itself an unusual finding due to the majority of nurses reporting they were Caucasian and of Euro-American background. Additionally, this class cohort has the highest percentage of students of color in the author’s 10 year history at this institution.

Of interest in the nationality and ethnic background demographic is that the end of semester self-descriptions were different for twelve members of the analytical sample; the end IDI descriptions tended (7 of 12) to be more ethnically oriented (see Table 5). For these participants to change their self-descriptions from racial category to ethnicity speaks to possible growth in their self-awareness. Although not measured by the IDI, self-awareness is the first step in cultural sensitivity (Gray & Thomas, 2006). Examples of these changes include one student initially described herself as American and Caucasian and on the end IDI used the term Irish American. Two students listed Asian on the early IDI and on the late IDI listed their ethnic background: Cambodian for one and Hmong for the other. Yet another described herself as Mexican & Caucasian initially and Mexican-Italian-Native American at the end of the study. This trend was not unanimous, with one
student describing herself as ½ Filipino and ½ Scandinavian-American on the early IDI compared to Filipino-American on the late IDI. The student with the most disparate self-descriptions listed Black & White on her early IDI while her late IDI description was “Don’t really know=German & French mostly”.

Table 5

*Changes in Self-described Nationality and Ethnic Background*

<table>
<thead>
<tr>
<th>Early IDI</th>
<th>Late IDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>American &amp; biracial</td>
<td>US &amp; biracial</td>
</tr>
<tr>
<td>Hmong, Asian American</td>
<td>Asian American-Hmong</td>
</tr>
<tr>
<td>Asian American</td>
<td>Cambodian</td>
</tr>
<tr>
<td>Mexican/Caucasian</td>
<td>Mexican-Italian-Native American</td>
</tr>
<tr>
<td>Black &amp; white</td>
<td>Don’t really know=German &amp; French mostly</td>
</tr>
<tr>
<td>American &amp; Caucasian</td>
<td>Irish American</td>
</tr>
<tr>
<td>Asian</td>
<td>Hmong</td>
</tr>
<tr>
<td>Caucasian, American</td>
<td>American/northern European</td>
</tr>
<tr>
<td>Nigerian-American</td>
<td>Nigerian</td>
</tr>
<tr>
<td>½ Filipino/ ½ Scandinavian American</td>
<td>Filipino-American</td>
</tr>
<tr>
<td>American</td>
<td>White-Caucasian</td>
</tr>
<tr>
<td>Asian Hmong</td>
<td>Hmong-Asian</td>
</tr>
</tbody>
</table>
**Items on the IDI**

The next section of the IDI consists of 50 statements to which participants indicated their agreement using a Likert-type scale ranging from 1 to 5 in which 1 indicates “disagree” and 5 is “agree”. The IDI scores were reported for each individual and for the group as a whole. The first listing is orientation as relates to the dimensions of the DMIS with perceived score, and developmental score. Next is the Worldview Profile, consisting of five scales. Developmental issues were presented as the five scale scores plus any clusters and sub-clusters contained within that scale. Group statistical profiles can also be obtained which list standard deviation, median, and mean for every item on the IDI, along with the scale, cluster, and sub-cluster scores.

**Orientation.** Orientation is based on the developmental score; a score of less than 84 indicates that the overall orientation lies within the ethnocentric stages of denial/defense/reversal (DD/R), a score of 85 to 114 indicates an orientation in the middle ground whereas of minimization (M), while a score of 115 and higher indicates an orientation within ethnorelativism and in the stages acceptance/adaptation (AA).

Orientation scores have been assigned both to each group of the total sample as a whole and to each individual in the group. At the early IDI the overall orientation for Group 1 was 99.77, which indicates an overall orientation of the group in mid-minimization; Group 2 had an orientation score of 88.5, indicating low minimization. Similarly, looking at the individual participants’ orientations, it can be seen that at the beginning of the study Group 1 had one participant in DD/R, fourteen in M, and two in AA.
while Group 2 initially had three participants in DD/R, eight in M and none in AA (see Figure 7).

Figure 7. Individual orientations at early IDI. Orientations of individuals in Groups 1 and 2 at early IDI.

These findings appear to indicate that Group 1 was overall more ethnorelative at the onset of the study than was Group 2, and although the graphic representation appears quite different, due to the small sample size the differences were not statistically significant but did trend towards significance (chi-square=3.512, df=2, p=.173). IDI scores of the analytical samples were analyzed for comparison of Groups 1 and 2 looking at the groups’ overall orientation, scale and cluster scores and the PSDS gap. This examination is important because the IDI has not been used to examine intercultural sensitivity development of a baccalaureate nursing class during their regularly scheduled coursework.

**Perceived score, developmental score, and PSDS gap.** The perceived score (PS) measures what an individual believes their intercultural sensitivity level to be while the developmental score (DS) is how the IDI actually measures that persons intercultural
sensitivity. Group 1’s initial PS was 123.57 compared to the initial PS of Group 2 at 120.22. Group 1’s DS was 99.77 while Group 2 had an overall DS of 88.5 (see Figure 8).

When the PS is higher than the DS, one’s opinion of self ethnorelativism is not in line with one’s authentic worldview and greater ethnocentrism is present than the individual believes (Bennett & Hammer, 1998, p. 47).

Figure 8. Early PS & DS both groups. The perceived score and developmental score of both groups at early IDI.

As seen in Table 6, t-tests of these differences were run, and Group 1 was found to differ significantly from Group 2 on developmental score (p=0.012) and was trending toward significance on perceived score (p=0.074).
Table 6

T-test of PS, DS, and Gap Scores at Early IDI

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Score</td>
<td>1.862</td>
<td>26</td>
<td>.074</td>
</tr>
<tr>
<td>Developmental Score</td>
<td>2.696</td>
<td>26</td>
<td>.012</td>
</tr>
<tr>
<td>PSDS Gap</td>
<td>-3.071</td>
<td>26</td>
<td>.005</td>
</tr>
</tbody>
</table>

The PSDS Gap is the difference between an individual’s perception of how interculturally sensitive s/he is and how the IDI has actually measured the intercultural sensitivity development. It is common for a PSDS Gap to be present; however a smaller gap indicates a more realistic understanding by individuals of their intercultural sensitivity and skills. On the Early IDI Group 1 had a PSDS gap of 23.8 while Group 2’s gap was 31.72 (see Figure 9). The difference from Group 1 to Group 2 was found to be significant (t = -3.071, df = 26 p = 0.005).

![Early PSDS Gap both groups](image)

*Figure 9.* Early PSDS Gap both groups. PSDS gap scores of Group 1 and Group 2 at early IDI.
**Scale scores.** Each of the five scales is scored numerically with a range from 1.0 to 5.0. The higher the score the more ethnorelativism is present and conversely the lower the score the more ethnocentric that issue is. A score between 1.0 and 2.32 indicates an area that is unresolved, that the issues or topics were of that scale were problematic and characterized by ethnocentric thinking. A score between 2.33 and 3.65 is considered in transition, indicating that the issues or topics within that scale were still being considered, were neither fully resolved nor fully problematic, and were characterized by a middle ground worldview that is somewhat ethnocentric and also somewhat ethnorelative. A score of over 3.66 indicates that the scale is fully resolved; the issues, concepts, or ideas of that scale cluster or sub-cluster were no longer problematic; ethnorelative thinking is apparent in those areas.

The scale scores for the analytical sample at early IDI were examined first. Table 7 shows the scores for each of the five scales at the early IDI. It can be seen that the DD scale and EM scale are fully resolved, the R scale is on the cusp of being fully resolved, both the M scale and AA scale are in transition.
Table 7

*Scale Scores of Analytical Sample at Early IDI*

<table>
<thead>
<tr>
<th></th>
<th>DD Scale</th>
<th>R Scale</th>
<th>M Scale</th>
<th>AA Scale</th>
<th>EM Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.3645</td>
<td>3.6577</td>
<td>2.7729</td>
<td>3.5062</td>
<td>4.0261</td>
</tr>
<tr>
<td>Median</td>
<td>4.5385</td>
<td>3.6667</td>
<td>2.6667</td>
<td>3.5000</td>
<td>4.6000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.57011</td>
<td>.73842</td>
<td>.69508</td>
<td>.51459</td>
<td>1.05882</td>
</tr>
<tr>
<td>Range</td>
<td>2.00</td>
<td>2.33</td>
<td>2.67</td>
<td>2.21</td>
<td>3.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.00</td>
<td>2.44</td>
<td>1.56</td>
<td>1.64</td>
<td>2.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.00</td>
<td>4.78</td>
<td>4.22</td>
<td>4.64</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Table 8 presents the first scale, DD, in which scores ranged from 3.0 (denial and defense were issues in transition, thus the individual tends to sometimes deny the presence of cultural difference and/or becomes defensive when faced with differences) to 5.0 (denial and defense were fully resolved; the individual neither denies the presence of cultural differences nor is defensive when encountering cultural differences.)
**Table 8**

*Early DD Scale Scores*

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.23</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.54</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>4.08</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.15</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>4.23</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.38</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.54</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>4.62</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>4.69</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.85</td>
<td>4</td>
<td>17.4</td>
</tr>
<tr>
<td>4.92</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>5.00</td>
<td>2</td>
<td>8.7</td>
</tr>
</tbody>
</table>
The R scale measures the degree of reversal, where individuals believe their own culture is less desirable than another. The R scale scores ranged from 2.44, where reversal remains an issue, to 4.78, in which reversal is resolved (see Table 9).

Table 9

*Early R Scale Scores*

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.44</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>2.78</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>2.89</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.22</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.56</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.67</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>3.78</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>4.11</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.22</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>4.33</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.35</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.44</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.56</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.67</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.78</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>
The next scale is the M scale, which examines the tendency to minimize those cultural differences that were identified. The M scale scores ranged from 1.56 to 2.89. Five participant scores were in the unresolved range, indicating that when cultural difference is identified the individuals have a strong tendency to dismiss the difference as unimportant. The remaining 23 participant scores were in the minimization range, indicating that these individuals will sometimes dismiss cultural differences as unimportant, but sometimes will see the differences as significant (see Figure 10).

Table 10

*Early M Scale Scores*

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.56</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>1.78</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>2.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>2.22</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>2.33</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>2.44</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>2.67</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>2.89</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.11</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.22</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>3.56</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>4.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.22</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

The next scale is the AA Scale, which looks at issues of accepting cultural difference and adapting one’s thoughts and behaviors according to the cultural difference and cultural group being encountered (see Table 11). Participant scores ranged from 2.43
(the issue of accepting and adapting to cultural differences encountered remains in transition) to 4.64 (the individual accepts and adapts to cultural differences).

Table 11

*Early AA Scale Scores*

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.43</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>2.57</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>2.86</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.07</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.21</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.29</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>3.43</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.50</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>3.57</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.64</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.71</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>3.79</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>3.86</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>4.00</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.29</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>4.64</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

The EM scale score (see Table 12) indicates the degree to which an individual feels culture-less (Paige, 2008) or does not identify with a specific cultural group. Higher scores indicate an individual feels less connection to a culture. Scores ranged from 2.0 to 5.0.
Once the identification of the scale scores for the sample was complete, the groups were examined to see if there was a difference from Group 1 to Group 2 on their early IDI scale scores (see Table 13).

Table 13

*Early Scale Scores by Group*

<table>
<thead>
<tr>
<th>Grp</th>
<th>Mean</th>
<th>Deviation</th>
<th>Std.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>1</td>
<td>4.4256</td>
<td>.50094</td>
<td>.12934</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.2500</td>
<td>.70471</td>
<td>.24915</td>
</tr>
<tr>
<td>R Scale</td>
<td>1</td>
<td>3.9641</td>
<td>.62315</td>
<td>.16090</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.0833</td>
<td>.59909</td>
<td>.21181</td>
</tr>
<tr>
<td>M Scale</td>
<td>1</td>
<td>2.8519</td>
<td>.70105</td>
<td>.18101</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.6250</td>
<td>.70508</td>
<td>.24928</td>
</tr>
<tr>
<td>AA Scale</td>
<td>1</td>
<td>3.4571</td>
<td>.59013</td>
<td>.15237</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.5982</td>
<td>.34771</td>
<td>.12293</td>
</tr>
<tr>
<td>EM Scale</td>
<td>1</td>
<td>3.9867</td>
<td>1.04325</td>
<td>.26937</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.1000</td>
<td>1.15635</td>
<td>.40883</td>
</tr>
</tbody>
</table>
To further understand the differences between the analytical sample groups, t-tests were run. As seen in Table 14 below, the t-tests indicated that the R scale scores were significantly different ($t= 3.271$, df=21; $p=.004$).

Table 14

**T-tests of Early Scale Scores**

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>.695</td>
<td>21</td>
<td>.494</td>
</tr>
<tr>
<td>R Scale</td>
<td>3.270</td>
<td>21</td>
<td>.004</td>
</tr>
<tr>
<td>M Scale</td>
<td>.738</td>
<td>21</td>
<td>.469</td>
</tr>
<tr>
<td>AA Scale</td>
<td>-.617</td>
<td>21</td>
<td>.544</td>
</tr>
<tr>
<td>EM Scale</td>
<td>-.239</td>
<td>21</td>
<td>.813</td>
</tr>
</tbody>
</table>

**Cluster Scores.** Cluster scores also range from 1.0 to 5.0 and have the same interpretation as scale scores: the higher the score the more ethnorelativism is present and conversely the lower the score the more ethnocentric that issue is. A score between 1.0 and 2.32 is unresolved, a score between 2.33 and 3.65 is considered in transition, and score of 3.66 and 5.0 indicates that the scale is fully resolved.

Each of the six cluster scores for the early IDIs of the analytical sample were examined by determining mean, median, and standard deviation for each cluster (see Table 15). Following this comparison, the cluster scores were compared by group (see Table 16).
Table 15

*Cluster Scores of Analytical Sample at Early IDI*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Mean</th>
<th>Defense</th>
<th>Similarity</th>
<th>Universalism</th>
<th>Acceptance</th>
<th>Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster</td>
<td>4.4969</td>
<td>4.2101</td>
<td>2.7043</td>
<td>2.8587</td>
<td>3.9565</td>
<td>3.2560</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>4.5714</td>
<td>4.5000</td>
<td>2.4000</td>
<td>2.7500</td>
<td>4.0000</td>
<td>3.3333</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>2.7043</td>
<td>2.4000</td>
<td>2.7500</td>
<td>3.9565</td>
<td>3.2560</td>
<td>3.3333</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>2.8587</td>
<td>3.9565</td>
<td>3.2560</td>
<td>3.3333</td>
<td>3.3333</td>
<td>3.3333</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>3.2560</td>
<td>3.3333</td>
<td>3.3333</td>
<td>3.3333</td>
<td>3.3333</td>
<td>3.3333</td>
</tr>
</tbody>
</table>

Table 16

*Early Cluster Scores by Group*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster</td>
<td>15</td>
<td>4.5810</td>
<td>.23203</td>
<td>.05991</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>4.3393</td>
<td>.59118</td>
<td>.20901</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>15</td>
<td>4.2444</td>
<td>.94253</td>
<td>.24336</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>4.1458</td>
<td>.91042</td>
<td>.32188</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>15</td>
<td>2.9067</td>
<td>.89400</td>
<td>.23083</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2.3250</td>
<td>.76298</td>
<td>.26976</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>15</td>
<td>2.7833</td>
<td>.88573</td>
<td>.22870</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>3.0000</td>
<td>.94491</td>
<td>.33408</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>15</td>
<td>3.9600</td>
<td>.78631</td>
<td>.20302</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>3.9500</td>
<td>.45040</td>
<td>.15924</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>15</td>
<td>3.1778</td>
<td>.66904</td>
<td>.17275</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>3.4028</td>
<td>.45980</td>
<td>.16257</td>
</tr>
</tbody>
</table>
Group 1 had a low spread of in the denial cluster as seen in the lower standard deviation; both groups had wide spreads of scores in the defense cluster with Group 2 also having a wide spread in universalism cluster as indicated by the larger standard deviations.

T-tests were run on the cluster scores to determine if the groups were significantly different; due to small sample sizes no significant differences were found in the cluster scores (see Table 17).

Table 17

*T-tests of Early Cluster Scores*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster</td>
<td>1.111a</td>
<td>8.170</td>
<td>.298</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>.242</td>
<td>21</td>
<td>.811</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>1.558</td>
<td>21</td>
<td>.134</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>-.546</td>
<td>21</td>
<td>.591</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>.039a</td>
<td>20.789</td>
<td>.969</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>-.846</td>
<td>21</td>
<td>.407</td>
</tr>
</tbody>
</table>

*a For these comparisons the unequal variance t-test formula was used because of a significant Levenes F statistic indicating that the variability in the two groups being compared was unequal*
**Sub-Cluster Scores.** Sub-cluster scores were reported in the same fashion using the same scale as cluster and scale scores. Each sub-cluster is a finer breakout of issues and topics within the denial and adaptation clusters. Denial is subdivided into denial: avoidance and denial: disinterest, while adaptation is subdivided into adaptation: cognitive frame-shifting and adaptation: behavioral code-shifting. Mean, median, and standard deviation of the analytical sample were calculated for each sub-cluster (see Table 18).

Table 18

*Sub-Cluster Scores of Analytical Sample on Early IDI*

<table>
<thead>
<tr>
<th></th>
<th>Denial Cluster</th>
<th>Denial Cluster</th>
<th>Adaptation</th>
<th>Adaptation Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disinterest</td>
<td>Avoidance</td>
<td>Cluster Cognitive</td>
<td>Behavioral</td>
</tr>
<tr>
<td>Mean</td>
<td>4.533</td>
<td>4.5652</td>
<td>3.1957</td>
<td>3.3043</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td></td>
<td>.49681</td>
<td>.74984</td>
<td>.67654</td>
</tr>
<tr>
<td>Range</td>
<td>1.50</td>
<td>1.67</td>
<td>3.00</td>
<td>2.80</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.50</td>
<td>3.33</td>
<td>1.75</td>
<td>1.80</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.00</td>
<td>5.00</td>
<td>4.75</td>
<td>4.60</td>
</tr>
</tbody>
</table>

To determine if there were significant differences between the groups on cluster or sub-cluster scores, these were further analyzed by group as seen in Table 19.
Table 19

*Sub-Cluster Scores by Group on Early IDI*

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster: Disinterest</td>
<td>1</td>
<td>15</td>
<td>4.5333</td>
<td>.32550</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>4.2813</td>
<td>.60412</td>
</tr>
<tr>
<td>Denial Cluster: Avoidance</td>
<td>1</td>
<td>15</td>
<td>4.6444</td>
<td>.42663</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>4.4167</td>
<td>.61075</td>
</tr>
<tr>
<td>Adaptation Cluster: Cognitive</td>
<td>1</td>
<td>15</td>
<td>3.2167</td>
<td>.77267</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>3.1563</td>
<td>.75519</td>
</tr>
<tr>
<td>Adaptation Cluster: Behavioral</td>
<td>1</td>
<td>15</td>
<td>3.1467</td>
<td>.73860</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>3.6000</td>
<td>.44078</td>
</tr>
</tbody>
</table>

It can be seen in Table 19 that the spread of sub-cluster scores is different between groups, with Group 1 having a smaller spread (lower standard deviation) and Group 2 showing a larger spread of scores (higher standard deviation) in both the denial cluster: disinterest sub-cluster and denial cluster: avoidance. To determine if these differences were significant, t-tests were undertaken in Table 20. As can be seen, none of the sub-cluster scores were statistically significant.

Table 20

*T-tests of Early Sub-Cluster Scores*

<table>
<thead>
<tr>
<th>GROUP</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster: Disinterest</td>
<td>1.098 *a</td>
<td>9.225</td>
<td>.300</td>
</tr>
<tr>
<td>Denial Cluster: Avoidance</td>
<td>1.050</td>
<td>21</td>
<td>.306</td>
</tr>
<tr>
<td>Adapt Cluster: Cognitive</td>
<td>.180</td>
<td>21</td>
<td>.859</td>
</tr>
<tr>
<td>Adapt Cluster: Behavioral</td>
<td>-1.582</td>
<td>21</td>
<td>.129</td>
</tr>
</tbody>
</table>

*a For these comparisons the unequal variance t-test formula was used because of a significant Levenes F statistic indicating that the variability in the two groups being compared was unequal*
Age as a Variable

As identified above the ages varied significantly between the groups with Group 1 being significantly older. Because increased age could lead to increased contact with cultural differences, which in turn may increase the scores on the IDI, it was determined that the relationship of age required further analysis. A comparison was undertaken of early IDI results between age and the scale, PS, DS, gap, cluster, and sub-cluster scores (see Table 21).
The analytical sample contained only three age groups: 18 to 21, 21 to 30, and 31 to 40. Scale, perceived score, developmental score, and PSDS gap were first examined using ANOVA, but no significant relationships were present (p<.05) (See Table 21).

Next was to examine cluster and sub-cluster scores and age (see Table 22). ANOVA was undertaken to look for correlation in the initial IDI results between age and the clusters and sub-clusters, which again revealed no significant findings, although the
adaptation cluster: cognitive frame-shifting was trending towards significance (F=3.229; df1=2, df2=20; p=.061).

Table 22

*ANOVA of Age with Cluster and Sub-Cluster Scores*

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinterest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.202</td>
<td>2</td>
<td>.101</td>
<td>.486</td>
<td>.622</td>
</tr>
<tr>
<td></td>
<td>4.167</td>
<td>20</td>
<td>.208</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.211</td>
<td>2</td>
<td>.605</td>
<td>2.869</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>4.219</td>
<td>20</td>
<td>.211</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.493</td>
<td>2</td>
<td>.246</td>
<td>1.635</td>
<td>.220</td>
</tr>
<tr>
<td></td>
<td>3.012</td>
<td>20</td>
<td>.151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Def Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.201</td>
<td>2</td>
<td>.100</td>
<td>.111</td>
<td>.895</td>
</tr>
<tr>
<td></td>
<td>18.089</td>
<td>20</td>
<td>.904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sim Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.095</td>
<td>2</td>
<td>.047</td>
<td>.056</td>
<td>.946</td>
</tr>
<tr>
<td></td>
<td>16.935</td>
<td>20</td>
<td>.847</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Univer Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.772</td>
<td>2</td>
<td>.386</td>
<td>.462</td>
<td>.637</td>
</tr>
<tr>
<td></td>
<td>16.706</td>
<td>20</td>
<td>.835</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accep Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.194</td>
<td>2</td>
<td>.097</td>
<td>.196</td>
<td>.824</td>
</tr>
<tr>
<td></td>
<td>9.883</td>
<td>20</td>
<td>.494</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt: Cog</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.020</td>
<td>2</td>
<td>1.510</td>
<td>3.229</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td>9.350</td>
<td>20</td>
<td>.468</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt: Behav</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.463</td>
<td>2</td>
<td>.731</td>
<td>1.699</td>
<td>.208</td>
</tr>
<tr>
<td></td>
<td>8.607</td>
<td>20</td>
<td>.430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt Clus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.096</td>
<td>2</td>
<td>.548</td>
<td>1.585</td>
<td>.230</td>
</tr>
<tr>
<td></td>
<td>6.915</td>
<td>20</td>
<td>.346</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Changes in Scores from Early to Late IDI

Of great interest to this study is the determination of whether teaching Group 1 the DMIS resulted in improvement of IDI scores compared to Group 2. As described previously, measurement of the scores on each aspect of the IDI indicates how much ethnocentrism or ethnorelativism is present in the group or individual at the moment of that measurement. However, when using the DMIS with the experimental group (Group 1) it is the change in the scores that hold the greatest importance. A positive change indicates a both greater resolution of the issues in that scale and that the experimental treatment (teaching the DMIS) was effective; a decreased score indicates less resolution and more ethnocentrism in that area and indicates that the experimental treatment did not achieve the desired outcomes. Changes were examined for orientation, perceived and developmental scores, PSDS gap scores, and scale, cluster, and sub-cluster scores.

Orientation Scores. Orientation by scales was examined from early to late IDI in both groups. Figure 10 shows these changes. A slight improvement in orientation occurred in Group 1 from the beginning of the study to the end, while little change occurred in Group 2.
Figure 10. Orientation changes both groups. Changes in orientation from early to late IDI in both groups.

**Changes in perceived and developmental scores.** The changes in perceived and developmental scores were examined. Table 23 shows the changes of both groups’ perceived and developmental scores.

Table 23

<table>
<thead>
<tr>
<th>Comparison of Group Changes on PS &amp; DS Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Perceived Score</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Developmental Score</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Both groups experienced higher scores on their perceived scores as well as their developmental scores. Group 1 increased 2.8 in the perceived score, while Group 2 increased 2.05. On the developmental score Group 1 increased 7.06 while Group 2 improved 5.04. Though visually apparent on Figure 11 these differences were not
statistically significant.

*Figure 1*. Changes in perceived and developmental scores. Change from early IDI to late IDI for both groups in perceived and developmental scores.

These changes were then examined for significance using t-tests. As can be seen in Table 24 none of the findings were statistically different (p<.05).

Table 24

*T-tests of Changes in PS & DS Scores Groups 1 and 2*

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Score</td>
<td>-.155</td>
<td>21</td>
<td>.878</td>
<td>-.40384</td>
</tr>
<tr>
<td>Developmental Score</td>
<td>-.075</td>
<td>21</td>
<td>.941</td>
<td>-.47344</td>
</tr>
</tbody>
</table>

**PSDS gap score changes.** Of particular interest to this study is the change of PSDS gap scores from early to late IDIs of both groups. Because the PSDS gap score is an indication of how realistic one views how one is doing in intercultural sensitivity and skill,
the greater the decrease in the PSDS gap score, the more realistic a participant has become in understanding her intercultural skills and action thus the more effective the teaching or training can be shown to have been. Figure 12 presents a look at both groups’ overall PSDS gap scores on early and late IDIs. When examining the PSDS gap scores of the entire group, it can be seen that both groups decreased from early to late IDI.

![Graph showing PSDS gap changes both groups](image)

**Figure 12.** PSDS gap score changes both groups. Changes in PSDS gap scores from early to late IDI in both groups.

Table 25 looks more closely at how those group changes in PSDS gap occurred.

Table 25

<table>
<thead>
<tr>
<th>Grp</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSDS Gap</td>
<td>1</td>
<td>-4.2344</td>
<td>8.85483</td>
<td>2.28631</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-4.3040</td>
<td>8.94115</td>
<td>3.16117</td>
</tr>
</tbody>
</table>

The gap score changes of the individuals in each group were further analyzed for change via t-tests, and were presented in Table 26. Although the gap changes look different, the
rate of change for both groups was similar, so the changes were non-significant ($t=0.018$, $df=21$, $p=.986$).

Table 26

*T-tests of Changes in PSDS Gap Scores*

<table>
<thead>
<tr>
<th>PSDS Gap</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.018</td>
<td>21</td>
<td>.986</td>
<td>.06960</td>
</tr>
</tbody>
</table>

Because the changes in gap scores were a result of changes in the perceived and developmental scores, examining these together provides further understanding of the changes that occurred in these scores. Figure 13 presents the changes of perceived, developmental and gap scores.

*Figure 13.* Changes in perceived, developmental, and gap scores. Both groups’ changes from early IDI to late IDI in perceived, developmental, and gap scores.
Scale score changes. Figure 14 presents the changes in scale scores of the analytical sample groups. The findings were mixed, with Group 1 increasing on the DD scale while Group 2 decreased. Both groups increased on the R scale, but Group 2 had a larger change. On the M scale both groups again increased but Group 1 had a larger change than Group 2. On both the AA and EM scales Group 1 decreased while Group 2 increased.

Figure 14. Scale changes across groups. Changes in each scale from early to late IDI for both groups.

To determine if the changes in the scales were significant, further analysis was undertaken (see Table 27). Scale changes were insignificant.
Table 27

*T-tests of Scale Changes*

<table>
<thead>
<tr>
<th></th>
<th>Equal variance assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>1.0</td>
<td>21</td>
<td>.320</td>
<td>.20577</td>
<td>.20196</td>
<td></td>
</tr>
<tr>
<td>R Scale</td>
<td>-1.409</td>
<td>21</td>
<td>.173</td>
<td>-.44278</td>
<td>.31414</td>
<td></td>
</tr>
<tr>
<td>M Scale</td>
<td>1.006</td>
<td>21</td>
<td>.326</td>
<td>.27778</td>
<td>.27599</td>
<td></td>
</tr>
<tr>
<td>AA Scale</td>
<td>-1.022</td>
<td>21</td>
<td>.318</td>
<td>-.22500</td>
<td>.22018</td>
<td></td>
</tr>
<tr>
<td>EM Scale</td>
<td>-.905</td>
<td>21</td>
<td>.376</td>
<td>-.20833</td>
<td>.23024</td>
<td></td>
</tr>
</tbody>
</table>

**Cluster score changes.** Cluster scores of the groups held similar changes (see Figure 15). Clusters were components of the scales, a way of breaking down the scale into more specific issues relating to the topic of the scale as relates to cultural sensitivity. The D/D scale is broken down into two clusters: the denial cluster (consisting of disinterest and avoidance sub-clusters) and the defense cluster; the R scale has no clusters; the M scale consists of the similarity and universalism clusters; the AA scale is made up of the adaptation cluster (further divided into the cognitive frame-shifting and behavioral code-shifting sub-clusters) and the acceptance cluster; and the EM scale, which also has no clusters.
As seen in Figure 15, Group 1 increased in the denial, defense clusters while Group 2 decreased. Group 1 increased more than Group 2 in the similarity and universalism clusters. Both groups decreased in acceptance, with Group 1 having a larger decrease. Adaptation scores decreased slightly for Group 1 and increased for Group 2. T-test was performed; none of the changes were found to be significant (see Table 28).
Table 28

*T-tests of Cluster Score Changes*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial Cluster</td>
<td>.446</td>
<td>21</td>
<td>.660</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>1.128</td>
<td>21</td>
<td>.272</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>.366</td>
<td>21</td>
<td>.718</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>1.207</td>
<td>21</td>
<td>.241</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>-1.752</td>
<td>21</td>
<td>.094</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>-.418</td>
<td>21</td>
<td>.680</td>
</tr>
</tbody>
</table>

**Sub-cluster score changes.** Sub-clusters were then analyzed. Figure 16 shows the changes in the sub-clusters. Group 1 showed an increase in the denial: disinterest and denial: avoidance sub-clusters while Group 2 experienced decreases in both. Group 1 a decrease in adaptation: cognitive frame-shifting while Group 2 had an increase. Group 1 had no change while Group 2 experienced a decrease in the denial: avoidance sub-cluster.
Figure 16. Sub-cluster score changes of both groups. Graphic depiction of changes in subcluster scores from early to late IDI of both groups.

Table 29 shows the t-tests performed to determine if these changes were significant. Again, although visually apparent on Figure 16 changes in the sub-cluster scores were statistically insignificant due to small sample sizes.

Table 29

**T-tests of Sub-Cluster Score Changes**

<table>
<thead>
<tr>
<th>Sub-cluster</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial: Disinterest</td>
<td>.430</td>
<td>21</td>
<td>.672</td>
<td>.09583</td>
</tr>
<tr>
<td>Denial: Avoidance</td>
<td>.291</td>
<td>21</td>
<td>.774</td>
<td>.08611</td>
</tr>
<tr>
<td>Adaptation: Cognitive</td>
<td>-.976</td>
<td>21</td>
<td>.340</td>
<td>-.37708</td>
</tr>
<tr>
<td>Adaptation: Behavioral</td>
<td>.331</td>
<td>21</td>
<td>.744</td>
<td>.10000</td>
</tr>
</tbody>
</table>
Need for Analysis of White-only Participants

Analysis was next undertaken to see if participants who self-identified as white would have greater increases of scores of the IDI. This analysis was performed because junior level college students of color were effectively functioning within two cultures (their home culture and the white middle-class based culture of higher education). Because participants of color inherently have more intercultural contact it was thought that their experiences over the course of a semester may not increase scores as much as the scores of white participants. Within the analytical sample, 60% of Group 1 was non-white and 40% was white; Group 2 was evenly divided (see Table 30).

Table 30

Ethnicity or Race in 2 Categories

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Count</th>
<th>NO, NOT WHITE</th>
<th>YES, WHITE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>% within GROUP</td>
<td>60.0%</td>
<td>40.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Count</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>% within GROUP</td>
<td>50.0%</td>
<td>50.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>% within GROUP</td>
<td>56.5%</td>
<td>43.5%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

It should be noted that although no statistically significant differences were present between the groups, the sample sizes within Group 2 were only four participants; the small sample size may impact the lack of significance.
White-only scales, perceived & developmental scores and PSDS gap. The first analysis of white students was done of the scales, perceived score, developmental score, and PSDS gap (see Table 31).

Table 31

Scales, PS, DS, & Gap Scores of White Students

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>1</td>
<td>6</td>
<td>.2179</td>
<td>.28541</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>-.0577</td>
<td>.25416</td>
</tr>
<tr>
<td>R Scale</td>
<td>1</td>
<td>6</td>
<td>-.1481</td>
<td>.34187</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>.2778</td>
<td>.79349</td>
</tr>
<tr>
<td>M Scale</td>
<td>1</td>
<td>6</td>
<td>.2963</td>
<td>.49023</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>.3056</td>
<td>.24637</td>
</tr>
<tr>
<td>AA Scale</td>
<td>1</td>
<td>6</td>
<td>-.3571</td>
<td>.55879</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>.1786</td>
<td>.46839</td>
</tr>
<tr>
<td>EM Scale</td>
<td>1</td>
<td>6</td>
<td>.0000</td>
<td>.55136</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>.4500</td>
<td>.66081</td>
</tr>
<tr>
<td>Perceived</td>
<td>1</td>
<td>6</td>
<td>.0384</td>
<td>5.15133</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>3.0181</td>
<td>2.52725</td>
</tr>
<tr>
<td>Developmental</td>
<td>1</td>
<td>6</td>
<td>1.9065</td>
<td>9.92854</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>6.2140</td>
<td>10.23076</td>
</tr>
<tr>
<td>PSDS Gap</td>
<td>1</td>
<td>6</td>
<td>-1.8681</td>
<td>4.97948</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>-3.1960</td>
<td>7.84130</td>
</tr>
</tbody>
</table>

To look for significance within the scale, perceived, developmental or gap scores a t-test was obtained. As can be seen in Table 32, there were no significant differences.
Table 32

*T-test of Scale, Perceived, Developmental & Gap Score Changes of White Students*

<table>
<thead>
<tr>
<th>Scale</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>1.558</td>
<td>8</td>
<td>.158</td>
</tr>
<tr>
<td>R Scale</td>
<td>-1.187</td>
<td>8</td>
<td>.269</td>
</tr>
<tr>
<td>M Scale</td>
<td>-.034</td>
<td>8</td>
<td>.973</td>
</tr>
<tr>
<td>AA Scale</td>
<td>-1.576</td>
<td>8</td>
<td>.154</td>
</tr>
<tr>
<td>EM Scale</td>
<td>-1.172</td>
<td>8</td>
<td>.275</td>
</tr>
<tr>
<td>Perceived Score</td>
<td>-1.060</td>
<td>8</td>
<td>.320</td>
</tr>
<tr>
<td>Develop. Score</td>
<td>-.664</td>
<td>8</td>
<td>.525</td>
</tr>
<tr>
<td>PSDS Gap</td>
<td>.331</td>
<td>8</td>
<td>.749</td>
</tr>
</tbody>
</table>

**White-only cluster and sub-cluster scores.** The next analysis was to examine white students’ cluster and sub-cluster scores by group; N=6 for Group 1 and N=4 for Group 2. Table 33 presents these findings.
Table 33

*White-Only Cluster and Sub-Cluster Changes*

<table>
<thead>
<tr>
<th>Cluster Type</th>
<th>Grp</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial: Disinterest</td>
<td>1</td>
<td>.2083</td>
<td>.48520</td>
<td>.19808</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.0625</td>
<td>.42696</td>
<td>.21348</td>
</tr>
<tr>
<td>Denial: Avoidance</td>
<td>1</td>
<td>.2222</td>
<td>.27217</td>
<td>.11111</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.0833</td>
<td>.50000</td>
<td>.25000</td>
</tr>
<tr>
<td>Denial Cluster</td>
<td>1</td>
<td>.2143</td>
<td>.29623</td>
<td>.12094</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.0714</td>
<td>.34007</td>
<td>.17003</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>1</td>
<td>.2222</td>
<td>.46746</td>
<td>.19084</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-.2083</td>
<td>.15957</td>
<td>.07979</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>1</td>
<td>.1333</td>
<td>.61536</td>
<td>.25122</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.3500</td>
<td>.37859</td>
<td>.18930</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>1</td>
<td>.5000</td>
<td>.61237</td>
<td>.25000</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.2500</td>
<td>.61237</td>
<td>.30619</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>1</td>
<td>-.3333</td>
<td>.46762</td>
<td>.19090</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.2000</td>
<td>.28284</td>
<td>.14142</td>
</tr>
<tr>
<td>Adaptation: Cognitive</td>
<td>1</td>
<td>-.6250</td>
<td>.73739</td>
<td>.30104</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.5625</td>
<td>.65749</td>
<td>.32874</td>
</tr>
<tr>
<td>Adaptation: Behavioral</td>
<td>1</td>
<td>-.1667</td>
<td>.93310</td>
<td>.38093</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-.1500</td>
<td>.59722</td>
<td>.29861</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>1</td>
<td>-.3704</td>
<td>.72917</td>
<td>.29768</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.1667</td>
<td>.60519</td>
<td>.30260</td>
</tr>
</tbody>
</table>

To determine if these changes were significant, t-tests were performed on the white students cluster and sub-cluster scores (see Table 34). The t-test results were significant for the adaptation: cognitive frame shifting sub-cluster ($t=-2.597, df=8, p=.032$), and trending
toward significance for the acceptance cluster ($t=-2.024$, $df=8$, $p=.078$). Thus in the white students’ cognitive frame-shifting sub-cluster the average change from early to late IDI was significantly different for Group 1 compared to Group 2, with Group 1 having a decrease in the mean of -.6250, while Group 2 having an increase of .5625.

Table 34

*T-tests of Cluster and Sub-Cluster Scores of White Students*

<table>
<thead>
<tr>
<th></th>
<th>$t$</th>
<th>$df$</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial: Disinterest</td>
<td>.487</td>
<td>8</td>
<td>.640</td>
</tr>
<tr>
<td>Denial: Avoidance</td>
<td>.575</td>
<td>8</td>
<td>.581</td>
</tr>
<tr>
<td>Denial Cluster</td>
<td>.706</td>
<td>8</td>
<td>.500</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>1.745</td>
<td>8</td>
<td>.119</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>-.623</td>
<td>8</td>
<td>.551</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>.632</td>
<td>8</td>
<td>.545</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>-2.024</td>
<td>8</td>
<td>.078</td>
</tr>
<tr>
<td>Adapt: Cognitive</td>
<td>-2.597</td>
<td>8</td>
<td>.032</td>
</tr>
<tr>
<td>Adapt: Behavioral</td>
<td>-.031</td>
<td>8</td>
<td>.976</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>-1.214</td>
<td>8</td>
<td>.259</td>
</tr>
</tbody>
</table>

**Caring for a Patient from a Different Cultural Background**

On the late IDI participants had one additional question: Did you care for a patient from a cultural background different from your own this semester? Participants then indicated either that they had or had not done so. Twelve Group 1 and seven Group 2 participants indicated that they had been given the opportunity to care for a patient from a different cultural background (see Table 35).
Table 35

*Patient from Different Culture*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>12</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Group 2</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

**Patient from different culture and scale, perceived, developmental & gap scores.** To determine what, if any, effect having cared for a patient from another cultural background made in scale scores, the same sets of t-tests were re-run using only those participants from the two groups who had cared for a patient from another culture during the semester. The means and standard deviations were next obtained and were presented in Table 36.
Table 36

*Patient from Different Culture and Changes of Scale, Perceived, Developmental & Gap Scores*

<table>
<thead>
<tr>
<th></th>
<th>Grp</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>1</td>
<td>12</td>
<td>.1538</td>
<td>.51654</td>
<td>.14911</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0440</td>
<td>.44601</td>
<td>.16858</td>
</tr>
<tr>
<td>R Scale</td>
<td>1</td>
<td>12</td>
<td>.0833</td>
<td>.56681</td>
<td>.16362</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.5873</td>
<td>.97228</td>
<td>.36749</td>
</tr>
<tr>
<td>M Scale</td>
<td>1</td>
<td>12</td>
<td>.5463</td>
<td>.70823</td>
<td>.20445</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.1746</td>
<td>.44378</td>
<td>.16773</td>
</tr>
<tr>
<td>AA Scale</td>
<td>1</td>
<td>12</td>
<td>-.1429</td>
<td>.51956</td>
<td>.14998</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0612</td>
<td>.38116</td>
<td>.14407</td>
</tr>
<tr>
<td>EM Scale</td>
<td>1</td>
<td>12</td>
<td>-.1000</td>
<td>.23355</td>
<td>.06742</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0286</td>
<td>.68730</td>
<td>.25977</td>
</tr>
<tr>
<td>Perceived Score</td>
<td>1</td>
<td>12</td>
<td>2.7455</td>
<td>7.27565</td>
<td>2.10030</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>2.8145</td>
<td>3.07611</td>
<td>1.16266</td>
</tr>
<tr>
<td>Developmental Score</td>
<td>1</td>
<td>12</td>
<td>7.1197</td>
<td>15.88286</td>
<td>4.58499</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>8.2201</td>
<td>11.99151</td>
<td>4.53237</td>
</tr>
<tr>
<td>PSDS Gap</td>
<td>1</td>
<td>12</td>
<td>-4.3742</td>
<td>8.88141</td>
<td>2.56384</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-5.4055</td>
<td>9.05228</td>
<td>3.42144</td>
</tr>
</tbody>
</table>

T-tests were then undertaken to determine if statistical significance was present. Table 37 presents those findings. As can be seen in this table, no significant findings were present.
Table 37

*T-tests of Patient from Different Culture with Scale, PS, DS, & Gap Scores*

<table>
<thead>
<tr>
<th>Variances</th>
<th>Sig. (2-tailed)</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD Scale</td>
<td>Equal assumed</td>
<td>.996</td>
<td>.844</td>
<td>17</td>
</tr>
<tr>
<td>R Scale</td>
<td>Equal assumed</td>
<td>.119</td>
<td>-1.440</td>
<td>17</td>
</tr>
<tr>
<td>M Scale</td>
<td>Equal assumed</td>
<td>.226</td>
<td>1.245</td>
<td>17</td>
</tr>
<tr>
<td>AA Scale</td>
<td>Equal assumed</td>
<td>.165</td>
<td>- .361</td>
<td>17</td>
</tr>
<tr>
<td>EM Scale</td>
<td>Equal assumed</td>
<td>.044</td>
<td>- .334</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Equal not assumed</td>
<td>-.266</td>
<td>6.819</td>
<td></td>
</tr>
<tr>
<td>Perceived Score</td>
<td>Equal assumed</td>
<td>.129</td>
<td>-.024</td>
<td>17</td>
</tr>
<tr>
<td>Develop. Score</td>
<td>Equal assumed</td>
<td>.865</td>
<td>-.158</td>
<td>17</td>
</tr>
<tr>
<td>LDS Gap</td>
<td>Equal assumed</td>
<td>.482</td>
<td>.243</td>
<td>17</td>
</tr>
</tbody>
</table>

*a* For these comparisons the unequal variance t-test formula was used because of a significant Levenes F statistic indicating that the variability in the two groups being compared was unequal.

The last analysis looked for changes in cluster and sub-cluster scores for those students who had cared for a patient from a different culture in both groups. Table 38 shows the results.
Table 38

*Patient from Different Culture Changes in Cluster and Sub-Cluster Scores*

<table>
<thead>
<tr>
<th></th>
<th>Grp</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial: Disinterest</td>
<td>1</td>
<td>12</td>
<td>.0417</td>
<td>.62915</td>
<td>.18162</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.0000</td>
<td>.28868</td>
<td>.10911</td>
</tr>
<tr>
<td>Denial: Avoidance</td>
<td>1</td>
<td>12</td>
<td>.0000</td>
<td>.85280</td>
<td>.24618</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0952</td>
<td>.46004</td>
<td>.17388</td>
</tr>
<tr>
<td>Denial Cluster</td>
<td>1</td>
<td>12</td>
<td>.0238</td>
<td>.60251</td>
<td>.17393</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0408</td>
<td>.29409</td>
<td>.11116</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>1</td>
<td>12</td>
<td>.3056</td>
<td>.66982</td>
<td>.19336</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0476</td>
<td>.82054</td>
<td>.31013</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>1</td>
<td>12</td>
<td>.3667</td>
<td>1.03690</td>
<td>.29933</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.2000</td>
<td>.77460</td>
<td>.29277</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>1</td>
<td>12</td>
<td>.7708</td>
<td>.87554</td>
<td>.25275</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.1429</td>
<td>.59261</td>
<td>.22399</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>1</td>
<td>12</td>
<td>-.4833</td>
<td>.64644</td>
<td>.18661</td>
</tr>
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<td></td>
<td>2</td>
<td>7</td>
<td>-.1143</td>
<td>.42984</td>
<td>.16246</td>
</tr>
<tr>
<td>Adaptation: Cognitive</td>
<td>1</td>
<td>12</td>
<td>.1667</td>
<td>.80009</td>
<td>.23097</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>.1786</td>
<td>.79993</td>
<td>.30234</td>
</tr>
<tr>
<td>Adaptation: Behavioral</td>
<td>1</td>
<td>12</td>
<td>-.0500</td>
<td>.82737</td>
<td>.23884</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.2000</td>
<td>.41633</td>
<td>.15736</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>1</td>
<td>12</td>
<td>.0463</td>
<td>.62757</td>
<td>.18116</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>-.0317</td>
<td>.47451</td>
<td>.17935</td>
</tr>
</tbody>
</table>

T-tests of cluster and sub-cluster scores were undertaken to determine significance of the changes of cluster and sub-cluster scores for those participants who had cared for a
patient from a different culture, and are shown in Table 39. As can be seen, there were no significant findings. The lack of significance is likely due to small sample sizes.

Table 39

_T-tests Patient from Different Culture and Cluster & Sub-Cluster Scores_  

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial: Disinterest</td>
<td>.164</td>
<td>17</td>
<td>.872</td>
</tr>
<tr>
<td>Denial: Avoidance</td>
<td>.271</td>
<td>17</td>
<td>.790</td>
</tr>
<tr>
<td>Denial Cluster</td>
<td>.264</td>
<td>17</td>
<td>.795</td>
</tr>
<tr>
<td>Defense Cluster</td>
<td>1.022</td>
<td>17</td>
<td>.321</td>
</tr>
<tr>
<td>Similarity Cluster</td>
<td>.368</td>
<td>17</td>
<td>.718</td>
</tr>
<tr>
<td>Universalism Cluster</td>
<td>1.677</td>
<td>17</td>
<td>.112</td>
</tr>
<tr>
<td>Acceptance Cluster</td>
<td>-1.339</td>
<td>17</td>
<td>.198</td>
</tr>
<tr>
<td>Adaptation: Cognitive</td>
<td>-.031</td>
<td>17</td>
<td>.975</td>
</tr>
<tr>
<td>Adaptation: Behavioral</td>
<td>.444</td>
<td>17</td>
<td>.662</td>
</tr>
<tr>
<td>Adaptation Cluster</td>
<td>.284</td>
<td>17</td>
<td>.780</td>
</tr>
</tbody>
</table>

This analysis of the data has looked at demographic data, analytical sample and groups’ scores, changes in scores by group; examined data for the relationship between age and experience, white subject only scores, and having cared for a patient from a different culture and scores.
Quantitative Findings-What Do the Results Indicate?

The quantitative findings were interesting in some ways and disappointing in others. Although it would have been ideal to see significant improvement (increases) in all of the scores, this did not happen. But the findings still contain many interesting aspects.

Demographics. The demographics section presented challenges in how participants’ interpreted some of the items (education experience). Obtaining clarification through personal communication with participants was enlightening.

The significant difference of ages between the two groups appears to be related to the common college phenomenon of students with similar ages, lives, and interests join together in informal groups for studying and support. Group 1 happened to have one of those informal groups of non-traditional age students; it is possible that some members of this group convinced other members to join them in the study. Group 2 was comprised almost entirely of traditional age participants. This finding mirrors the ages within the junior nursing class cohort from which the sample was self-selected: the majority of students were in the 20 to 25 range, with an estimated 25% of the class being older. The oldest cohort member was 52; she participated in the early IDI but was lost to follow up. The higher Group 1 DS could be related to the fact that Group 1 was somewhat older.

The different perceptions of what constituted experience in another culture was quite intriguing to the author. One example was a participant who was born and raised in Minnesota and lived here all of her life except for a summer that she lived in the deep Southern US. Her perspective is that the South is very differently culturally from Minnesota; having been in the South a number of times the author would agree with that
assessment. Additionally, the participants of color (particularly those that were Hmong) who viewed their entire lives in Minnesota as bi-cultural experience because their home culture was very different from mainstream Minnesota in values, roles, expectations, and language had a valid point. However, to maintain any sort of validity for analysis purposes the author made the decision to only consider time outside the home land or country of birth to be considered experience in another culture. Looking for correlations between age and experience was also interesting based on the assumption that intercultural experiences leading to a change in IDI scores would be more likely to have happened in older students simply based on life experience. The insignificance of these findings but with the trend towards significant difference between the groups may be a result of small sample sizes.

Education was also a definitional conundrum. The current educational level categories on the IDI do not represent the common variations of the education achieved by this college population, and of the college population in Minnesota as a whole based on the authors 12 years in higher education in the Twin Cities area. Nothing further is known about the prevalence of vocational, technical, or community college education in other parts of the US. Again, the author had to make a decision regarding the definition of the educational levels present on the IDI; this decision was necessary but decreases the understanding of the role of education on DMIS development and IDI scores. The resultant elimination of 2-year associate degrees, technical degrees (one students had been a journeyman plumber prior to coming to the college of her nursing education), and technical certificates from the category of “college degree” and lumping them all into the “other” category downplays the importance of those education preparation backgrounds.
Changes in the world region selections based on not reading thoroughly is annoying but not unexpected based on the authors teaching experiences with the student population. Considering the ethnic origins of the junior nursing cohort as a whole, the analytical sample is representative of the whole. This is based in part on the mission of the college which seeks to serve students from traditionally underserved populations. The college also recruits students from several African countries, particularly Kenya. Additionally, the Twin Cities area has large populations of African refugees and immigrants; the new Minnesotans from African countries find nursing to be a desirable career choice because of steady employment with good wages and benefits (as evidenced by the percentages of African immigrant and refugee students in nursing programs around the Twin Cities). These factors combined would expectedly lead to the presence of multiple students who grew up in an African country in the nursing classroom of the college.

The differences in nationality and ethnic background were some of the most unexpected and interesting findings of the study. Twelve participants used different terminology in their self-description of nationality and ethnicity. Because participants had put in time over the course of the semester talking about culture and the importance of culture, writing reflectively, and attending focus groups on culture, self-awareness of one’s own cultural background would be a logical outcome. Based on this assumption, it is also logical that students would be more likely to describe themselves more specifically using ethnicity rather than simple racial categories at the end of the semester. This was the case for eight of the changes; but three had little change in ethnicity, and one was less ethnically
descriptive. The participant using less ethnically descriptive phrasing had an orientation change from M to DD/R, an ethnocentric movement, and was the only participant using different terminology to so move. Of the eight participants with more ethnicity in their self-descriptions, most (seven) had no change in orientation. No statistical analysis was undertaken of these findings because of the very small sample sizes. Of great curiosity is the student who described herself as “black & white” on the early IDI and “don’t really know=German mostly” on the late IDI. These findings appear nearly antithetical to one another, and unfortunately these differences were not discovered in time to contact participants for clarification. The listing of black first would imply that black was the largest portion of heritage. The only speculative interpretation available is that the participant has a small percentage of African American heritage, and the Caucasian background is mostly German.

**Orientation and perceived, developmental, and PSDS gap scores.** The lack of significant difference in orientation and PSDS gap on the early IDI were expected and points to the groups as starting at similar points. The significant difference in developmental scores and trend towards significance in perceived scores were unexpected findings, and further indicate that indeed some differences were present between groups at the onset of the study. The presence of these differences holds the potential to impact the study’s overall findings, but the change scores’ lack of significant difference indicates that the overall outcome was not affected. The changes of orientation were less than expected and an unexpected finding. Of greater interest were the changes in perceived and developmental scores and the PSDS gap. Both groups experienced an increase in perceived
and developmental scores and a reduction of the PSDS gap. Although Group 1 had a larger increase in both perceived and developmental scores as measured in raw numbers, the change was not significant. The changes occurring with both groups could be related to the point participants were at in their nursing education; this was their first semester of clinicals in which they cared for patients on a regular basis. Because the clinical sites utilized by the nursing program include some facilities with substantially diverse patient populations, many of the participants from both groups would have cared for diverse patients while under the tutelage of faculty and staff nurses. Caring for diverse patients with education provided by faculty and staff would have a combined effect which may increase participants’ cultural self-awareness and cultural skills. Although the PSDS gap appears significant when viewed on a graph, unfortunately the change was not statistically significant. Again, this finding is likely due to small sample sizes.

**Scale scores.** The significant difference (p=.004) in the R scale of the groups at early IDI was not completely surprising when viewed in the light of age and developmental score differences of the groups; the lack of significant differences between groups at the onset of the study was also expected. Examining the changes that occurred in the scales was interesting in that some were expected and some were not. The increase of Group 1 in DD scale was expected: it was assumed that teaching students the DMIS would help them resolve the issues contained within denial and defense. The Group 1 movement toward resolution of the issues in the R and M scales were also expected: as participants became more sensitive to issues of culture they would gain greater cultural skill and be less likely to view the world from a polarized perspective and more likely to be aware of the
significance of cultural differences. The M scale is of particular interest: the majority of Group 1 participants were in the minimization orientation, which is characterized by a worldview that sees cultural difference as present but not important. To have increased the M scale score indicates that the group overall is becoming more aware of the importance of cultural differences, and becoming more ethnorelative. Group 1s decreases on the AA and EM scales were also unexpected. However, these decreases did not change the stage of resolution of either scale: AA was in transition on the early IDI and remained so, while EM was resolved and remained so. Thus the changes were neither statistically significant nor would they have much impact on Group 1s overall intercultural development. Group 2s greater resolution of R scale and increases of the AA and EM scale were unexpected. Once again each of these scales’ overall resolution remained in the same category from early to late IDI: transition for AA and R scales and resolution for EM scale. The lack of statistical significance of the changes in the scales is again likely related to small sample size.

**Cluster scores.** Although cluster scores have the limitation that they were theoretical categories, and have not yet been empirically tested for validity and reliability, cluster scores were analyzed to more fully understand participants’ standing within the DMIS as measured by the IDI. It was hoped that further breakdown of data from scales into clusters would provide statistical significance of results and therefore improve comprehesion of the participants. The early IDI cluster scores showing no statistical significance between groups was expected. The Group 1 increases in scores of the denial, defense, similarity and universalism clusters were positive and expected outcomes, even if these changes were not statistically significant. And as follows the scale changes, the
decrease of Group 1 in the acceptance and adaptation clusters were unexpected, especially the decrease in the acceptance cluster which had been in the resolved category on the early IDI and ended in transition of the late IDI. The adaptation cluster remained in transition even with the decrease in score. Most of Group 2s changes were expected: decreases or no change in denial, defense, and acceptance clusters. However, the increase experienced by Group 2 in the similarity, universalism, and adaptation clusters was unexpected. Again it must be noted that Group 2 was in resolution in all three of these clusters on the early IDI and remained in resolution. Again, small sample sizes likely led to the lack of significance in the findings.

**Sub-cluster scores.** Sub-cluster scores also were limited by being only theoretical categories that have not yet been empirically tested for validity and reliability. But again, sub-cluster scores were analyzed in the hope that further breakdown of the cluster scores would provide significant findings. The similarity of sub-cluster scores as evidenced by a lack of significance across both groups on the early IDI was expected. The increased scores of Group 1 in the disinterest and avoidance sub-clusters were expected, while the decrease in cognitive frame-shifting and lack of change in behavioral code-shifting was unexpected. However, the overall level of resolution in both of those clusters started and remained in transition. The decreased scores of Group 2 in disinterest, avoidance, and behavioral code-shifting sub-cluster were expected. However the increased score in cognitive frame-shifting for Whites only was unexpected. This sub-cluster remained in the same category of resolution in spite of the change in score. Once again, the lack of statistical significance is likely related to small sample sizes.
White-only analysis. The analyses of white-only participants revealed fewer differences than expected based on the assumption that participants of color were effectively functioning within at least 2 cultures, that of home and that of higher education. The significant difference of cognitive frame-shifting sub-cluster (p=.032) and a trend towards significance of the acceptance cluster (p=.078) of Group 1 white students compared to Group 2 white students was expected due to their having a framework for understanding intercultural sensitivity via the DMIS. It was anticipated that the white participants would have had greater differences in score changes across the board. Again, the lack of significance of these results is likely from the very small sample sizes.

Caring for a patient from a different culture. The lack of change among those students who had the opportunity to care for a patient from a different cultural background was also interesting. Although the EM scale change was statistically significant (p=.044), this change indicated of those participants who cared for a patient from a different culture that Group 1 decreased their EM scale score mean more than Group 2; this finding was unexpected.

Conclusion

The findings of this study were for the most part statistically insignificant. This lack of significance is due to small sample sizes. The improvement in Group 1 scores should be looked at as improvement, in spite of the lack of statistical significance. This study was essentially a pilot study of teaching the DMIS to junior baccalaureate nursing students in their regular class work to determine if changes in their intercultural sensitivity
occurred as measured by the IDI. Repeating this study with larger sample sizes would be
most interesting to see if these insignificant findings would become significant.
Chapter 4

Qualitative Findings:

“I expect growing diversity and need to be sensitive about these differences”

In this age of increasing cultural diversity in the US, in Minnesota, and in health care this study was developed in an effort to understand what students know about culture, how they undergo cultural sensitivity development, and what feelings they have about all of this, data was obtained in written, verbal, and non-verbal format. Written data came from the half the junior class of nursing enrolled in their maternal-child health course at the time of the study and volunteer participants, while the verbal and non-verbal data was obtained during three focus groups. The writings and focus group transcripts then underwent analysis. Themes were identified to understand how nursing students understand culture and cultural sensitivity, why they feel cultural sensitivity is important in nursing, and what their experiences with cultural sensitivity have been. Because student responses often contained more than one theme, the percentages present in some themes were greater than 100%. Once the themes were understood, patterns to explain the themes were developed from the data. The results of this analysis follow.

“Culture is a way of life, the way a group of people live”

The first step in understanding cultural sensitivity development was determined to be a need to start with the basics and gain an understanding of how students would define culture. The student responses to that question most often (71%) included a textbook definition of culture as values and beliefs (see Figure 17). Many students (44%) further described those values and beliefs as belonging to or shared by a group or population of
people. Representative statements included “Culture is values, beliefs, etc shared by a
group” and “Culture is the value and belief system of a group of people.”

The references to group values and beliefs nearly mirrors the description of culture
put forth in the classic 1952 work of Kroeber and Kluckhohn: the core of culture consists
of traditional ideas and their attached values for a group of humans (Baldwin, Faulkner,
Hecht & Pickell in Baldwin, Faulkner, Hecht & Lindsely, 2006, p. xv). The idea of culture
revolving around group membership relates with the contemporary themes of culture
definitions as well as classical definitions containing a focus of culture on group
membership (Baldwin, et al).

In contrast, 32% of students described culture as an aspect of individual identity.
Statements included culture described as “something individuals identify with,” “related to
a particular individual,” “your identity,” and “unique to an individual.” None of the
traditional definitions of culture include culture as an individual trait. This emphasis on
individual over group identity by many of the students is not totally unexpected
considering both the fact that the typical US American is very individualistic in
perspective, and the students were juniors in college, most were US born and educated, and
at an age in which the typical American young adult is completing their education,
beginning their career, and moving towards independence from their family. (Bhawuk &

The statements indicating that most students see themselves as having cultural
group-based values and beliefs were important as this indicates that students will likely
also see their patients as members of groups (either similar to or different from the students
own group) and will therefore be aware of cultural differences and thus prepared to develop culturally competent care.

Figure 17. Student responses: What is culture? Pie chart of students’ responses to the question “what is culture?”

Culture was also defined as a way of doing things by twenty-nine of students. Although most students used the term traditions, other statements included customs, practices, and behaviors of people. Examples of this theme include: “the way a group of people do things,” “a certain way of living,” and “habits, traditions, foods, etc.” Again this aspect of responses compares closely with Kroeber and Kluckhohns 1952 work which describes two aspects of the definition of culture as historical, including traditions and normative, including behavior (Baldwin, et al., 2006, p. 8-9) as well as Taylors 1871 work (Andrews & Boyle, p. 3).

**Source of culture.** How one comes to have their cultural beliefs, values, and traditions was explained by several students. Although one student referred to this process
as “inherited,” more included learning as the mode of transmission. “Values, beliefs, and traditions that were learned” was a typical student statement. Kroeber and Kluckhohn used the phrase “acquired and transmitted” in their 1952 work (Baldwin, et al, p. xv) while Ting-Toomey and Chung use “a learned meaning system” (p. 27). Awareness of the source of culture has implications for nursing students in that college students can be presumed to understand that some people learn differently than they themselves do, thus these nursing students may be more likely to expect different perspectives among their patients, especially those coming from a much different culture than their own.

The source of the culturally based beliefs, values, and practices was also present in various students’ writings; however it should be noted that an answer to the question “what is culture” does not inherently require inclusion of the source of culture. These origins were most often portrayed (eighteen students or 44%) as having a familial or generational basis, while a handful of students simply referred to the source as a group. Students described this source as “within their family and communities,” “what they have grown up with,” or “based on the experience within their family.”

In a slightly different tone, one student holds that “Culture is the norm way of life of a generation.” Most definitions of culture do not specify a familial aspect of the source of what is transmitted through culture, but instead refer to in-group and out-group (Ting-Toomey & Chung, p. 27). It appears that the students including family as the source of culture have strong family ties and look to family to learn appropriate behavior in various circumstances. And although the minority of the students were non-White, and non-White Americans tend to be more collectivist than individualistic (Triandis), it would be
presumptuous to assume that only students of color see family as the source of their culture. Neither this aspect of responses nor the description of culture as creating differences gives adequate information to relate to the DMIS other than students would be beyond denial: if one is examining where culture comes from then it can also be implied that differences exist. However, these answers do not indicate whether those differences were perceived to be good or bad or even important.

**Inter- and intra-group differences.** Only three (7%) of students reflected on the intergroup and intragroup differences of culture that can be present. The statements indicating awareness of the intra-group differences inherent within any cultural group included “Culture is different for each person,” “Some may follow it [culture] religiously while others don’t at all,” “Cultural variations make people unique and individuals,” and “It [culture] can vary from person to person.”

The inter-group variations, or those across cultural groups, were referred to as “It [culture] can vary from person to person but varies more between different groups” and “[Culture is] different ways of life, different views, different attitudes about the way things are and how the world is.” Another statement that portrayed this idea was “[Culture is] ways of life, different views, and different attitudes about the way things were and how the world is” while one more depicted the differences as including “even video games.”

Although many students described variations within and across cultures, few addressed the dynamic aspect of culture. One student said culture is “influenced and adapted,” and another stated culture “can be influenced by society or other factors.” The definition of culture from Cox lists multiple elements, including that culture is dynamic.
and constantly changing (in Furness, p. 251). Others include the ideas that culture is dynamic and contains both intergroup and intragroup differences as characteristics of culture (Garcia & Guerra, 2006, p.105-106; Spector, 2004, p. 8). Understanding the dynamic nature of culture and acknowledging the existence of intragroup and intergroup differences opens the door to looking for changes and differences, which in turn leads to the decreased likelihood that stereotypes will be applied to patients from diverse cultures.

Culturally competent nursing care requires personalization to the patient as a unique individual; avoidance of stereotypes is a major factor in being able to personalize care. Inclusion of awareness of intragroup and intergroup differences in their writings indicates either minimization or more likely acceptance on the DMIS: differences were noticed and accepted, and while differences may not be important (minimization) to be looking for differences implies an understanding that the differences were deemed to be important to overtly address.

**Interesting misunderstandings.** Two different interesting misunderstandings were present in writings. The first, contained in two students’ work consisted of the idea that not everyone knows enough to be a member of a culture. The statements included “Culture is something we all have though we usually don’t know it” and “Everyone can be a part of a culture if they know enough about it to understand it.” Although only two students included this aspect in their writings, the statements indicate both a lack of cultural self-awareness as well as a profound misunderstanding of what culture is and where culture comes from. These statements appear related to the comments of white students made to
the author during participant recruitment regarding not being eligible for the study because they were white they had no culture.

Along this same line was the other false belief: two students equated culture with race in their statements “Culture is a place where people of the same race come together” and “Culture has to do with a person’s race, ethnicity, and background.” Although ethnicity is often included in how individuals describe their cultural background, to define culture as just ethnicity is limited. It could be presumed that students have experienced the term “multicultural” used in their education to refer to multi-racial or multi-ethnic.

Multicultural education has been criticized as being seen as “a minority thing” and due to the reliance of inclusion of non-White authors, film makers, or guest speakers into a class to achieve what becomes only surface multiculturalism (Grant, 1998). In Minnesota, the inclusion of multiculturalism in education began after the influx of Latino and Asian immigrants and refugees. Because these relative newcomers to the areas were non-white, they became the “other” in our society and educational system.

These students’ lack of self-awareness is apparent regarding their cultural background: what it is, what culture includes, and where culture originates. These statements may also indicate that these students see society through a dichotomous perspective of only white and non-white. Additionally, when the culture as iceberg metaphor is applied here, the visible aspects of culture were likely to be skin color, facial characteristics, and hair type.

These characteristics were also how humans assign racial categories. Race is often the most noticeable aspect of another’s cultural background for novices of cultural
learning. For those students with the white/non-white worldview, non-white race would likely be the first (and perhaps only) aspect of a person of color that they would consider when thinking about the cultural background of that person. This would likely lead to both a grossly incomplete view of the person's culture, but also may lead to stereotyping. Those students holding this dichotomous worldview have an ethnocentric perspective and would likely be in defense/reversal on the DMIS: they appear to see the world as consisting of “us” and “them.” DMIS stage cannot be further determined as no indication is given by students as to whether the perceived differences between “us” and “them” were good, bad, or neutral.

“Just be aware that there is more than one culture”

After gaining an understanding of how students define what it is that culture actually is, the next step was to expand that understanding by asking focus group participants to define cultural sensitivity? Analysis identified four themes from participant responses: awareness of cultural differences was present in 37%, knowledge and learning in 31%, respecting differences in 19%, and adapting care in 13% (see Figure 18). Awareness of differences by itself was seen in the statement “knowing there were different standards and rules.” Although more students identified awareness of cultural differences than any other aspect, only two included changing their nursing care in response to cultural differences in their statements. An Asian student summed this up as “being aware of other cultures as well as being able to adapt to other cultures.” This is an interesting intersection of cognition and behavior because acknowledgement of differences does not necessarily lead to behavior changes. One can be aware of differences, respect that this patient has
differences, and yet proceed to perform nursing care in a standard unchanging manner without regard to a patient's cultural preferences. This aspect of student definitions of culture is similar to a study of the cultural awareness of BSN students by Krainovich-Miller, et al. (2008), who found beginning BSN students had greater cognitive awareness of cultural beliefs than comfort with interactions with diverse patients (p. 253-254). However, being aware of differences is but a first step toward cultural sensitivity, which also requires action.

*Figure 18. What is cultural sensitivity?*

Knowledge and learning was another common theme, with some students emphasizing culture specific knowledge and others the process of learning. One white student holds knowing culture specific is a priority because “Depending on what culture you were talking, about there were certain things you need to know.” The need to learn about other cultures was present only in statements of students of color: “not being ignorant,” “you were learning continuously about different cultures,” and “it [cultural sensitivity] is a desire to learn about someone else’s culture.” Perceiving cultural
sensitivity as knowing culture specific information, or the dos and taboos of a culture, may lead to stereotyping and a cookbook approach to providing nursing care to diverse patients. The many texts on the market describing health beliefs and practices of specific ethnic and cultural groups may lead students and nurses alike to believe knowledge and application of culture specific information is the endpoint of cultural competence. This can be seen in Giger & Davidhizar’s (2004) idea that culturally appropriate care is the as application of “transcultural knowledge in a skillful and artful manner” (p. 8), and Purnell & Paulanka purporting that culture specific knowledge will “benefit health-care providers by enabling them to offer culturally congruent health interventions, health promotion and disease prevention activities, and teaching strategies” (1998, p. xxiii). It must be conceded that while culture specific knowledge results from learning, it is the act of learning that is an ongoing process which has no set endpoint. Culture is dynamic, thus viewing cultural sensitivity and competence as knowledge of cultural practices will end in outdated stagnation. Cultural sensitivity and competence should be viewed as a process, an enduring practice of continuous learning, and not a terminal point (Dean, 2001; Furness, 2005).

Cultural sensitivity as respect for cultural differences was included in the statements of three students, all of whom were women of color. “Being respectful to other cultures,” “respecting other cultures’ differences” and “respecting another people’s values and beliefs” were the statements. In the authors nursing education experience use of the word respect when describing attitudes and actions is rarely used by white students; respect is almost exclusively stated to be desirable or even necessary by students of color. This
difference likely arises from the lack of respect that is keenly felt by people of color in the US as a result of personal and institutional racism (Grant-Mackie, 2006; Cortis, 2003).

“Everyone is different”

After determining what students think culture is, they were next asked to elaborate on why culture is important in nursing to assess how they would apply that knowledge at the bedside. Seven patterns emerged from this set of student writings. In diminishing frequency those patterns were: differences exist, to adapt care, understand patient beliefs, impacts patient response, shows respect, personalizes care, and provides best care (see Figure 19).

In addition to these patterns, it was noted that several students addressed that cultural diversity indeed exists and is important, but gave no explanation as to why or how a patients cultural background and beliefs were important in nursing. This small set of responses potentially is students providing the answer they think the teacher wants, but without actually understanding content.
Figure 19. Why is culture important in nursing? Seven categories of responses to the question “why is culture important in nursing?”

The most common pattern across the student writings occurred fifteen times, and was that a patient’s cultural background creates differences. Some students overtly specified those differences as different from the nurse with responses “There is a lot of diversity and cultural differences in regards to every patient” and “a nurse will come across many different cultures.” Others only identified that variations exist, expressed most often by the phrase “not everyone is the same.” This indicates students understand the basic tenants of culturally competent care as described by multiple authors in the literature (Andrews & Boyle, 1999; Giger & Davidhizar, 2004; Purnell & Paulanka, 1998).

Awareness of difference is the first step toward self-awareness when providing culturally competent nursing care (Lipson, 1996, p. 2). This pattern among student responses indicates an awareness and acceptance of a more culturally diverse society. Further, the idea that diverse cultures will have different beliefs regarding health and health care was
regularly identified in the writings. “Many cultures vary in the way thing were done and believed” was one students portrayal of this concept. These statements indicate that students were in acceptance. When identifying that culture impacts health care, denial is no longer an issue. And because none of the students indicated that these differences were negative, it appears that defense is not an issue. Because the differences were seen as significant in light of providing nursing care, acceptance of the differences among cultures is apparent. Thus, these students were most likely in acceptance on the DMIS or potentially in adaptation.

“The nurse needs to change how things were done.” Ten of the students believed that the cultural background of a patient will require the nurse to adapt the nursing care provided to an individual client. This idea was presented in the statement “the nurse may need to adapt to this persons culture in a way that fits them and still achieves what the nurse needs to.” The adaptation of care was viewed as something of a compromise between the patient’s cultural belief and the nurses need to accomplish a certain nursing task. One described this issue as “the type of care (and the way that care is given) will need to take into account a person’s culture.” Some students described this as “the nurse may need to” while others were more adamant and expressed “the nurse must” or “the nurse has to.”

Adaptation of nursing care based on a patient’s cultural background begins with an awareness that cultural differences may exist, and progresses to understanding the differences and planning care to correlate with the patients cultural practices and desires. Thus the idea of adapting care based on the patients cultural background again relates to
the basic premise of culturally competent nursing care, which Lipson (1996) sees as incorporating “the ability to intervene appropriately and effectively” (p. 1). The book “The Spirit Catches You and You Fall Down” revolves around the lack of adaptation of health care to the cultural beliefs of a Hmong family. Clearly those students who were anticipating adapting their nursing care based on the cultural background of the patient were changing their behavior, which in turn indicates they were in adaptation of the DMIS.

“Who the person is and their thoughts.” The next pattern, given by nine of students, describes a need to understand two related patient beliefs: first, the patient concept of disease causation, and second patient beliefs on appropriate care. Regarding the first, one student wrote “you have to know the belief of the patient before you start to give care” while another “culture helps you understand who the person is, where the person is coming from in their thoughts and beliefs.” The second aspect is addressed in the student responses “culture is important in nursing because it gives the nurse the window to figure out what is important to the patient” and “different people may have different beliefs about what can and cannot be done to the body.” One response combines the two aspects: “Nurses need to know why the patient believes something is occurring and therefore what intervention can be done. Culture can help provide those answers.”

The idea that culture impacts a patient’s outlook and understanding of disease causation as well as the acceptability of treatment options is common in the literature (Julia, 1995; Lipson, Dibble, & Minarik, 1996; Rodriquez, 1999; Ulrey & Amason, 2001). One example is that of humeral theory – the view that illness and health conditions either causing or resulting in imbalance of heat and cold while simultaneously foods were seen as
causing increased or decreased heat, and is a common example of patient beliefs on both disease causation and appropriate treatment (Spector, 2004, p. 23).

The need to understand the patient’s beliefs would logically come before the ability to adapt care, but was part of student responses in slightly fewer writings (22%) than was adapting care (24%). This may be due to those students being accomplished in considering cultural differences of others and how that would impact beliefs either due to the student being a person of color and interacting in a predominantly white educational system on a daily basis, or because of experience with culturally diverse peers, co-workers, or customers/patients. Those students who indicated patient beliefs were an aspect of why culture is important would likely be in at least acceptance and possibly adaptation on the DMIS.

“They might not accept what the nurse wants to do.” Nine students’ writings recognized the influences that a patient’s cultural beliefs have on their response to planned or provided health care. Students described this connection as understanding a patient’s cultural background will help explain, help determine, or affect the response to the care provided by the nurse as well as medical care in general. One student used this description: “Understanding someone’s culture is important in nursing because one’s culture influences how they respond to care.” Understanding causation beliefs may or may not be implied in the statement “Culture is important to nursing because it gives nurses the window to figure out what is important to the patient and to treat him in that manner.”

The primary idea was different cultures have different beliefs, and the nurse needs to know about the culture of patients to understand those beliefs so as to provide care that
utilizes those beliefs. Similarly, a student wrote: “Culture is important in nursing because it helps you understand who the person is, where the person is coming from, and how to get the person to a higher level of wellness.” Again, the patient response to care having culturally based roots is present in much of the literature. Spector (2004) includes response to care in primarily the second stage of illness (diagnosis): what treatments were used by the patient, while how the patient relates to health care professional (a portion of the third or patient status stage) would also be impacted if the proposed care was not acceptable to the patient. The concept of culture influencing patient response to care indicates acceptance on the DMIS. The differences among culturally diverse patients were no longer minimized, but were accepted as a reality. Further, the need to understand the responses of a culturally diverse patient as originating in the client’s cultural background also indicates cognitive frame-shifting behaviors.

“It shows respect.” The need to honor or show respect to clients and honor their culture was listed by seven students as the most important aspect of why culture is important in nursing. Students described a need to be respectful of clients’ ways and the importance of regarding culture to facilitate respect towards the client because “The nurse is one of the medical professionals who will honor the beliefs/values/traditions of a culture.” Nursing was described as being about caring with an emphasis on “a way to show care is by respecting differences.” One student combined the need for respect with the need to be culturally appropriate in her response: “Nurses need to learn how to show respect to cultures different than your own to give good care.”
Showing respect as an aspect of culturally competent care is not present in the literature, as understanding and respecting were not synonymous. Showing respect for culture differences does imply that these students were beyond denial in the DMIS, and likely also beyond defense/reversal, but does not indicate if students remain in minimization or have progressed to acceptance or adaptation. One can show respect for the beliefs of another regardless of whether one agrees or disagrees with those beliefs or perceives them to be important, and showing respect for beliefs may or may not include changing one’s own behaviors according to the others beliefs.

“We need to personalize care.” Understanding a patient’s culture in order to personalize or individualize care was also a pattern in seven of the responses. “Culture helps nurses understand their patients on a personal level,” “the importance of individual care,” and “nurses care for the unique needs of persons so they must understand their culture” were examples of how students described this aspect. Personalizing care is not the same as adapting care based on cultural background of the patient, as the latter could include stereotyping if all persons from a cultural group were considered to be alike and no effort is taken to understand the cultural background and practices of an individual patient.

Student identification of the need to personalize care is expected considering three factors: (a) these students were beginning to care for patients in the clinical setting, (b) students were required to develop a plan for the care they will provide, and (c) those plans of care were required to be personalized to each patient as a unique individual. However, consideration of culture as a factor when personalizing care does not play a large part of
the students’ written care plan (cultural background description and utilization is not required and is not allotted points on the assignment), and thus would not be expected from a majority of students. On the other hand, the idea of individualizing care to culturally diverse patients is present in most of the students’ nursing texts. But as is commonly the case, students likely perceived that what is most important to their practice as a nurse was a graded aspect of an assignment, and conversely if there were no points associated with an issue then it is not truly important.

Personalization of care to a diverse patient is also present in the literature, often as a need to avoid stereotyping based on patient cultural background. Lipson (1996) holds that cultural stereotyping can be avoided when the nurse seeks additional information from a patient by avoiding jumping to conclusions based on cultural knowledge (p. 2). Because a student seeking to individualize care to culturally diverse patients will choose different behaviors based on the information obtained about the patient, it can be seen that the student is beyond an ethnocentric worldview on the DMIS and likely in adaptation.

“So we can give the best care.” Consideration of culture as a way to implement the best care was present in six of the student writings. Again, some students stated nurses should and some stated nurses must utilize understanding of the patient’s culture when developing care. One example is “Nurses must understand one’s culture to treat the person in the best possible way.”

Although best care is a term often used in nursing in relationship to evidence based practice, student use of the term best may also simply indicate what the patient thinks is best, and therefore be similar to personalizing care and understanding the patients beliefs
about what care is appropriate in a specific situation. Further examination of the use of the term best would be conjecture at best.

**More Variety in Why Culture is Important**

It is interesting to note that although the number of responses to the questions “what is culture?” and “why is culture important in nursing?” were identical at 41, no patterns in the latter question applied to a majority of students. The most frequent response was present in only 37% of responses to the inquiry as to why culture is important in nursing. However, if one combines the six less frequent patterns of responses to that question under the broad umbrella of improving patient care and outcomes, 76% of responses would fit into the pattern. Conversely, the top two patterns among responses to the question “what is culture?” were present in a majority of responses.

The cause of this difference in frequency of response could be attributed to asking the former question is a simple definition of a term, while answering the latter question requires explanation of the oft-difficult term “why?” In the author’s experience, students can most often provide the correct answer to a question regarding the steps of a given procedure, but were often flummoxed when asked why those steps occur in that order. It is expected that a similar dynamic is at work here.
“I just wish I could learn more about every culture”

To more fully comprehend the experiences of junior nursing students as they increase their cultural sensitivity while learning to care for patients, participants were asked to describe their experiences. The majority of participants (12 out of 15) had been able to have the opportunity to care for a patient from a different cultural background than their own. This portion of the focus group meeting was the longest, and several participants gave examples of intercultural experiences outside of their nursing clinicals.

The clinical experiences occurred in both the medical-surgical and maternal-infant health rotations, with diverse patient characteristics ranging across language skills (both patients with limited English and lack of professional interpreters), diverse ethnic and religious backgrounds, female circumcision, the presence or absence of family members, to specific childbearing practices.

There were 38 statements pertaining to the experience of caring for a culturally different patient, with four themes emerging: inadequacy, descriptions of the differences encountered, trying to be culturally competent, and personal identity (see Figure 20).
“I just felt so inadequate!” Inadequacies of both self and of others (primarily staff nurses) were presented as the largest theme of the student experience with culturally diverse patients. Participants described situations in which their knowledge base was inadequate or when the actions and attitudes of staff nurses or peers were inadequate. Caring for a non-English speaking patient was a new experience for most participants, with the resultant language barrier perceived as a personal inadequacy by some participants. Representative statements included “I’m an idiot because I only speak one language” and “It was kind of hard because she was in a lot of pain but only understood some simple English.” This participant summed up her experience as:

When I can’t communicate with somebody because of language it makes me feel like I’m inadequate and it makes the client feel ‘oh, here’s just another person taking care of me that can’t really help because they don’t know my language.’
Examples of how language barriers were inadequacies of the staff nurses included the staff nurse having asked family members to interpret, being impatient or frustrated when the family member translating was not present, and “the nurse talked to the [non-English speaking] patient really loudly.”

Knowledge of cultural differences was another area participants perceived self-inadequacies, as seen in “I also feel that I should know more about the culture before I start care” and “I hate that I can never be perfect and know everything.” Several indicated they wished they could research the cultural background of their patients prior to beginning care so that they had a basic understanding of the culture. This is likely related to nursing educations focus on preparation and participants’ status as students: when students were unprepared for class or lab they have been told by faculty that they should have read content or practiced in advance, and as beginning clinical students they care for only one patient at a time after having spent several hours preparing to care for the patient by researching his/her diagnoses and medications. This combination would likely result in greater confidence in one’s ability to prepare in advance as opposed to confidence in the ability to think on one’s feet and learn about a patient’s culture while caring for him/her.

Another inadequacy identified was the attitude of staff nurses when they made comments that the participant interpreted as the staff nurse did not want to learn more about culture. This was seen in the statement “some nurses were like ‘whatever’ and they treat everybody the same way” or when the staff nurse made culturally insensitive comments: “God, one more thing to deal with!” after a diverse patient made a request and “Why were they making it so difficult? Why can’t they eat the hospital food?” Participants
indicated that they found these statements by the staff nurses offensive and inappropriate, but felt helpless to say anything to the nurse due to the power differential between beginning student and staff nurse. The staff nurses making these comments were indicating especially a lack of cultural desire, but also a lack of cultural awareness and cultural knowledge (Campinha-Bacote, 1999). Further, when considering that these nurses work on units with diverse patient populations, the lack of cultural desire, awareness, and knowledge would be based in an ethnocentric worldview, and likely indicate denial, defense, or minimization on the DMIS.

One last, but certainly not least important inadequacy was experiencing fear of being offensive while facing the challenge of providing culturally sensitive care to a culturally diverse patient. This was expressed by a white participant who had also mentioned this fear in other portions of the focus group. She stated:

It’s so hard! It’s like you want to know something. You don’t want to offend people. You want to have an idea, but you don’t want to stereotype. You don’t want to judge people, you just don’t know. You want to ask, but should you ask? It’s hard.

The identification of inadequacies as a major issue could be a result of participants having perfectionist tendencies in their personalities or of having had finals around the time of the focus group meetings (which is the determining factor on whether or not students’ progress to the next level of the nursing program). Additionally, much of what first year nursing students learn can be categorized into right or wrong: asking closed questions rather than open questions, learning to identify heart and lung sounds,
performing sterile dressing changes without breaking sterile technique, and taking multiple choice exams in which only one answer choice is correct. Moreover, participant statements contain an emphasis on culture specific information over culture general information, which inherently consists of doing things right or wrong (the dos and taboos of a culture.) Learning a list of what to do and avoid is easier and more familiar to the novice student than is utilizing critical thinking skills to determine how to learn about a diverse patient while in the midst of caring for him/her. To identify self-inadequacies would indicate an ethnorelative worldview of at least acceptance on the DMIS: cultural differences were understood to exist and were perceived to be important. The fear of cultural differences and interactions and the resultant stress is also presented in the literature (Ulrey & Amason, 2001; Roberts, et al., 2008; Luquis, et al., 2006; Kavanagh, 1998; Masin & Tischenko, 2007; Moch, et al., 1999).

In response to perceived inadequacies, several participants described wanting to learn more, either by asking the staff nurse or instructor, or through continuous learning which was seen as a choice “I think its personality, whether you want to learn more. Some just don’t.” In response to the participant expressing fear, a student of color attempted to help allay the fears and offer reassurance by stating “I think caring comes across in every aspect, instead of being rude and not wanting to know.”

Furthermore, several participants indicated that once they were a staff nurse they expected they would know more, that increased comfort comes with increased knowledge and experience. This was summed up as “it [knowing about culture] is like everything in nursing-it comes with time.” For participants to indicate that they anticipate having a
greater knowledge base once they were staff nurses is understandable as they were at the end of their first of two years of nursing education at the time of focus group meetings, and had only had one semester of clinical coursework. In addition, as mentioned previously, these nursing students have been told to practice skills, whether psychomotor or communication, to achieve proficiency; they likely see cultural competence as yet another area that requires further practice before adeptness is achieved. The desire to learn more about culture indicates participants plan on doing things differently, which points toward increased cultural desire along with seeking increased cultural knowledge (Caminha-Bacote, 1999). Additionally, when an individual desires to learn more about culture they were beyond denial/defense on the DMIS, and likely in adaptation.

“She looked just like me—it was such a neat feeling!” Identity was a theme in statements of a few of the participants of color. One described in detail what the experience had been for her to care for a Korean patient who spoke no English. Even though the participant was adopted as an infant, raised in Minnesota, and speaks no Korean, she felt the patient was comforted by the presence of someone who “looked like her” after having had only Caucasian nurses.

Another participant described the difficulty of answering “where were you from?” as she is originally from Nigeria but has lived in a Minneapolis suburb for several years, and considers Minnesota to be her home. Several participants also described how clinicals were more difficult for them because there were few or no staff nurses from their ethnic background, and their clinical instructor was also white. These statements were only made by students of color, and portray the importance of racial and ethnic identity of diverse
students. That none of the white students commented on identity likely indicates that they expect faculty, staff nurses, and patients to also primarily be white, pointing at the institutional racism of their education.

“There were a lot of differences between me and the patient”

How participants characterized the differences during their diverse clinical patient encounters was also examined. Wording was used that falls into four main categories: family, description of the race/ethnicity or geographic origin of the patient, language issues, and patient response to the participant (see Figure 21).

![Characteristics of diverse patient encounters](image)

*Figure 21. Characteristics of diverse patient encounters. Four characteristics experienced by students during diverse patient encounters.*

Descriptions of the patient’s family (including roles and practices) were most commonly provided, with sixteen of 32 responses fitting this category. When describing the clinical encounter, participants included the presence and significant tasks and roles of
family members as well as family based practices in statements such as “her husband spoke some English so he was translating,” “she had a female circumcision,” “her husband was helping her with breastfeeding,” and “her family members will go back to Saudi to give birth.” The inclusion of family in descriptions helped to fully understand the situation of the diverse patient encounter.

Race, ethnicity, or geographical background information of patients was also commonly included using terms such as Hmong, from India, Korean, Latina, and from Ethiopia. Language, specifically English fluency (or lack thereof) was mentioned four times in such statements as “She spoke English well” or “She didn’t understand English.” Participants most often began telling the story of their diverse patient clinical encounter with a listing of the perceived differences between the participant herself and the client, and then went on to describe what the experience had been like. A participant described her encounter:

I had a Somali client in my last OB experience. She had good English-we could communicate easily. She had a “no males allowed” sign on her door. So the next morning I went to tell her the doctor was going to come see her soon, and she asked if I could please go tell the nurse that she doesn’t want any male doctor. In another part of Nigeria there were Muslims, and I’m comfortable working with them.

This description was typical as it begins with a description of how the patient was different (a Somali client) with depiction of English fluency (good English, could communicate easily), followed by portrayal of the issue encountered (no males allowed on door, doesn’t want male doctor) and ends with a statement of what the experience was like for her
comfortable working with Muslims). These descriptions of the differences encountered with diverse patients show a relationship to Campinha-Bacote’s (1999) cultural awareness and knowledge.

“She didn’t speak much English, so I couldn’t ask her questions.” Of interest were those four participants who mentioned doing something different because of the cultural difference of their patient: using a picture board for a non-English speaking patient, calling a female physician to see a Muslim woman who did not want to be examined by the male physician making rounds, clustering cares to minimize interruptions to the patient and family, and using high school Spanish.

Changing how one behaves in an intercultural situation is indicative of adaptation on the DMIS. In contrast, two students reported they took no action as a result of the cultural differences between themselves and their patient. One stated she was “just going in to give care and not probe the patient about her culture” and another stated she didn’t discuss the patients cultural background because she was uncomfortable with how to begin the conversation. Identifying possible intercultural situations and choosing to not change behavior is most consistent with minimization: yes, differences exist but, they weren’t important and therefore I don’t have to do anything different because of the differences.

Further, those participants who adapted care as a result of their patients’ cultural background were indicating cultural awareness, knowledge, and desire: cultural differences have been perceived (awareness) and identified (knowledge) which leads to adapting the nursing care provided (knowledge) in order to provide culturally appropriate nursing care.
“I think we learned a lot about culture this year, but I want to learn more”

To continue to understand the development of cultural sensitivity development in this group of participants, the focus groups were asked what participants felt had helped to facilitate their cultural sensitivity development during their college careers, both prior to and during their nursing coursework. During this analysis it was found that participants had provided examples from their nursing and non-nursing coursework as well as their co-curricular activities (see Figure 22). Comments on coursework contained the themes (in decreasing frequency): class activities, interactions with diverse students or patients, co-curricular activities, assignments, and faculty.

![Helped develop cultural sensitivity](image)

*Figure 22. Helped develop cultural sensitivity. Six identified activities and experiences that helped to develop cultural sensitivity.*

The specific nursing class activities participants found helpful were a movie on Sudanese refugees, culturally based maternal-child case studies, and learning how to ask “tell me about your country.” Interactions with diverse students and patients took place in
classrooms, across campus (including dorms), while in the skills lab, and during clinicals, and included discussion-only activities as well as practicing and providing physical nursing care. Some of the discussions were informal (as in getting to know a person) while some were required participation in small group discussions within diverse groups.

Co-curricular activities participants found helpful included a discussion circle and cultural sensitivity activity sponsored by the Multicultural and International Programs and Services (MIPS) office and community sponsored event on refugees at a nearby community library. The majority of participants indicating co-curricular activities to be helpful with their cultural sensitivity development were students of color, both US born and international students.

The assignment most often referred to was their first semester inclusivity assignment (which involved internet research, interview, and participation in a cultural event with the interviewee). Faculty were perceived to facilitate cultural sensitivity when they discussed their cultural backgrounds and practices, and when they gave a class examples of issues of culture they had encountered in practice.

**Domains of learning.** Further examination of the themes determined that participants had described activities from two different and one mixed domain of learning: cognitive (60%), affective (30%), mixed (15%), and of interest there was no learning activities that were strictly behavioral learning (see Figure 23).

Cognitive learning occurred in class activities, with assignments, from faculty, and from learning of current affairs. These included such activities as class discussions, therapeutic communication and diversity assignments, professors discussing what cultural
differences they’ve encountered, and learning more about race and ethnicity as a result of learning about issues of refugees and immigration.

Affective learning took place from interactions with diverse peers and patients as well as from faculty. Examples of experiences leading to affective learning include interacting with diverse peers in the skills lab and diverse patients, liberal professors, and learning about diverse professors’ experiences.

The mixed learning was mostly affective/cognitive (with one example of cognitive/behavioral), and occurred in class activities, interactions with diverse peers and patients, and as a result of co-curricular activities. These experiences included clinical experiences with patients from a different culture than the students, talking to and getting to know diverse classmates, core curriculum courses, and participation in cultural activities sponsored by the MIPS office.

Figure 23. Domains of learning. Activities that helped develop cultural sensitivity described in domains of learning.
Types of Learning Activities

The types of activities participants had found helpful in facilitating cultural sensitivity were examined to determine if they were either experiential or personal. Experiential is defined here as an activity that inherently incorporates interaction with diverse persons (such as group discussions and providing clinical cares) while personal is an individual activity without an interactive component (such as reading). Experiential activities were slightly more common (30 examples) than were personal activities (22 examples) see (Figure 24).

![Types of cultural learning activities](attachment:image.png)

*Figure 24. Types of cultural learning activities. Frequency of experiential and personal learning activities that facilitated cultural sensitivity.*

But perhaps more telling is who was responsible for the activity to take place. Faculty were responsible for arranging thirty one of the activities (including class discussions, assignments, and clinical patients) while participants were personally responsible for fifteen of the activities (attending off-campus presentations and learning
about current global affairs) and the college was responsible for two activities (the presence of diverse classmates and college-wide presentations).

**What Does the Literature Say about Classroom Activities?**

Although several studies have been done on cultural immersion programs, little exists in the literature about what students felt was helpful in the classroom to improve their cultural sensitivity. Cultural awareness and efficacy of educational experiences (without further depiction of what those educational experiences consisted of) were measured before and after two early nursing courses by Krainovich-Miller, et al (2008). Because the authors do not divulge what educational strategies and experiences they utilized to achieve these results, their study cannot be strictly compared to the current study.

A critical pedagogical approach was used to facilitate BSN student understandings of cultural diversity by Underwood. Student beliefs and questions were gathered and then used as a basis for class discussions, speakers, readings, and video presentations.

End of course evaluations were used to determine students had gained “greater knowledge, sensitivity and appreciate of the effects of culture and diversity on their own lives and the lives of others” (p. 286).

Thus although a wide variety of educational strategies and experiences were engaged, there is no indication as to which of those strategies and experiences students found most helpful.
“Any little interaction is helpful in opening my eyes more.”

Participants were highly animated and interested in expressing what they perceived would further their cultural sensitivity development. Improving cultural sensitivity is a critical precursor to improved intercultural communication and intercultural competence (Salisbury & Goodman, 2009, p. 12; Ulrey & Amason, 2001, p. 449). In decreasing frequency, participants indicated that they thought more interactions, class activities, and off campus work or volunteering would help facilitate this in the future (see Figure 2). This parallels the findings of Salisbury and Goodman, who found interactions with diversity combined with multiple settings and types of learning to positively correlate with improved intercultural competence (p. 12-13). Of particular interest here is that only one statement included a need to have an open attitude, since attitude would influence whether or not any other learning would take place.

Figure 25. Would help cultural sensitivity development. Four ways students felt would facilitate their cultural sensitivity development.
The types of interactions participants desired consisted of asking questions of diverse peers and co-workers, and caring for a diverse patient population during clinical experiences. The types of class activities participants wanted were more videos and discussions after the videos, and culture content integrated into all classes. One participant wanted more cultural information in textbooks and research on cultures.

Regarding the desire for more interaction with diverse peers and co-workers, a participant of color stated “one of the ways to keep empowered a little bit more is you guys need to choose for yourself to meet other students.” She went on to say that if students don’t feel they were getting enough cultural knowledge and experience from the nursing program “then you can get it from the community.” This advice clearly indicates that this participant believes in self-directed learning, and that she believes that if her peers feel that they have not had enough cultural knowledge and experience through their formal college educational experiences then the logical option is to search out more knowledge and experience off campus. This participant is older than the traditional age college students, Asian, married with children and is earning her second bachelor’s degree in nursing. Her perspective is likely influenced both by her experiences as a woman of color and by her age and previous educational experiences. Being in the process of earning a second degree is a prime example of intentionally seeking out additional knowledge and experience in a desired field.

Past Experiences and Hopes for the Future

The differences between what participants felt had already been helpful compared to what they would like to have to continue their cultural sensitivity development were
interesting: whereas class activities were found to be most helpful in their cultural sensitivity development to date, they would much prefer to have more interactions with culturally diverse persons in the future by a margin of nearly two to one.

Comparing these findings to the five overlapping and interdependent constructs of Campinha-Bacote’s (1999) cultural competence model proves fascinating. Cultural awareness is viewed as a cognitive process during which individuals perceive cultural differences as well as value them. Cultural knowledge is the intentional process of becoming educated about the cultural differences one has encountered. Cultural skill is defined as the ability to perform a cultural assessment and a physical assessment of diverse persons. Cultural encounters and cultural desire are self-explanatory.

First, participants in this study had obvious interest in culture or they would not have volunteered for the study, which indicates the presence of cultural desire; most participants’ responses to the question of what cultural sensitivity is indicates cultural awareness in that their descriptions include awareness of differences in culturally based beliefs, values, and actions; participants found classroom activities to be very helpful in their cultural sensitivity development thus far, indicating they had gained cultural knowledge; and finally participants desire more exposure and interactions with culturally diverse persons, which is similar to both cultural encounters and cultural skill.

However, because students do not appear to limit their desired future interactions to just the assessment phase of the nursing process, but seem to indicate from their early responses regarding providing care and adapting care that they want to also plan and
implement care for diverse individuals, they do not strictly fit Campinha-Bacote’s construct of cultural skill (1999, p. 203-205).

When looking beyond their college experiences, participants indicated they believed increased exposure to ideas of culture and accurate portrayals of diverse cultures beginning at a young age would have been quite helpful. Two of the participants (one Cambodian but raised in Minnesota and speaking with no discernible accent, and one Nigerian international student with a relatively strong accent) both indicated that they had been asked if they grew up living in huts in the jungle with wild animals like lions or elephants in the yard. One indicated that she thought this misperception was perpetuated by television shows showing African tribal members living in the bush, which leads to the stereotyping that all Africans live in bush villages. The other participants did not comment on these statements, nor did they have significant facial expression change, which gives no further indication as to if they were aware of these stereotypes or even if they themselves had at one point believed in them.

**Peers as a Tool for Use.** Of concern were two related participant statements regarding what they perceived would be helpful to further develop cultural sensitivity provided interesting insights into DMIS development. A white participant stated “we have a tool we weren’t utilizing with all the diverse students in the program.” The idea of seeing one’s culturally diverse peers as a tool for use or learning would indicate minimization on the DMIS: she seems to recognize that she has peers from different cultures, but those differences were so minimal as to not require respect. However, the statement seems so blatantly racist as to potentially indicate denial on the DMIS (but her DS score was
minimization). And when this statement was made during the course of a focus group consisting of women from several racial and ethnic backgrounds, none of the women of color made comments on this statement.

The other statement came from a Hmong participant, who stated that volunteering at a homeless shelter was a good way to get more interaction with diversity and therefore increase cultural sensitivity. This statement appears to imply that the participant believes Hmong people were not homeless. Considering that the participant interacts successfully in a predominantly white higher educational setting (and thus has a fair amount of experience with white culture), the statement begs the question if she expects the homeless to be limited to Hispanic, non-Hmong Asian, and African descent. However, the author did not feel it was appropriate to press the participant for further explanation during the focus group meeting.

“There were a lot of issues on campus.”

Once participants had elaborated on what they had found helpful in their cultural sensitivity development, the author sought to understand the flip side of this coin: what had participants experienced that they felt impeded their cultural sensitivity development? Understanding their hindrances further deepens understanding of what facilitates cultural sensitivity development in that those identified problems and issues can then be addressed overtly in an attempt to counteract their negative influence.

This question was also asked during focus group sessions, and eighteen statements were given. Five themes were identified (again in diminishing frequency): fear of being offensive, the college sets a bad example, there is a lack of diversity among faculty and
clinical patients, their education has been inadequate, and they have been too busy to participant in co-curricular activities (see Figure 26).

Although not specifically addressing nursing students specifically, Taylor (2005) identified similar barriers to cultural competence of staff nurses: lack of knowledge and skills, lack of time to work with diverse patients appropriately, ethnocentric and prejudiced perspectives combined with a lack of cultural self-awareness (p. 136-137).

**Figure 26.** Hinders cultural sensitivity. Five aspects of life students identified as hindrances to their cultural sensitivity development

**“I don’t want to do it wrong and offend someone.”** The fear of being perceived as offensive to culturally diverse persons was primarily an issue for the white students, but one student of color expressed the same thought. Again the example came up of the authors classroom statement regarding lack of knowledge of African hair care which was interpreted by some of the students of African descent to mean the author thought African hair was bad. This seems to have been both a trauma and a learning event: some (primarily
white students) expressed that they had been appalled that their peers had taken the statement the way they did, but as a result of this episode they did learn that what is intended to be communicated is not always the perceived message. Unfortunately their peers’ perception of the author’s statement as racist seems to have created fear to the point of paralysis in some of the white students. If even the “expert” teachers statement can come out wrong and be interpreted in a way other than what was intended, then what chance do they as cultural novices have of being appropriate?

This fear was also identified in the work of Roberts et al with UK medical students: “the overwhelming emergent theme was palpable discomfort when the students were focused on these concepts [race, ethnicity, and culture].” Gerrish provides insight regarding the development of this fear in that students may become paralyzed by fear as a result of a lack of confidence once they understand that their beliefs and actions can impact how they relate to diverse others (1996, in Furness, p. 253).

**Bad Example.** The statements on the college setting a bad example had primarily to do with gay and lesbian issues on campus: while the official Catholic stance is that homosexuality is wrong the college professes acceptance of the GLBT community, but does not support activities proposed by the campus organization for GLBT members and allies nor offers same sex partner benefits. Participants felt that the college should be consistent between what they say and what they do, especially if one educational goal is to develop the cultural sensitivity of students. This desired consistency was between what the college stated their goals were and official Catholic teachings and policies.
To avoid being perceived as hypocritical students want to feel uniformity exists between the college’s words and actions, regardless of whether they were Catholic issues. A white student, who had explained that she was a devout Catholic, put it this way: “there were two different messages: what the college does, and what Catholic teachings say. You can’t have it both ways.” Although this statement is clearly addressing inconsistencies between the campus climate and practices with Catholicism as an institution, students expressed the same idea with regards to the other perceived inconsistencies described above.

“We should be learning more.” In terms of how their education had been inadequate, participants identified issues from their K-12 experiences as well as their nursing curricula: issues of culture had not been addressed in their early grades nor were they addressed overtly in each of their nursing courses, and not all of the professors were comfortable talking about issues of culture.

Obviously, changing their earlier education is not possible, but participants expressed that they believe current elementary and middle school students were getting more culture content including a more diverse student and teacher population, and foreign language immersion options among the schools in the Twin Cities area. However, inclusion of cultural content in all nursing courses could easily be undertaken, and in fact should not be left to one course (Culley, 1996; Furness, 2005; Salisbury & Goodman, 2009; Suh, 2004).

Participants indicated they wanted more of both culture general and culture specific information in their nursing courses. Of interest here is that in the focus group consisting
of all Asian participants the request was for culture general information, while the mixed
groups requested both. A Hmong student who is speaks and writes Hmong, is married and
has 2 children put it this way: “You can never understand all the specifics about a culture.
Theres so many things about the Hmong culture that even I myself don’t understand. So
you can’t be that specific, you have to be more broad.”

“The faculty and patients were mostly white.” Lack of diversity was seen as
problematic both among the patients they had cared for clinically and among faculty. Their
diverse faculty members had spoken of their cultural background during classes, which all
participants seemed to appreciate. However, the students of color especially wished there
were more faculty of color across the campus, not just in nursing. This is a consistent
problem within higher education across the US, and exacerbated in nursing education
because nursing has historically been a white profession (McTige-Musil, Garcia, Moses &
Smith, 1995; Roach, 2009; Vaughn, 1997.)

Participants also indicated that if they had been given the opportunity to care for a
patient from a different cultural background, the opportunity only arose in one of their
clinical courses. None of the participants indicated having cared for a diverse patient for
more than one clinical day. This finding is interesting considering the increasing diversity
among the Twin Cities. This could be a result of faculty making patient assignments for
students avoiding non-English speaking patients (in an attempt to either improve patient
care or make the experience easier for the students), or avoiding diverse patients as much
as possible due to lack of comfort and skill in dealing with their cultural backgrounds. But
again, further speculation on why this occurred is mere conjecture.
How diverse the student population is across campus was a lengthy topic of discussion in two of the meetings, with participants discussing the relatively high number of Asian students, especially those of Hmong ethnicity, along with African immigrants, refugees, and international students from Africa (particularly Kenya and Tanzania) and students of Nepali background. Several participants indicated regret that they had not gotten to know many of their diverse peers during their three or more previous years of college course work, to which an Asian student replied “you have to take it as your personal responsibility to get to know people.” Again, this statement was quietly agreed with by the white students present, and was another example of a “quietly educational moment.”

In Conclusion

In summary, this study appears to be the first to ask students how they understood culture and cultural sensitivity, why cultural sensitivity is important in nursing, and what the experience of learning cultural sensitivity development was like, including what facilitated and hindered their development. Participants seemed eager to relate their beliefs and experiences, and spoke in what appeared to be a frank and uncensored communication.
Chapter 5
Comparison of Findings

Demographics

Comparison or triangulation of findings was undertaken for those twelve participants who changed their self-description of nationality and ethnicity from the early to the late IDI. One description changed completely, from “black & white” to “don’t know really, mostly German.” This change did not fit categorization. Of the eight descriptions that became more ethnic on the late IDI, seven participants had no change in their orientation, and one moved toward ethnorelativism. Of the three participants with similar ethnicity in their descriptions two had no change and one moved toward ethnorelativism. Only one participant had less ethnically descriptive wording, and she moved toward ethnocentrism. Although this was of interest, no statistical analysis was undertaken.

Triangulation of findings was undertaken with focus group transcripts and reflective writing responses of participants and compared to the late IDI results. Data from students’ written descriptions of what culture is and why it is important were analyzed for indications of IDI stage. But because these responses were submitted anonymously, there is no way to know if the author of any writing was a study participant or not, nor whether her level of intercultural sensitivity had been assessed on the IDI. Thus analysis of these written responses and correlating with stages of the IDI was necessarily vague.

What Culture is and Why it is Important

The written description of why culture is important included one response regarding the influence of cultural background on the decision making of patients. This
statement appears to indicate cognitive frame-shifting on the part of the student, but because the student does not provide details on if or how her nursing action would be impacted by the clients decision making, there is no evidence of behavior code-shifting adaptation. The statements on cultural background impacting what is accepted by a patient as the best treatment indicate an understanding of the impact culture has on a patient’s decision making. This describes intercultural sensitivity development that goes beyond minimizing cultural differences in health care and is well into acceptance of cultural difference and probably cognitive frame-shifting. The awareness of cultural background impacting what constitutes appropriate health from a patients perspective also indicates cognitive code-shifting adaptation. Again, awareness of patient thought processes is present. But those students who wrote about adapting their nursing care to the clients culturally-based belief system were demonstrating behavioral code-shifting adaptation: deciding what should be done based on the situation (the patient preferences in this case) indicates the ability to change behavior according to the situation at hand (again, the patient preferences).

Responding that cultural diversity is important because it is common is interesting because it does not address what the nurse will need to consider when providing care, but only prepares the nurse to encounter cultural differences. This is a sort of “brace yourself for what’s coming” response that gives no information about how the student views cultural differences. Were culturally diverse clients good or bad, interesting or more time consuming and therefore negative?
The students that described that culture is important to nursing because culture is common and nurses work with culture constantly provide an interesting perspective. This response does not address what the nurse will need to consider when providing care, but only prepares the nurse to encounter cultural differences. Identifying the presence of diversity gives little information about how the student views cultural differences. Were culturally diverse clients good or interesting? Or were culturally diverse patients more time consuming and therefore overall negative but one must be prepared to deal with this additional complication when providing nursing care? Denial and defense cannot be ruled out among students with this theme in their response. Minimization is definitely present, as there is no indication of understanding how cultural differences impact client beliefs or acceptance of care, nor of a need to modify nursing care based on those culturally based beliefs. These students were ethnocentric.

The act of considering patients’ culture as a way to avoid barriers to culturally sensitive care was described as avoiding providing care to a patient based simply on how the nurse would want to receive care begins to get at personalization of care and consideration of the patients cultural perspectives. The response does not address the need to avoid stereotyping the cultural other, but it does link assessing and implementing a client’s culturally based beliefs on appropriate care with the students cultural self-awareness. The specific use of the phrase “provide care” indicates behavior that is based on knowledge of cultural difference. Thus the student can be seen to have progressed beyond ethnocentric stages of intercultural sensitivity development. The expression of needing to avoid basing care on one’s own beliefs indicates progression into at least into
cognitive frame-shifting adaptation, and is able to utilize behavioral code-shifting adaptation.

**Comparison of Qualitative Data and Participants’ IDI Stages**

Participants spoken and written words can be compared with their stage of intercultural sensitivity development on the IDI. These examples will further illustrate the cultural sensitivity development of students in DD/R, M, and AA.

**Ethnocentric participant examples.** One student was in the ethnocentric stage of DD/R on her late IDI. This student had the most disparate descriptions of her nationality and ethnicity, first describing herself as “black & white” and on the late IDI stating “don’t really know= German & French mostly.” During the focus group meeting, she described cultural sensitivity as “I think it’s being aware of how those values and beliefs impact that person’s decision making. And then how you would respond”. This statement indicates both self-awareness and an understanding of cognitive frame-shifting. Her response to what cultural sensitivity is included “I really think that it’s not enough to say you’re culturally sensitive because I’ve found that I don’t. I always thought I was, but I’m learning I don’t.” When asked to elaborate on her statement, this participant indicated that she is finding out how much she doesn’t know about cultures, but that she has learned about many culturally-based beliefs and practices during her nursing education.

This statement indicates the student equates culture-specific knowledge with cultural sensitivity. She is focused on the dos and taboos of culture as a way to provide culturally appropriate care. The participant had participated in a 2-hour session on culture provided by Student Services in preparation for being a Resident Advisor (RA) in the
dorm, and thought that experience had accomplished more. Both of these statements were indicators of minimization thinking: a little preparation should be enough to get you through life because there is only a little bit to learn about culture. When describing her close friend from the UAE as trilingual she said she had told her friend “sorry but I’m sheltered and landlocked and I’m totally in my own little bubble” as a way to explain her own lack of cultural knowledge and foreign language skills. This statement indicates a perspective of denial and defense due to the assumption that it’s OK to not know about other cultures because of a lack of contact with cultural otherness. Although the participant indicates an understanding of cognitive frame-shifting, her comments otherwise show that she is overall more ethnocentric in her worldview.

**Ethnorelative participant examples.** Only one participant in Group 1 was in the ethnorelative stage of AA on her late IDI. This participant used very similar terminology to describe her nationality and ethnicity. Her definition of cultural sensitivity was “its how open a person is to learn about other cultures.” The idea of learning about other cultures came up with other focus group questions; her recommendation for improving the nursing programs culture content was to have “a whole section of teaching on culture, not just ‘its nice to know other cultures’ like we had.” This emphasis on wanting to learn about cultures indicates adaptation and cognitive frame-shifting.

In her descriptions of clinical experiences she included more cultural details about the others involved than did her peers: she specified Somali girls, not just African American; her OB patient was described as “African American and Jehovahs Witness and a nurse”. This awareness of cultural background indicates that she is adapting her thoughts
to include the perspective of the culturally different persons she worked with, which is an example of cognitive frame-shifting. She did not indicate doing things differently because of cultural background, so there is no evidence of behavioral code-shifting. Of interest is her assumption that volunteering would give her contact with more cultural diversity. However, when this statement is taken in the context of the participant describing her family as a “pretty traditional Hmong family, except that my parents both wanted me to go to college” it is possible that she may not have had a great deal of contact with culturally diverse other than interacting with diversity other than her student peers.

**Minimization participant examples.** The majority of Group 1 participants were in the middle ground minimization stage on their late IDI. The participant statements which illustrate minimization include defining cultural sensitivity as “just being aware that there is more than one culture” and as “being sensitive to another person’s needs and cares regardless of what their culture is” and “being aware of other cultures”. Minimization is also apparent in this participant’s description of caring for an Ethiopian:

“It didn’t seem like there were any big differences, in what I was doing as her nurse, but I didn’t get into discussing too much about their background. Maybe it’s just because it’s a nursing thing. I was just focusing on her.”

This statement classically describes the stage of minimization by indicating that the differences were not significant, and therefore didn’t require discussion of the patient’s cultural background. The last half of the statement indicating that focusing on the patient doesn’t require consideration of her cultural background however comes from a more ethnocentric denial perspective. One participant described nursing as “finally taking notice
that there needs to be some change”. On the surface this implies that she sees the profession of nursing and her nursing education as newly including cultural content, but a deeper interpretation is that the student herself is newly aware of cultural sensitivity and how cultural sensitivity is important for nursing. Although the following students scored an overall orientation of minimization, they indicated more ethnocentrism in their reflective writings: “patients from other cultures will possibly have different beliefs than myself” and “since starting the nursing program I am learning that there were distinct cultural differences even in health care.”

**Further comparisons of verbal statements and IDI stages.** Participants that expressed a need to understand a patients culture points to movement beyond the stages of denial and defense and minimization. Cultural differences were clearly seen as important. The desire to understand what a client believes is indicative of at least acceptance of cultural difference and more likely adaptation and cognitive frame-shifting. It should be pointed out that understanding cultural difference does not necessarily include adapting how nursing care is provided, thus evidence of behavioral frame-shifting adaptation is absent here. Of interest is the orientation of the three students that did mention changing behavior based on the patients culture: one is in DD/R and the other two were in M; behavioral change would more likely be seen in an individual with an orientation in AA.

Students who described consideration of culture as a way to honor patients and shows respect indicate that they were no longer denying the presence of cultural differences, nor were they defending their own culture as better. Respect is a cognitive concept that includes some behaviors but primarily attitudes. Students’ descriptions of
acknowledging the culture of a patient to show respect indicate some degree of cognitive frame-shifting adaptation but their IDI overall orientation was Minimization.

The discussion of the question regarding participant reaction to culture content in their nursing coursework gave little correlation with the DMIS stages of participants: all the major patterns could be issues for an individual in minimization or greater ethnorelativism, but would not be a concern to a participant in denial or defense. The primary result of this question was to improve the authors overall understanding of participants’ perceptions of what learning activities were most helpful in learning cultural sensitivity; students seem to appreciate most and learn best from class activities that have an aspect of application that can be put to use during interactions with culturally diverse others.

Stages of the DMIS were not highly apparent in the focus group question regarding what in the nursing program had facilitated cultural sensitivity. However, it can be presumed that for a participant to have an answer she would be at least in the minimization stage or possibly more ethnorelative. A participant in defense or denial would not likely identify activities or occurrences that create cultural sensitivity at all because of their perspective that cultural difference doesn’t occur or if differences do exist they were bad and therefore should not be adapted to; in either case cultural sensitivity would be a moot point.

Looking at participants’ comments on what in their college experience has facilitated cultural sensitivity as relates to aspects of the IDI, the Asian participant’s comment on that being around culturally diverse people will lead to greater understanding
of how to act in future situations with that cultural group can be interpreted to indicate behavioral code-shifting is taking place, while the white student’s statement of learning by reading indicates at least acceptance and potentially cognitive frame-shifting. The white participants comments on thinking she was culturally sensitive but finding out that she wasn’t indicated an increased level of self-awareness compared to the beginning of the academic year. This response gives little evidence of IDI level other than potentially movement from the beginning of the year out of either denial or defense, but both of her IDIs indicated an orientation in DD/R, with a decreased score from the early to the late IDI.

During the discussion of racism and stereotypes, an African participant provided her belief on the source of the stereotype that all Africans come from jungles and have wild animals in the yard: television shows present this view. However, in providing what could be seen as a reasonable excuse for this stereotype the participant and those agreeing with her were presenting a classic example of what the stage and scale of minimization looks like on the IDI. And indeed those involved had indeed scored in minimization on both their early and late IDIs.

Participants that described awareness of cultural differences and expecting to see cultural differences among patients as examples of how their cultural expectations facilitate providing culturally sensitive care indicate at least at the minimization stage of the DMIS but more likely acceptance, with a potential for adaptation. Being aware that differences exist (acceptance) can lead to looking for differences (acceptance and possibly
cognitive frame-shifting) which in turn can lead to providing culturally appropriate care (behavioral code-shifting). These participants had an overall orientation in M.

The participant of color who sees the application of her values and beliefs and expectations to everyone that she encounters as the best way to facilitate culturally sensitive care indicates that she is either in the stage of denial (in which cultural differences were not acknowledged) or minimization (in which culturally differences were small and not important). Both of this participant’s IDIs were in the minimization stage.

There was a recurrent response to questions in which participants identified a fear of being offensive to culturally diverse others. This statement is a classic example of the new racism in which colorblindness, the intentional lack of attention to racial or ethnic background (Scruggs, 2009). This statement seems to indicate acceptance on the IDI because cultural difference has been identified; however cultural difference has not been deemed important enough to act on. Minimization is more likely indicated by this stated fear of offense. Also, this clearly indicates that participants were not cognitively frame-shifting (at least not on a consistent basis), and have not yet fully accomplished behavioral code-shifting, although they appear to be aware of the need to do so. Most of the participants reporting fear of being offensive or rude had an orientation in M, while two were in AA. Those in M were exhibiting skills of progressive intercultural sensitivity.

Related to the fear was a pattern regarding lack of knowledge: students indicated they lacked knowledge and/or they would seek new knowledge to avoid acting on assumptions. Lack of knowledge was seen to indicate minimization or acceptance on the DMIS; what is missing (and would help students progress toward ethnorelativism) is the
what-to-do-about-it piece, both as a lack of confidence in asking patients about their cultural preferences and also a lack of knowledge that would move them into cognitive and/or behavioral adaptation. Being aware of their lack of knowledge is a first step toward obtaining the needed knowledge to become culturally sensitive. The next most common pattern was an awareness of the potential to make assumptions; knowing what they themselves would prefer may lead to assuming that culturally diverse others would have the same preferences. This set of responses indicates an awareness of cultural difference, and an awareness of the need to prevent stereotyping patients, but again a lack of knowledge and skill that would move them into adaptation.

Writings and IDI stage. A mixed race participant stated that she did not think she would have any barriers to providing culturally sensitive care specifically because she intends to treat everyone the same and provide care the same for all patients regardless of their cultural background. Again, this statement indicates a lack of understanding of cultural difference (denial on the DMIS) or a worldview in which cultural differences were so minimal as to not create problems when providing nursing care (minimization stage of DMIS); the students overall orientation was within M.

Participants’ statements regarding their intention to personalize care to prevent barriers to culturally sensitive care can be seen to eliminate denial, defense, and minimization as issues. Personalizing care requires acceptance of cultural difference as important; planning care on the basis of the patients cultural background indicates some understanding if not ability to cognitively frame-shift. The actual implementation of personalized care based on cultural beliefs would indicate behavioral code-shifting, but no
participants included action as an aspect of their description. The participants describing personalizing care were primarily in the M orientation, with one in AA.

**Conclusion**

There were many ways in which the written and spoken words of student reflected their IDI stages. Although student descriptions of what culture is and why culture is important were anonymous, those statements provided some indication of the stage of the writer. Cognitive frame-shifting is indicated by descriptions of patients’ cultural backgrounds as an influence on decision making, patients’ views of what health is, and acceptance of health care practices. Behavioral code-shifting was present in statements indicating that nurse behavior should vary and be adapted to the individual based on the patient’s cultural background, and in the explanation that considering patients’ cultural background when providing culturally appropriate care would avoid providing care in the manner in which the nurse herself would like care presented. Ethnocentric perspectives are present in student descriptions that culture in nursing is important because culture is interesting or simply because culture is common and nurses work with culture frequently. No insight is present in these statements as to how culture impacts nursing care, or that cultural background creates significant or important differences.

Additionally most participant statements can also be related to a specific intercultural development level. Participants provided rich examples of their thought processes through their reflective writings, interviews, and focus group sessions. Their thought processes as evident in their words can then be interpreted in terms related to cultural sensitivity development. The comparison of findings allows a much fuller
understanding of participants’ cultural sensitivity than either the quantitative measure of the IDI or the qualitative measures of reflective writings, interviews, and focus groups could possibly provide alone. An ethnocentric example included emphasis on the dos and taboos of culture in providing culturally appropriate care. An ethnorelative example included greater specificity of patient cultural background than those of her peers along with a desire to learn in depth information on multiple cultures as a way of understanding those cultural perspectives as opposed to what she perceived as having been taught only superficial cultural information.

Minimization was the predominant stage of Group 1 participants, and was also present in their descriptions of cultural sensitivity as awareness of culture, a need to tend to patients’ needs regardless of cultural background, and that patients from diverse cultures might have different beliefs than the student herself. However, participant statements did not always reflect their IDI stage. Three participants expressed a need to understand patient’s cultures, which seems to indicate adaption and cognitive frame-shifting, and likely acceptance/adaptation on the IDI. However, two of these students are in minimization and the other in denial/defense/reversal.

Discussion of what had helped and what participants thought would help future intercultural development contained little reflection with DMIS stages. The exception here is a comment on being around culturally diverse others will lead to improved understanding of how to act in future situations with that cultural group. This statement indicates cognitive code-shifting is at play, and likely behavioral code-shifting as well with the inclusion of changing behavior.
The recurrent response of fear of being offensive to culturally diverse others relates to an awareness of cultural differences, but shows lack of frame shifting because of the paralysis created by fear. Lack of cultural knowledge, another recurrent response, is seated in minimization if the individual sees that lack as the reason why they don’t know more and also are not seeing a need to seek more cultural information. However, if a lack of knowledge is the impetus for learning more, then at least acceptance is at play.
Chapter 6

Discussion: “What did you learn about us?”

This study sought to understand how college junior nursing students view culture and its importance in nursing, what they found helpful and hindering in their cultural sensitivity development, what their experiences were when caring for a culturally diverse patient, how their IDI scores changed from the beginning to the end of their first semester of nursing, and in what ways did their IDI results reflect their writings and their spoken statements. This work is the first of its kind to both measure IDI results and ask nursing students for their opinions and definitions regarding cultural sensitivity.

It is well established that the practice of nursing should incorporate culturally competent care as a basis tenet for all patients, and equally well established that no consensus exists regarding what cultural sensitivity or cultural competence is. Further, it is accepted that nursing education should be laying at least a basic foundation in culturally sensitive nursing care for students of the profession, but also documented that nursing education has not been consistently successful in this endeavor. The world of professional nursing is continually seeking to understand what really works through evidenced based practice; nursing education is beginning to apply evidence based best educational practices. Thus this study fills a gap for the professional nurse educator, providing evidence for understanding what students have found helpful and want to experience more on their journey of intercultural sensitivity development. Application of this evidence to baccalaureate nursing would surely improve student outcomes relating to provision of culturally sensitive care.
Implications for the DMIS & IDI in Nursing

The IDI has rarely been used in nursing education or practice. This could be a result of the perspective put forth by Ironside (2001) that research findings in any other discipline cannot be assumed to be applicable to nursing, but instead similar research must be designed within nursing education to verify whether or not the research is indeed valid. Ironside states “the extent to which theoretical work from higher education is generalizable to nursing situations is, in most cases, is assumed rather than demonstrated” (p.73).

This perspective seems to stem from the history of nursing education as being hospital-based, which was the case for decades prior to nursing being accepted as a profession and being acknowledged as a rightfully having a home within higher education. It seems hypocritical that nursing as a profession views itself as a discipline of the academe, while simultaneously stating that other higher education research doesn’t apply to nursing. Other health professions do not share this separatist perspective, and instead readily look to one another for both research inspiration and cross-disciplinary collaboration.

The use of corporate training methods within the profession is nearly unheard of, and thus the IDI appears to be viewed suspiciously by much of nursing education as questionable at best. However, the goals of intercultural sensitivity development were incredibly applicable to nursing, and thus the IDI should be fully accepted and no longer seen as a bastard stepchild of some fringe faction of education.

Although no studies were published using the IDI in nursing education, studies with physician trainees demonstrated findings, specifically among physicians in training
(Altshuler, et al., 2003). The view of nursing education as an insulated silo within higher education is outdated and damaging to the profession and restricts learning available to students.

The DMIS is a robust but easily understood construct that lends itself well to the situation of nursing education. Utilization of the DMIS as a framework for understanding experiences with cultural difference and one’s growth in intercultural sensitivity could easily be achieved if the DMIS was utilized regularly, including revisiting the concepts formally on at least a once per semester basis throughout the nursing coursework. In addition, the DMIS should be referred to when students of nursing verbally report or provide written reflection on difficulties or confusion during intercultural encounters with patients, peers, or staff.

Combining administering the IDI each semester with utilization of the DMIS as a framework across the nursing curriculum would enrich the students’ understanding of cultural difference and intercultural sensitivity.

**Implications for Nurse Educators**

It has been seen in the results of this study as well as in the literature that nursing educators must be culturally competent in order to facilitate cultural sensitivity and competence among their nursing students (Bond, et al, 2001; McCalman, 2007; Suh, 2004; Taylor, 2005). Thus, the first step for all nurse educators is to personally develop cultural competence. This necessarily begins with cultural self-awareness and through the use and application of reflection, education, and training will progress toward the ability to provide culturally competent nursing care.
This study has found that the average second semester nursing student understands what culture is, but does not necessarily grasp why culture is important to the practice of nursing. This finding points to an inadequate application of the concepts of culture in the context of bedside nursing care. As found in Luquis, et al. (2006), this could result from relying on other academic departments to fulfill cultural diversity requirements for nursing students, and thus reclaiming that content back into the department of nursing would help students fully understand why culture is a critical consideration when planning and implementing nursing care.

Patient care simulations using mannequins with electronics that mimic human vital signs, organ sounds, and behaviors are growing in popularity as a way to increase nursing student confidence, skill, and critical thinking. One way to address participants’ desire for increased contact and experience with cultural diversity would be to use mannequins with multiple skin colors and incorporation of cultural issues or dilemmas within the simulations. This would add one more layer of complexity to the simulation, and require students to consider and address patient cultural background in their simulation patient care. In addition, incorporating mannequins of color and cultural issues into simulation would help students realize that culture is not a topic to be addressed within one discreet nursing course, but instead is a real world issue of all patients that should be considered during every patient encounter. These mannequins are readily available in “ethnic” skin color versions. However, when the author’s institution was purchasing mannequins the “white skin” mannequins were available for nearly immediate shipment while the “ethnic” mannequins have a several weeks to months delay before shipping.
Use of culturally-based simulations would also provide an opportunity for students to practice their cultural assessment skills in a non-threatening situation in which there would be no possibility of offending the patient.

**Implications for nursing course construction.** The results here show that nursing students, both white and non-white, want as well as need more cultural content in their nursing courses. One of the hindrances of nursing student intercultural sensitivity development is a lack of culture content due to relegation of issues of culture to one or two classes. The outdated concept that culture can be dealt with in one specific course and therefore culture is not relevant to all faculty is harmful to the profession and students both. This problem can be overcome with relatively easy changes, primarily with incorporation of issues of culture into each and every nursing course. This would also move away from the reliance on other departments to take care of cultural sensitivity of nursing students (Luquiz, et al., 2006). In addition, the need for nursing students to have clinical experiences with diverse individuals (including learning how to work with foreign language interpreters) is overcome through a combination of seeking clinical sites with diverse patient populations and intentionally including diverse patients in student clinical assignments.

A need exists to teach students specific tools to facilitate their intercultural sensitivity and skills, including specific ways to begin intercultural interactions including suggestions on what questions to ask and how to ask those questions. Doing so will assist students with little intercultural experience or little cultural interest to increase their comfort level along with their intercultural communication skills. Multiple tools and texts
were available to help students learn how to traverse intercultural experiences successful, although at this time no nursing or health care text is available based on the DMIS. The most critical factor is to provide the tools students need across the length and breadth of the nursing education experience, again specifically avoiding relegating all issues of culture to one or two courses.

On a more macro level, nursing should intentionally look for disconnections between what current practices and policies were and what the philosophy, mission, vision and outreach of the institution as a whole. These disconnects were viewed by students as hypocritical, and thus will underscore any statements or efforts regarding improvement of cultural sensitivity among students. Students look to their educational institution as well as faculty for role models on best practices. Thus it is imperative to search out and remedy inconsistencies. And although it may not be realistic to completely eliminate all issues that could be perceived as contradictory to intercultural efforts, openly acknowledging that these contradictions exist will help students understand the seriousness of intent of improving intercultural sensitivity, while simultaneously conceding that not all aspects of nursing are black and white, and that in professional nursing gray area not only exists but will be encountered regularly.

**Implications for nursing faculty development.** Inherent in the proposal that nursing courses should all contain elements of culture and diverse patient populations should be utilized for clinical experiences to facilitate cultural sensitivity is the need for faculty to both develop their own personal sensitivity, but also to gain the background and skill necessary to teach culturally competent care.
The journey towards intercultural sensitivity is similar regardless of one’s status as student or professor, and starts with self-awareness and builds toward adaptation of thoughts and behaviors as a result of introspection, learning, and experiences. Nurse educators should consider their own intercultural sensitivity development to be a professional responsibility, and seek out advancement accordingly.

Although not an aspect of this study, the innate factor upon which faculty development is built is administrative support. This support must begin with the expectation that all nursing faculty will seek out personal intercultural sensitivity development, but must also include strategic planning to provide financial backing for the faculty development necessary to create change within the nursing curriculum.
Chapter 7

Strengths and Limitations of the Study

Strengths, or What Went Well

The study had several strengths. First was the application of the IDI to a population of baccalaureate nursing students within their regularly scheduled clinical nursing coursework. The IDI has not been used in this population previously, although it has been used with nursing students participating in short term courses abroad. This study provides a glimpse into the processes of an entire semester of becoming culturally sensitive.

An additional strength was the student population from which the sample was self-selected has a higher percentage of students of color than the “average” day baccalaureate nursing program. This facilitated obtaining a wider view of student perspectives based on their racial and ethnic backgrounds. The broad age range was also a strength in the same way: greater diversity among ages was present in the sample than is commonly found in a traditional day baccalaureate nursing education program.

An additional strength was a multi-methods approach to the study. Multiple methods allows for a deeper understanding of the phenomenon being researched, beyond the understanding that could be obtained by a mono-method approach. The combined use of participant writings, focus group meetings, and the IDI contributed to a rich compilation of data.

Limitations, or What Didn’t Go as Well as Intended

Multiple limitations were also present in this study. The first rests in the self-selection of the participants. At the onset of the study, Group 1 had 17 students, and 52.3%
students of color. Group 2 had 11 students, and 45.4% were students of color. At the completion, Group 1 had 14 students, 57% were students of color, while Group 2 had 8 students and 50% students of color. The student body overall were 37% students of color. And although the higher ratio of students of color does provide a broader base for data collection, the over representation is not typical and skews results, and does not provide an accurate picture of the typical baccalaureate nursing student.

Another problem of recruitment was the questions and statements that arose from several students who asked verbally or emailed the author asking if the study was only for students of color since it was about culture. These comments were centered on the belief that since they were Caucasian, they did not have a culture and therefore did not qualify for the study. This was likely in part to have occurred because the initial written, email, and verbal requests for participants did not overtly state that both white students and students of color were eligible and encouraged to participate. When these first questions were asked the written, email, and verbal requests for participants changed to specifically state that the study was for all students, that students from all cultural, racial, and ethnic backgrounds were eligible and encouraged to participate. In spite of this change in recruitment, the participant population is significantly more diverse than the nursing class as a whole. The other aspect of asking whether white students could participate in a study on culture indicates an inadequate preparation of juniors in college if they do not understand that they have a cultural background.

Perhaps the greatest limitation of this study is the small sample size, which in turn led to having the central tendency spread out. Nursing students at this higher education
institution describe their first two years of nursing coursework as intense and hectic. Time is an issue for many students for a number of reasons: most hold down at least part time jobs, those who have limited English proficiency require longer to read and complete assignments which limits the time they have for any other activities, and many have families for which they hold multiple responsibilities which range from child rearing to caring for aging or ill parents and other family members. Whatever the reasons for the sample size to be small, the fact remains that with a small sample finding statistical significance is difficult. Ideally each group should have a minimum of thirty participants in order to achieve reliable statistics. The small sample size both impacted the lack of significance of the findings, and results in generalization of findings to baccalaureate nursing students as a whole chancy at best.

The differences between the groups at the onset of the study were yet another limitation. Because it is common for groups of students who find they have family circumstances, age, and/or outlook in common to form informal groups during their nursing education that led them to register for the same clinical groups, and study and socialize together, it holds that groups of friends with similarities would be present in both study groups. This proved true in this study, as seen by the significantly older ages of Group 1. Although as described above the age range of participants allowed for understanding of a greater variety of perspectives, the ages of participants in Group 1 is not typical of the average baccalaureate day nursing education program.

A significant limitation was the problematically low response rates throughout the data collection. Only five (28%) of Group 1 responded to the reflective questions, only half
came for a verbal discussion/interview on what their IDI results indicated, and only 82% participated in focus group meetings.

The sample coming from a specific population within nursing education is another limitation. Recruitment for this study came from only the 93 junior baccalaureate nursing students in the baccalaureate day program of a multi-campus private liberal arts college. This college is a women’s college, thus baccalaureate degree program students were almost exclusively women; men with a previous baccalaureate degree were accepted into baccalaureate degree programs, but comprise a small percentage of students, and a minute fraction of the traditional baccalaureate day program students. No male students were in the junior class cohort. The range of nursing education programs range from 1 year technical college Licensed Practical Nurse (LPN) programs to research and clinical doctorate programs. The institution where this study was undertaken provides a wide variety of educational routes beginning with a traditional day associate degree in nursing (ADN) program, an extended evening/weekend ADN program, a Licensed Practical Nurse to ADN fast-track one year program, a traditional day baccalaureate degree (BSN) program, a fast-track post-baccalaureate to BSN program, masters of science degrees in education leadership and clinical specialties, and a doctorate of nursing practice (DNP) program. To have obtained the study sample from just one of the seven educational programs on campus is indeed a great limitation.

Another limitation has been hinted at earlier: volunteering for study participation likely indicates interest in culture, which in turn may have led to higher overall IDI scores with less ethnocentrism and greater ethnorelativism than would have occurred if the
sample were randomly generated. This was also postulated by Klak and Martin (2003), who stated that using a sample of self-selected students may lead to the sample containing a bias toward students that were “motivated to learn about intercultural issues” (p. 455).

In retrospect it would be interesting to have asked students at the onset of the study how nurses provide culturally appropriate care. This would have gotten at students’ perceptions of what exactly it is that nurses do based on a client’s culture, what considerations must be made, what must the nurse be aware of, and what adaptations may be required when providing care. Although this would have the potential to provide another layer of information, being as this was the first semester of clinical nursing courses, most students had little first-hand knowledge of what nurses actually do, and very basic conceptualization of what they, as a nursing student, could do for or with a patient.

**Assumptions Made**

One assumption the author made was that all students would be interested in learning more about their present level of intercultural sensitivity development, and would want to become more culturally sensitive.

Another assumption was that the participant group would racially and ethnically mirror the junior class as a whole, with about 37% of participants being women of color. This did not turn out to be the case as described above.

A third assumption was that knowing all the students within the population from which the sample was derived would facilitate student engagement and participation in the project. Again, this did not prove true.
A final assumption was that the time involved in this study would be virtually unnoticeable by participants and therefore time requirements would not give cause to dropping from the study. Several of the participants who did withdraw from the study indicated that time was the primary reason for doing so.

Perhaps the greatest assumption made for this study is that the profession of nursing will accept the use of a non-nursing framework (the DMIS) and a non-nursing tool (the IDI) as a means for legitimate research within nursing education. Although the author obviously believes that appropriate applicability exists in spite of the DMIS and IDI having non-nursing origins, it is not yet known how nursing education professionals will respond to this work, and whether or not these results will ever see the light of day published in nursing education journals.

Implications for Future Research

The results of this study beg for future research. First and foremost, larger sample sizes must be utilized to obtain statistically significant results. Next, to better comprehend what aspect of nursing education results in DMIS growth, the IDI should be administered multiple times: at the start of nursing coursework and repeated administration upon the completion of each semester of coursework. Larger participant populations and more transferable results could easily be accomplished by utilizing the IDI with an entire cohort of nursing students.

To better understand the development of intercultural sensitivity among all types of nursing students, it would be ideal to administer the IDI to students of multiple nursing education programs: 1 year technical school practical nursing (PN) students, associate
degree (ADN) in nursing students, PN students to ADN students, traditional baccalaureate to fast track post-baccalaureate students, masters of nursing students, doctorate of nursing practice of research doctoral students. The richness of data provided by this vast array of students would allow for generalization and transferability of findings to virtually all levels of nursing education, and would greatly facilitate understanding the process of intercultural sensitivity development of nursing students.

When additional research is undertaken, it would facilitate data analysis if those unexpected changes in demographics that occurred in this study were to be avoided. This could be accomplished by providing students with written instructions clarifying demographic categories. For example, students could be told they do not need to limit their entry under “nationality and ethnicity” to just a racial category. Experience in another culture could be defined as time outside the culture in which you were raised or time with cultures the participant found different. This allows for experiences such as a Minnesotan going into the Deep South or a Somali living in Kenya to be categorized as experience in a different culture. Guidelines for interpretation of the categories on educational level could be provided, including possibly “college degree” meaning only a four year degree, and technical or community college degrees then not included in the college degree category.

Future research using the same type of mixed methods in which the IDI combined with assessment of what students found helpful in facilitating their intercultural sensitivity development could be utilized to understand a cross section of college students’ intercultural sensitivity development. This type of project is warranted because the US is rapidly becoming more culturally diverse, and college students will be working within
increasing diversity throughout their professional lives. These statements are based on the participants in the current study being at least juniors in college, and commenting on how curricular and co-curricular activities beyond their nursing education had impacted their cultural sensitivity development.
References


Groenwald, T.


Intercultural Developmental Inventory, LLC. (n.d.). *What is the Intercultural Developmental Inventory (IDI)?* Retrieved from http://www.idiinventory.com/about.php


Primary* Refugee Arrivals to MN by Region of World 1979-2007


Appendix A: Information and Consent Form

Cultural Sensitivity Development in Baccalaureate Nursing Students
INFORMATION AND CONSENT FORM

Introduction:
You were invited to participate in a research study investigating (state what is being studied). This study is being conducted by Pamela Hamre, a faculty member in the Department of Nursing. This study is being undertaken as the authors doctoral dissertation. You were selected as a possible participant in this research because you were a baccalaureate nursing student. Please read this form and ask questions before you agree to be in the study.

Background Information:
The purpose of this study is to understand the process that nursing students experience as they become more culturally sensitive during their first full semester of clinicals. Approximately 25 people were expected to participate in this research.

Procedures:
If you decide to participate, all participants will complete the Intercultural Development Inventory (IDI) at the beginning and the end of the semester. The IDI is a paper-pencil survey type instrument that looks at intercultural development of individuals. The IDI takes about 20 minutes to complete. All participants will also attend one 1-hour focus group meeting near the end of the semester.
Participants enrolled in NURS3400 the first half of the semester were referred to as Group 1. Group 1 participants will meet with Pamela Hamre to discuss their individual IDI results. This conversation will be taped, and then transcribed. Students will be asked to write one guided written reflection near the end of the semester. Five volunteer participants from Group 1 will be asked to journal on a weekly basis about their thoughts and clinical experiences regarding issues of culture. This study will take approximately two hours over the course of the 14-week semester.

Risks and Benefits of being in the study:
The study has minimal risks. Participants may be uncomfortable with the result of their IDI or in discussing issues of culture in the clinical setting during a focus group meeting.

The benefits to participation were an increased awareness of one’s cultural sensitivity development, a heightened awareness of issues of culture, an anticipated increase in cultural sensitivity development over the course of the semester, and the satisfaction of knowing that participation in this study will help understand an aspect of nursing education that has not been studied in this way.

Compensation:
Compensation is pizza and pop provided for lunch during the focus group meeting.

Confidentiality:
Any information obtained in connection with this research study that can be identified with you will be disclosed only with your permission; your results will be kept confidential. In any written reports or publications, no one will be identified or identifiable.

Students who have the researcher, Pamela Hamre, for the clinical component of 3400 will not in
any way be singled out or acknowledged during clinicals to maintain privacy of participation. Information from the guided written reflection will not be used to either increase or decrease a student’s clinical grade.

The author will keep the research results in a locked file cabinet in office Whitby 9B at the College of St. Catherine in St. Paul, MN where only the author will have access to the records. Data will be analyzed by September 2007. After data analysis of the IDIs is complete, they will be destroyed by shredding. Tapes of IDI explanation meetings and focus groups will be erased once the tape is transcribed. Transcripts and written reflections will have identifying information removed, and will be kept for further educational purposes.

Voluntary nature of the study:
Participation in this research study is voluntary. Your decision whether or not to participate will not affect your future relations with the College of St. Catherine in any way. If you decide to participate, you were free to stop at any time without affecting these relationships. Your grade will not be impacted by a decision to participate, not participate, or withdraw from this study.

Contacts and questions:
If you have any questions, please feel free to contact me, Pamela Hamre at 651-690-6764, or 651-690-6764. You may ask questions now, or if you have any additional questions later. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher(s), you may also contact Dr. John Schmitt, Chair of the College of St. Catherine Institutional Review Board, at (651) 690-7739.

You may keep a copy of this form for your records.

Statement of Consent:
You were making a decision whether or not to participate. Your signature indicates that you have read this information and your questions have been answered. Even after signing this form, please know that you may withdraw from the study at any time.

____________________________________________________________________________
I consent to participate in the study. I agree to be audio taped.

_______________________________________________________________________
Signature of Participant Date

_______________________________________________________________________
Signature of Researcher Date
Appendix B: Certificate of IDI Qualification

April 1999, Portland, Oregon, U.S.A.

International Development Inventory,
For administration and interpretation of the
has completed the Qualifying Seminar.

Pamela S. Harre

This is to certify that

International Development Inventory

Pamela S. Harre
Appendix C: IRB Approval CSC

February 5, 2008

Pam Hamre, RN, CNM, PhD(C)
Associate Professor
The College of St. Catherine
St. Paul, MN 55105

08-N-01 Cultural sensitivity development in baccalaureate nursing students: A mixed
Methods study

Dear Dr. Hamre:

Thank you for submitting your research proposal to the College of St. Catherine Institutional
Review Board (IRB) for review. The primary purpose of the IRB is to safeguard and respect the
rights and welfare of human subjects in scientific research. In addition, IRB review serves to
promote quality research and to protect the researcher, the advisor, and the college.

On behalf of the IRB, I am responding to your request for Exempt level approval to use human
subjects in your research. A member of the CSC IRB has reviewed your application. As a result,
the project is approved as submitted.

If you have any questions, feel free to contact me by phone (X 7739), email
(jsschmitt@stkate.edu), or campus mail (mail stop MPLS). Also, please note that all research
projects are subject to continuing review and approval. You must notify our IRB of any research
changes that will affect your subjects. You should not initiate these changes until you receive
written IRB approval. Also, you should report any adverse events to the IRB. Please use the
reference number listed above in any contact with the IRB.

We appreciate your attention to the appropriate treatment of research subjects. Thank you for
working cooperatively with the IRB; best wishes in your research!

Sincerely,

[Signature]

John Schmitt, PT, PhD
Chair, Institutional Review Board
The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS; OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 0801E24561

Principal Investigator: Pamela Hamre

Title(s):
Intercultural Sensitivity Development of Baccalaureate Nursing Students: A Mixed Methods Study

This e-mail confirmation is your official University of Minnesota RSPP notification of exemption from full committee review. You will not receive a hard copy or letter. This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.

This exemption is valid for three years from the date of this correspondence. You will receive a notification requesting an update after three years, at which time you will have the opportunity to renew your study.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at (612) 626-5654.

You may go to the View Completed section of eResearch Central at http://ersresearch.umn.edu/ to view further details on your study.

The IRB wishes you success with this research.