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**AN ASSESSMENT OF THE INTERCULTURAL  
COMPETENCE OF STUDENT AFFAIRS ADMINISTRATORS**

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**degree in**

**Higher, Adult, and Lifelong  
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AN ASSESSMENT OF THE INTERCULTURAL COMPETENCE OF STUDENT  
AFFAIRS ADMINISTRATORS

By

Amy Franklin-Craft

A DISSERTATION

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## ABSTRACT

### AN ASSESSMENT OF THE INTERCULTURAL COMPETENCE OF STUDENT AFFAIRS ADMINISTRATORS

By

Amy Franklin-Craft

The educational benefits of a diverse student body are clear. However, in order to reap the benefits associated with a diverse student body, campus leaders must create a campus environment that is welcoming and affirming, and fosters cross-cultural interactions. Student affairs professionals are uniquely positioned within the university to be instrumental to this process. To be effective, practitioners must be capable of understanding and interacting competently with diverse groups of students.

Regrettably, while the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to define what it means to be interculturally competent and fewer have developed methods for assessing efforts toward its development among professionals. Accordingly, the purpose of this study is two-fold. This study introduces to the field of student affairs, a new theoretical construct (Cultural Intelligence or CQ) and assessment instrument (Cultural Intelligence Survey) designed to assess intercultural competency. Second, this newer construct and instrumentation are used to address a series of research questions designed to better understand the intercultural competency of a sample of student affairs administrators.

This study examines: 1) the relationships between demographic characteristics and intercultural competency of student affairs practitioners; 2) which and to what degree variables including: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US,

and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners; and 3) whether or not there are relationships between student affairs practitioner self and peer-assessments of intercultural competency.

In spring 2009, 465 student affairs practitioners completed three web-based instruments, the Cultural Intelligence Survey (CQS), developed by Ang, Van Dyne, Koh, and Ng (2004), the Multicultural Competence in Student Affairs-Preliminary 2 Scale (MCSA-P2) (Pope & Mueller, 2000), and a researcher developed Personal Data Form. Of this group, 52 practitioners also submitted the names and contact information of peers and students they believed could assess their intercultural competence. One hundred, eighty-eight individuals completed observer assessments.

Selected study findings: 1) Race and identification with a socially marginalized group were not be related to intercultural competence as assessed by the CQS; 2) Five experience variables, including international travel or living, training and workshop attendance, work place interactions with individuals from identity groups dissimilar to one's own, and workplace conversations about cultural difference accounted for 20% of the variance in intercultural competency; 3) Of the four factors that comprise cultural intelligence, practitioners rated themselves highest in meta-cognitive ability (higher order thought processes) and lowest in cognitive ability (procedural or crystallized knowledge). Finally, practitioner self-assessed intercultural competence was not related to peer assessed intercultural competence. The implications of and recommendations resulting from this research are discussed in detail.

**Dedicated to my husband Steven, and my children, Abagael, Nolan, and Nathaniel Craft**

**“I love you not for what you are, but for what I am when I am with you. I love you not for what you have made of yourself but for what you are making of me. I love you for the part of me that you bring out.” - Elizabeth Barrett Browning**

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I once read that words are a form of action. My hope is that mine are capable of influencing some modicum of change. Ours is an uncertain world, largely due to lack of cultural understanding, disrespect, and oppression. This dissertation is dedicated first and foremost to those individuals who work toward the creation of a different world -- one in which every person is understood, respected, and valued for who they are, not who others want them to be.

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## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>Chapter 1: Framing the Research.....</b>  | <b>1</b>  |
| Concerns Associated with Current Scholarship.....                                  | 5         |
| Definition of Intercultural Competence.....  | 5         |
| Limited and Theoretically Questionable Instrumentation .....                       | 6         |
| Limitations Related to Methodology .....   | 7         |
| Limited and Conflicting Research Findings .....                                    | 7         |
| Educational Impact of a Diverse Student Body and the Role of Student Affairs ..... | 8         |
| The Compete Student Affairs Practitioner.....                                      | 13        |
| Definitions and Assessment of Multicultural Competence .....                       | 15        |
| Conclusion .....   | 17        |
| <b>Chapter 2: Review of the Literature.....</b>                                    | <b>19</b> |
| Multi and Intercultural Competence of Student Affairs Practitioners .....          | 21        |
| King and Baxter Magolda's (2003) Model of Intercultural Maturity.....              | 25        |
| Bennett's (1993) Developmental Model of Intercultural Sensitivity .....            | 27        |
| Deardorff's (2006) Models of Intercultural Competence .....                        | 29        |
| Research About Intercultural Competence Among Student Affairs Practitioners .....  | 33        |
| An Alternative Theoretical Conceptualization of Intercultural Competence .....     | 36        |
| Overview of Conceptual Framework.....  | 37        |
| Cognitive and Meta-cognitive CQ.....   | 37        |
| Motivational CQ .....  | 39        |
| Behavioral CQ .....  | 41        |
| Comparison Across Models.....  | 43        |
| Measurement of Cultural Intelligence .....   | 45        |
| Advantages of the CQ Construct and Instrumentation .....                           | 48        |
| Limitations of Current Research.....   | 49        |
| Conclusion .....   | 51        |
| <b>Chapter 3: Methodology .....</b>  | <b>53</b> |
| Research Design.....   | 54        |
| Cultural Intelligence Survey .....   | 54        |
| Multicultural Competence in Student Affairs – Preliminary 2 Scale .....            | 57        |
| Rationale for the Use of Two Instruments.....                                      | 59        |
| Human Subjects Review and Timeline.....  | 60        |
| Participants and Sampling Techniques .....   | 60        |
| Data Analysis.....   | 73        |
| Conclusion .....   | 74        |
| <b>Chapter 4: Study Results.....</b>   | <b>77</b> |
| Preliminary Analysis.....  | 79        |
| Primary Analysis.....  | 86        |
| Question 1: Demographic Characteristics and Intercultural Competency.....          | 88        |

|  |     |
|--|-----|
| Gender Identity .....  | 88  |
| Race and Ethnicity .....   | 90  |
| Sexual Orientation .....   | 95  |
| Religious Identity.....  | 97  |
| Ability Status .....   | 98  |
| International Status .....   | 100 |
| Interaction of Identity Statuses .....   | 101 |
| Question 1: Summary of Findings .....  | 107 |
| Question 2: Age, Life Experience, and Intercultural Competence .....                   | 107 |
| Correlation Matrices .....   | 109 |
| CQS Sub-Dimensions: Meta-cognition, Cognition, Motivation, and Behavior .....          | 113 |
| Age and Years Worked in Student Affairs .....  | 116 |
| Conversations with Diverse Others and About Difference.....                            | 117 |
| Intercultural Training, and Travel and Living Outside the US....                       | 119 |
| Multiple Linear Regression Analysis: CQS.....  | 121 |
| Set I – Independent Variables not Achieving Significance .....                         | 122 |
| Set II – Independent Variables that Achieved Significance .....                        | 123 |
| Multiple Linear Regression Analysis: MCSA-P2.....                                      | 126 |
| Set I – Independent Variables not Achieving Significance .....                         | 127 |
| Set II – Independent Variables Reaching Achieved Significance .....                    | 128 |
| Question 3: Relationship Between Self and Peer-assessed Cultural Competency .....      | 132 |
| Participant and Observer Descriptive Statistics .....                                  | 132 |
| Composite CQS Score Differences.....   | 134 |
| Meta-cognitive CQS Score Differences.....  | 135 |
| Cognitive CQS Score Differences .....  | 136 |
| Motivational CQS Score Differences .....   | 138 |
| Behavioral CQS Score Differences .....   | 139 |
| Summary of the Relationship Between Participant and Observer Assessed CQS Scores ..... | 141 |
| Chapter Summary .....  | 142 |
| Chapter 5: Discussion, Implications, and Recommendations.....                          | 146 |
| Overview of Study .....  | 148 |
| Discussion of Question 1: Facets of Identity .....                                     | 150 |
| Gender.....  | 150 |
| Race and Ethnicity .....   | 151 |
| Sexual Orientation .....   | 154 |
| Religious Identity.....  | 155 |
| Ability and International Status .....   | 156 |
| Discussion of Question 2: Experience Variables.....                                    | 157 |
| Overview of Experience Variables .....   | 157 |
| Travel and Living Abroad.....  | 160 |
| Training.....  | 161 |

|   |     |
|---|-----|
| Interactions With Culturally Diverse Individuals and<br>Conversations About Cultural Difference ..... | 161 |
| Work Experience .....   | 163 |
| Sub-Dimensions of CQS.....  | 166 |
| Regression Analysis.....  | 169 |
| Discussion of Question 3: Relationship Between Self and Observer CQS                                  |     |
| Scores.....   | 171 |
| Limitations .....   | 173 |
| Implications Related to the CQ Construct and the CQS.....   | 175 |
| Implications Related to the Research Data .....   | 183 |
| Recommendations for Future Research.....  | 187 |
| Summary and Conclusions .....   | 190 |
| Appendices.....   | 192 |
| References.....   | 212 |

## LIST OF TABLES

|          |   |    |
|----------|---|----|
| Table 1  | Characteristics of Multiculturally Competence Student Affairs Practitioners ..... | 24 |
| Table 2  | Comparisons Between Conceptualizations of Intercultural Competency .....          | 43 |
| Table 3  | Gender and Racial and Ethnic Demographics .....                                   | 62 |
| Table 4  | Demographic Profile of Study Participants Compared to ACPA Membership .....       | 65 |
| Table 5  | Type and Size of Employing Institutions and Current Status.....                   | 67 |
| Table 6  | Additional Demographic Information.....   | 70 |
| Table 7  | Time Spent Living Outside the US.....   | 73 |
| Table 8  | Descriptive Statistics: CQS and Four Sub-Dimensions .....                         | 79 |
| Table 9  | Inter-item and Item-to-Total Correlations: CQS and Four Sub-Dimensions .....      | 80 |
| Table 10 | Meta-cognition CQ Inter-Item and Item-to-Total Correlation Matrix.....            | 81 |
| Table 11 | Cognition CQ Inter-Item and Item-to-Total Correlation Matrix .....                | 81 |
| Table 12 | Motivational CQ Inter-Item and Item-to-Total Correlation Matrix.....              | 82 |
| Table 13 | Behavioral CQ Inter-Item and Item-to-Total Correlation Matrix.....                | 82 |
| Table 14 | CQS and MCSA-P2 Model Summary .....   | 86 |
| Table 15 | CQS and MCSA-P2 Coefficients.....   | 86 |
| Table 16 | Descriptive Statistics for CQS Based on Gender.....                               | 89 |
| Table 17 | T-Test for Equality of CQS and MCSA-P2 Mean Scores Based on Gender .....          | 89 |
| Table 18 | Descriptive Statistics of CQS Scores Based on Race and Ethnicity.....             | 90 |
| Table 19 | One-Way ANOVA of CQS Based on Race and Ethnicity .....                            | 91 |

|          |  |     |
|----------|--|-----|
| Table 20 | Descriptive Statistics of MCSA-P2 Scores Based on Race and Ethnicity .....           | 92  |
| Table 21 | One-Way ANOVA of MCSA-P2 Scores Based on Race and Ethnicity .....                    | 93  |
| Table 22 | Descriptive Statistics of CQS and MCSA-P2 Scores Based on Sexual Orientation .....   | 96  |
| Table 23 | T-Test for Equality of CQS and MCSA-P2 Means Based on Sexual Orientation .....       | 96  |
| Table 24 | Descriptive Statistics of CQS and MCSA-P2 Scores Based on Religious Identity .....   | 97  |
| Table 25 | T-Test for Equality of CQS and MCSA-P2 Means based on Religious Identity .....       | 98  |
| Table 26 | Descriptive Statistics of CQS and MCSA-P2 Scores Based on Ability Status .....       | 99  |
| Table 27 | T-Test for Quality of CQS and MCSA-P2 Means Based on Ability Status.....             | 99  |
| Table 28 | Descriptive Statistics of CQS and MCSA-P2 Scores Based on International Status ..... | 100 |
| Table 29 | T-Test for Equality of CQS and MCSA-P2 Means Based on International Status .....     | 101 |
| Table 30 | Descriptive Statistics of CQS by Gender and Race and Ethnicity .....                 | 102 |
| Table 31 | Between-Subject Effects: CQS by Gender, Race and Ethnicity .....                     | 103 |
| Table 32 | Descriptive Statistics of MCSA-P2 by Gender and Race and Ethnicity .....             | 104 |
| Table 33 | Between-Subject Effects: MCSA-P2 by Gender, Race, and Ethnicity .....                | 106 |
| Table 34 | Independent Variables Used in Correlation and Regression Analyses .....              | 109 |
| Table 35 | Relationship of Demographic Variables to MCSA-P2 and CQS .....                       | 110 |
| Table 36 | CQS Sub-Dimension and Independent Variable Descriptive                               |     |

|          |  |     |
|----------|--|-----|
|          | Statistics .....   | 115 |
| Table 37 | CQS Sub-Dimension Correlation Analysis: Age and Years Worked in Student Affairs .....          | 116 |
| Table 38 | CQS Sub-Dimension Correlation Analysis: Conversations About Difference .....                   | 118 |
| Table 39 | CQS Sub-Dimension Correlation Analysis: Training, Travel, and Living .....                     | 119 |
| Table 40 | CQS Multiple Linear Regression Model Summary: Variables Not Achieving Significance .....       | 122 |
| Table 41 | CQS Multiple Linear Regression Coefficients: Variables Not Achieving Significance .....        | 123 |
| Table 42 | CQS Descriptive Statistics: Variables Achieving Significance .....                             | 124 |
| Table 43 | CQS Multiple Linear Regression – Model Summary: Variables Achieving Significance .....         | 125 |
| Table 44 | CQS Multiple Linear Regression - Coefficients: Variables Achieving Significance .....          | 126 |
| Table 45 | MCSA-P2 Multiple Linear Regression – Model Summary: Variables Not Achieving Significance ..... | 127 |
| Table 46 | MCSA-P2 Multiple Linear Regression - Coefficients: Variables Not Achieving Significance.....   | 128 |
| Table 47 | Descriptive Statistics: Variables Achieving Significance .....                                 | 129 |
| Table 48 | MCSA-P2 Multiple Linear Regression – Model Summary: Variables Achieving Significance .....     | 130 |
| Table 49 | MCSA-P2 Multiple Linear Regression - Coefficients: Variables Achieving Significance .....      | 131 |
| Table 50 | Participant and Observer CQS and CQS Sub-dimension Descriptive Statistics .....                | 133 |
| Table 51 | CQS Participant and Observer CQS Descriptive Statistics .....                                  | 134 |
| Table 52 | Paired Samples T-test: Observer and Participant CQS .....                                      | 134 |

|          |  |     |
|----------|--|-----|
| Table 53 | CQS Participant and Observer Paired Samples Correlations .....                     | 135 |
| Table 54 | Participant and Observer Meta-cognitive CQS Descriptive Statistics ....            | 135 |
| Table 55 | Paired Samples T-test: Participant and Observer Meta-Cognitive<br>CQS Scores ..... | 136 |
| Table 56 | Participant and Observer Meta-cognitive CQS Paired Samples<br>Correlations .....   | 136 |
| Table 57 | Participant and Observer Cognitive CQS Descriptive Statistics .....                | 137 |
| Table 58 | Paired Samples T-test: Participant and Observer Cognitive CQS .....                | 137 |
| Table 59 | Participant and Observer Cognitive CQS Paired Samples<br>Correlations .....        | 138 |
| Table 60 | Participant and Observer Motivational CQS Descriptive Statistics .....             | 138 |
| Table 61 | Paired Samples T-test: Participant and Observer Motivational CQS .....             | 139 |
| Table 62 | Participant and Observer Motivational CQS Paired Samples<br>Correlations .....     | 139 |
| Table 63 | Participant and Observer Behavioral CQS Descriptive Statistics .....               | 140 |
| Table 64 | Paired Samples T-test: Participant and Observer Behavioral CQS .....               | 140 |
| Table 65 | Participant and Observer Behavioral CQS Paired Samples<br>Correlations .....       | 141 |

## LIST OF FIGURES

|          |  |    |
|----------|--|----|
| Figure 1 | The Dynamic Model of Student Affairs Competencies .....                    | 22 |
| Figure 2 | Pyramid Model of Intercultural Competence .....                            | 30 |
| Figure 3 | Deardorff's (2009) Process Model of Intercultural Competence .....         | 32 |
| Figure 4 | Earley and Ang's (2003) Model of Cultural Intelligence .....               | 38 |
| Figure 5 | CQS Distribution .....   | 84 |
| Figure 6 | MCSA-P2 Distribution .....   | 85 |
| Figure 7 | Differences in CQS and MCSA-P2 Means Scores By Race<br>and Ethnicity ..... | 97 |

## **Chapter 1: Framing the Research Questions**

Individuals culturally and ethnically different from the White majority currently comprise 30% of the overall population (U.S. Census Bureau, 2008). This population is expected to increase to 54% by 2050 (U.S. Census Bureau, 2008). Following national demographic trends, the face of higher education has also changed. According to the National Center for Educational Statistics (2006), between 1976 and 2004 minority student enrollment at U.S. colleges and universities doubled from 15% to 30%; and it is projected that by 2016, enrollments will increase by an average of 35%, nearly four times that of White undergraduate students (Hussar & Bailey, 2007). Adding to the cultural diversity of the higher education landscape, the number of international students studying in the United States has also increased dramatically. In 2004, the percent of non-resident aliens studying in the United States was just 3% of all students (National Center for Education Statistics, 2006). This percentage is projected to grow to 15% by 2016 (Hussar & Bailey, 2007). Collectively, these statistics suggest that by 2016, as much as 39% of the students enrolled at U.S. colleges and universities will be racially and ethnically different from the domestic White majority (Hussar & Bailey, 2007).

The educational benefits of a diverse student body are well documented. For example, a racially and ethnically diverse campus environment enhances intellectual and social development (Chang, 2000; Gurin, Dey, Hurtado, & Gurin, 2002; Pike & Kuh, 2006), as well as openness and commitment to racial understanding (Astin, 1993; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). However, in order to reap the benefits associated with a more diverse student body, institutions must attend not only to the racial composition of the student body but also the campus culture and climate that

affect both students lives and the nature of their relationships (Chang, 2007; Harper & Antonio, 2008; Milem, Chang, & Antonio, 2005). Specifically, as indicated by Chang (2007), the creation of an ideal campus climate, capable of fostering the types of cross-cultural interactions that enhance learning, is inextricably linked to the establishment of a non-racist environment. The cultivation of this sort of environment requires altering patterns of exclusion by attending to both structural inequities, and psychological paradigms and behaviors of majority faculty, administrators, and students (Chang, 2007).

Though current scholarship suggests that campus diversity strongly contributes to students' educational experiences and learning, creating a socially integrated and welcoming campus climate is complex (Chang, 2007). On many college campuses, paradoxical relationships exist. Specifically, relatively high levels of interracial contact often exist in environments characterized by strong segregation and racial tension (Harper & Antonio, 2008). Further, though students express a strong desire to learn about others, because they lack exposure to individuals dissimilar to themselves, they find social interactions difficult to initiate and maintain (Harper & Antonio, 2008).

There are campus units whose historical role has included attempting to influence the social climate and interaction students' experience. These units are collectively termed 'student affairs.' For the purpose of this dissertation, the term 'student affairs' is used to describe those offices or units within a college or university setting primarily responsible for the out-of-class experience and learning of students. Student affairs' functional areas often include financial aid, residence life and housing, counseling, student orientation, student activities, and student conduct. Professionals comprising the various student affairs offices draw upon a number of skills in the performance of their

unique roles. These include: advising, assessment and research, budgeting, conflict management, counseling, program planning, and supervision (Barr, Desler, & Associates, 2000; Mueller, 1999; Pope, Reynolds, & Mueller, 2004). Student affairs professionals are positioned within the university to have a broad ranging influence on both student development and the student experience (Gordon & Bronner, 1998; Manning & Coleman-Boatwright, 1991). Their daily interactions with students create the opportunity to lead in the development of welcoming and supportive campus climates (Castellanos, Gloria, Mayorga, & Salas, 2007; Gordon & Bonner, 1998; Harper & Antonio, 2008; Pope, 1993).

Student affairs practitioners have long espoused a commitment to student learning and engagement as well as to fostering inclusive campus environments (Harper & Antonio, 2008; Harper & Patton, 2007). The role of the student affairs practitioner is to attend to the out-of-class needs of students, promote meaningful interactions among students, and help students develop to their fullest potential (Castellanos, et al., 2007; Howard-Hamilton, Phelps, & Torres, 1998; McEwen & Roper, 1994; Pope, Reynolds, & Mueller, 2004). These goals are not fully attainable however unless practitioners are capable of understanding and can interact competently with diverse groups of students (Castellanos, et al., 2007; Howard-Hamilton, et al., 1998; Jenkins, & Walton, 2008; King & Howard Hamilton, 2003; Talbot, 1996).

The recognition that student affairs practitioners must be capable of effectively working with diverse groups of students has led to the identification of a problem. While the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to define what it means to be interculturally

competent (Castellanos, et al., 2007; Deardorff, 2006; King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004) and fewer have designated methods for assessing efforts toward its development among professionals (Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003). The purpose of this study is to address these two issues. This dissertation will: (a) introduce a new theoretical construct and assessment instrument designed to assess intercultural competency, and (b) utilize this newer construct and instrumentation to address a series of research questions designed to be better understand the intercultural competency of a sample of student affairs administrators.

The questions I address are:

1) Are there relationships between demographic characteristics (gender identification, age, race and ethnicity, religious identity, sexual orientation, ability status, and international status) and intercultural competency of student affairs practitioners?

2) Which and to what degree do variables: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US, and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners?

3) Are student affairs practitioner self and peer-assessments of intercultural competency related?

Chapter 1 is organized into three segments. In the first section, I briefly highlight the primary focus of this research, namely, concerns with current scholarship regarding assessment of intercultural competence of student affairs administrators. In the second, I

outline the importance of addressing the problems associated with intercultural competency research by highlighting the educational impact of changing demographics in higher education and discussing the role and function of student affairs in creating supportive and hospitable campus environments. Finally, I use the third section to discuss the importance of assessment in development of a fully competent student affairs practitioner and define the construct of the study: intercultural competence.

### **Concerns Associated with Current Scholarship**

The four central concerns with current scholarship regarding the intercultural competence of student affairs practitioners relate to: 1) the definition of intercultural competence, 2) the instrumentation designed to assess competence, 3) limitations with methodology used in research, and 4) conflicting research findings. While more fully discussed in chapter 2, I will briefly highlight each of these issues in subsequent paragraphs.

#### **The Definition of Intercultural Competence.**

Growing cultural diversity within US society has led to heightened expectations for greater understanding, sensitivity, and competency in the work place and within educational settings (Gurin, et al., 2002; King & Baxter-Magolda, 2005). Yet, as argued by scholars including Castellanos, et al. (2007), Deardorff (2006), and Pope and Mueller, (2000) how intercultural competency has been understood and defined, let alone measured, has remained illusive. Further, the definitions of competency within student affairs that have been developed have focused primarily on domestic diversity, particularly race and ethnicity (multicultural competence) (King & Baxter-Magolda, 2005). These definitions have taken an emic, or culturally specific perspective, as

opposed to a broader etic perspective appropriate for addressing competency to effectively negotiate both domestic and international diversity (intercultural competence). Because it is difficult to develop competencies unless there is clarity regarding how they are defined and because the definition cannot be ascribed until there is clarity about attributes, it is necessary to devote energies to understanding how scholars have characterized the attributes that comprise an interculturally competent practitioner. Only then can an appropriate assessment instrument based upon the theoretical construct be sought or developed.

### **Limited and Theoretically Questionable Instrumentation.**

While creating more inclusive environments and enhancing learning outcomes among students are compelling reasons for interest in assessment of intercultural competence among student affairs practitioners, current instrumentation is limited and theoretically flawed (King & Howard-Hamilton, 2003; Pope & Mueller, 2000). Few instruments capable of assessing intercultural competencies have been introduced (Pope, Reynolds & Mueller, 2004), and those that have been are based exclusively on the Pope and Reynolds (1997) tripartite model of multicultural competence, a construct that arguably is missing its theoretical mark. Among other problems, critics of the current tripartite model of multicultural competence argue that the theory is remiss by not addressing the developmental aspects of competency and the instrumentation is overly reliant upon assessment of attitudes as a proxy to competence (King & Baxter-Magolda, 2005).

### **Limitations Related to Methodology.**

A third problem within current scholarship regarding intercultural competence in student affairs rests with the research methodology. Without exception, all of the research conducted with student affairs professions has utilized self-report methodological procedures. Because individuals are at times unwilling or unable to adequately assess their own knowledge, skills, and abilities, the validity of self-report measures is dubious (Aronson, Ellsworth, Carlsmith, & Gonzalez, 1990). As pointed out by Castellanos, et al. (2007), there may be reason to believe, given the cultural importance placed on multiculturalism within student affairs, that participants may respond in what they believed to be socially desirable ways. In addition, absent of established criteria, participants are forced to rely on their own judgment in establishing the standards against which they evaluate their abilities (King & Howard-Hamilton, 2003).

### **Limited and Conflicting Research Findings.**

There is a paucity of research regarding intercultural competence of student affairs administrators (Castellanos, et al., 2007; King, & Howard Hamilton, 2003; Marina, 2003; Martin, 2005; Mastrodicasa, 2004; Miklitsch, 2005; Mueller, & Pope, 2001; Pope, & Mueller, 2000, 2005; Weigand, 2005). Because research is limited, the role of variables including years of professional service, functional work area, frequency of travel outside the use, direct work experience with diverse others, and conversations about issues of diversity have not been convincingly vetted. Further, questions have emerged regarding one of the more constantly examined relationships, specifically, between demographic variables and intercultural competence. Here, research outcomes,

particularly those regarding the relationship between marginalized status and intercultural competence have been conflicted (Castellanos, et al., 2007).

### **Educational Impact of a Diverse Student Body and the Role of Student Affairs**

While concerns about current scholarship regarding intercultural competence in student affairs are provocative, the importance of this research extends beyond the primary focus on definitions, constructs, instrumentation, and assessment. The potential impact of the practitioner on the experiences and learning outcomes of students serves to undergird the importance of this research. Therefore, in subsequent paragraphs, I highlight the importance of this research as it relates to the student experience. Before proceeding however, I think it is important to note that the focus on practitioners is not meant to imply that they are the sole arbiters of the student experience; faculty and peers also play significant roles. While practitioners arguably do play an important role in student learning and engagement (Keeling, 2004), the degree to which they uniquely impact the student experience has not and likely cannot be teased out. Further, I write from the perspective that practitioners have a desire to engage in the type of self assessment and learning necessary to enhance their ability to competently work with diverse groups of students and positively shape inclusive environments.

A large body of empirical research supports the assertion that increasing the diversity of college campuses enhances their educational mission by broadening students' perspectives, contributing to students' cognitive and social development, and furthering students' potential as responsible and contributing citizens and future leaders (Harper & Hurtado, 2007; Milem, et al., 2005). In recognition of the educational as well as potential societal gains associated with diverse learning environments, the Association of

American Colleges and Universities (AAC&U) defined social responsibility, global knowledge and engagement, and intercultural competence as compelling educational and institutional priorities (McTighe Musil, 2006). To this end, it is imperative that not only are university personnel seeking to develop intercultural competence among students, but that they themselves are capable of working effectively with students who represent a broad array of cultural diversity, both domestic as well as international.

Despite the learning outcomes associated with a diverse student body, it is the level of student engagement and involvement that largely determines the degree of cognitive and social development of students (Milem, et al., 2005). Further, the greatest development occurs when a supportive and mutually reinforcing campus culture and climate exist (Milem, et al., 2005). Institutional cultures are formed as a result of a confluence of history, human participation, and institutional traditions (Kuh & Whitt, 1988). A dilemma on American college campuses relates to whose traditions, experiences, and ways of knowing are embraced. In 1991, Manning and Coleman-Boatwright brought this issue to the forefront arguing that majority assumptions and cultural values are rarely questioned and as a result, the fact that many cultures do exist on campuses is concealed. Citing Katz (1989), Manning and Coleman-Boatwright explained that White culture, with its Eurocentric origins, is defined by a number of values including: rugged individualism, competition, an action orientation, a specific communication, time, and historical orientation, an emphasis on scientific method, and a future orientation. They argued that the prevalence of these values within the environment impacts how students whose cultural values are not in alignment experience the culture. Majority values become the norm or standard by which behaviors are shaped

and judged. Those not ascribing to these values are considered deviant or abnormal, or are otherwise marginalized (Davis, et al., 2004a; Katz, 1989; Tierney, 1992). Feelings of alienation, isolation, and invisibility are common reactions experienced by marginalized students (Davis, et al., 2004a; Davis, 2004b; Harper & Hurtado, 2007; Schwitzer, 1999). Because practitioners play a role in impacting the institutional culture and by extension the student experience (Harper & Hurtado, 2007; Keeling, 2004), it is critical that they are aware of, understand, and competently work with historically marginalized students. If they cannot, the social experience, educational gains, and persistence of these students is in jeopardy (Ancis, Sedlacek, & Mohr, 2000; Berger & Milem, 1999). Further, without recognition of the possibility that multiple cultural values exist, practitioners may continue to perpetuate the dominant culture and as a result, any benefits associated with their efforts to broaden students' world-views is diminished (Katz, 1989; Harper & Antonio, 2008; Harper & Hurtado, 2007).

There is also a large body of evidence suggesting that in addition to differences in culture, there are also differential perceptions of the campus climate based upon race and ethnicity with non-White students reporting the experience of more prejudicial treatment (Harper & Hurtado, 2007). Researchers including Ancis, et al. (2000), Bonazzo and Wong (2007), D'Augelli and Hershberger (1993), and Rankin and Reason (2005), point out that domestic as well as international students of color are far more likely to perceive campus climates as racist and inhospitable than are White students. The combined weight of the institutional culture and climate that leads to feelings of isolation, alienation, and perceptions of prejudice often results in diminished satisfaction with the educational experience (Ancis, et al., 2000; Cabrera & Nora, 1994; Hurtado, 1992;

Suarez-Balcezar et al, 2003). This climate, in turn, impacts the students' institutional involvement (Bonazzo & Wong, 2007) as well as commitment (Cabrera, et al., 1999). Theories of student attrition have long posited that reduced involvement and institutional commitment go hand in hand with diminished persistence (Tinto, 1993). Thus, issues relating to institutional culture and climate are two factors impacting at minimum the educational experiences if not persistence rates of students of color.

The most recent data from the National Center for Educational Statistics indicates that with the exception of Asian/Pacific Islander and Non-resident alien students, graduation rates of undergraduate minority students in the 1998 and 2001 cohorts were well below those of White students (Knapp, Kelly-Reid, & Whitmore, 2006). Specifically, graduation rates of students identified as Black/Non-Hispanic (39.7%), Hispanic (45.8%), and American Indian/Alaskan Native (36.5%) were 18.5%, 12.4%, and 21.7% respectively below that of White (58.2%) students. These percentages are in alignment with research regarding those student populations most impacted by the institutional culture and climate and lends support to the assertion that there is a relationship between institutional climate and persistence among students of color (Ancis, et al., 2000). While student affairs professionals are not solely responsible for the development of campus climate, they do play a significant role.

While persistence among international students mirrors that of domestic majority students, one should not assume that as a group international students adjust well and are problem-free. Specifically, while both domestic and international students studying in the United States face common adjustment problems including academic pressure, social adjustment issues, and interpersonal conflict, international students often experience

these more profoundly (Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002). For example, Rajapaksa and Dundes (2002), report that both domestic and international students have generally high levels of adjustment. They add, however, domestic students are nearly 20% more likely to report general contentment and adjustment than are international students. Contributing to disparities in adjustment, international students: report difficulties establishing friendship networks upon arrival to college (Terkla, Roscoe, & Etish-Andrews, 2005), are twice as likely as domestic students to report feeling lonely, and are 21% more likely than domestic students to report feeling homesick (Rajapaksa & Dundes, 2002). Further, a full 46% of international students reported feeling as if they had to conceal parts of their identity in order to fit into the U.S. campus culture (Rajapaksa & Dundes, 2002).

Similar to outcome gains associated with domestic diversity, there are many benefits associated with cross-cultural interactions (Hechanova-Alampay, et al., 2005). These include diffusion of knowledge among cultures, a broadening of cultural perspectives, reductions in ethnocentrism, intolerance and stereotypes, and increased cognitive complexity, personal awareness, and confidence (Church, 1982). However, similar to domestically diverse students, international students also experience feelings of isolation and marginalization that impact the potential benefits associated with cross-cultural interactions (Hechanova-Alampay, et al., 2005). Because relationships with peers, faculty and administrators are as important to student success as is individual effort (Seifert, Drummond, & Pascarella, 2006; Watson & Kuh, 1996) and because student affairs professionals have a role in positively shaping the campus climate and institutional *policies* (Harper & Antonio, 2008; Howard-Hamilton, 2000; Jones, Castellanos, & Cole,

2002; Pope, Reynolds, & Muller, 2004), providing individual support and advisement (Ancis, et al., 2000; Manning & Coleman-Boatwrite, 1991), and attempting to increase the cultural competency of students (St. Clair, 2007) they are in a unique position to help ensure student success. However, the degree to which they will be successful in their role is dependant upon both a desire and ability to form positive relationships and interact effectively with students (Castellanos, et al., 2007; Pope, Reynolds, & Mueller, 2004; Pope & Reynolds, 1997). A student affairs professional with a well-developed understanding of the experiences and perceptions of underrepresented students is in a much better position not only to intervene directly with students but also to contribute to the development of a culturally relevant and effective programmatic plan (Ancis, et al., 2000; Castellanos, et al., 2007; Howard-Hamilton, Phelps, & Torres, 1998; Jenkins & Walton, 2008; King & Howard Hamilton, 2003; Reynolds & Pope, 1997; Talbot, 1996; Pope, et al., 2004).

### **The Competent Student Affairs Practitioner**

The increased percentage of domestic racial minorities as well as international students on U.S. college and university campuses has not been reflected in a parallel shift in the composition of student affairs administrators. Not only are professionals emanating from student affairs preparatory programs racially and ethnically less diverse than the student population with whom they work, they also lack knowledge about needs, developmental issues, histories, and unique contributions of diverse groups (King & Howard-Hamilton, 2003; Talbot, 1996). In addition, they self report a lack of understanding and skill in how to work with students from diverse backgrounds and fear

participating in opportunities that might broaden their understanding of diverse students (King & Howard-Hamilton, 2003; Talbot, 1998).

Senior student affairs administrators identified the ability to work with diverse student populations as one of the most critical yet, within preparatory programs, often overlooked skills for successful student affairs practice (Herdlein, 2004). As a result, student affairs preparatory programs are expected to ensure that future administrators are well prepared to deal with the academic, developmental, and social needs of rapidly diversifying student populations (Pope & Mueller, 2005). Yet, programs continue to struggle with identifying the most appropriate method to ensure tomorrow's student affairs professionals have the capacity to successfully work in the rapidly diversifying workplace (Gayles & Kelly, 2007).

While scholars including Gayles and Kelly (2007) recommend that programs assess their course offerings and methods of infusion, they also point out that inclusion of topics related to diversity and multiculturalism needs to be done with some caution, taking into account the developmental readiness of the students. Implicit in this recommendation is assessment of developmental preparedness of students. However, while many student affairs preparatory programs require, whether through individual courses or embedded into the curriculum, multicultural leaning experiences, little is known about how well these courses prepare students to apply their knowledge to practice (McEwen & Roper, 1994). Assessment, both prior to and after completion of coursework would be one way to evaluate the success of programs in the development of interculturally competent practitioners.

## **Definitions and Assessment of Multicultural Competence**

Student affairs scholars use a tripartite model of multicultural competence developed originally within the field of counseling psychology (Sue, et al., 1982) and adapted for use in student affairs in 1997 by Pope and Reynolds. Using this model, a shorthand definition of multicultural competence is “the awareness, knowledge, and skills needed to work with others who are culturally different from self in meaningful, relevant and productive ways” (Pope, Reynolds, & Mueller, 2004, p.13). More specifically, according to Pope, et al. (2004) awareness includes those values, attitudes, and assumptions essential to working with diverse others. Knowledge consists of content knowledge of diverse cultures and world-views, often overlooked in the educational systems and in student affairs preparation programs. Finally, skills are comprised of those behaviors that afford a practitioner the ability, primarily through verbal and non-verbal communication, to apply awareness and knowledge. The tripartite model, though not without merit, has been critically evaluated for omitting the developmental aspects of intercultural competency (King & Baxter-Magolda, 2005).

Models of intercultural competency are similar to the model of multicultural competency in that both include knowledge, awareness, and behavioral dimensions (Bennet & Bennet, 2004; Early & Ang, 2003; Deardorff, 2006; King & Baxter-Magolda, 2005; Pope & Reynolds, 1997). However, models of intercultural competency also focus on the role of one’s own identity and cognitive development as a mediator of competence (Bennet & Bennet, 2004; Deardorff, 2006; Early & Ang, 2003; King & Baxter-Magolda, 2005). This definition includes the attribute that arguably has been omitted within the tripartite model commonly used in student affairs literature, namely meta-cognitive

ability (Deardorff, 2006; King & Baxter-Magolda, 2005). Meta-cognitive ability can be thought of as a developmental task resulting in the capacity to empathize and experiment with different cultural lenses resulting in the movement from ethno-centrism to ethno-relativism (Kasl & Elias, 2000). The individual who has developed to a level of ethno-relativism is able to relate and communicate with people of other cultures and more fully able to integrate disparate parts of his or her own identity.

King and Baxter-Magolda (2005) argued that the theoretical model of multicultural competence currently used in student affairs literature relies heavily on assessment of attitude as a proxy for competence, ignoring the meta-cognitive dimension that affords individuals the ability to integrate knowledge, skills, and awareness to think and respond in developmentally complex and relativistic ways. Drawing upon Landreman's (2003) comprehensive integration of the literature regarding intercultural competence, King and Baxter-Magolda (2005) argued that application is omitted. Specifically, they argued that achieving competence requires an understanding of self and identity (intrapersonal) within a socio-cultural-political context (interpersonal) leading to critical reflection and motivating action.

Melding the multiple attributes defined in the literature, from this point forth, I will define an interculturally competent individual as one who has the following attributes: 1) **requisite attitudes and motivation**: awareness of, openness to, and value for learning about cultural difference and ability to not only tolerate ambiguity but also withhold judgment about cultural differences (Bennett, 1993; Castellanos, et al., 2007; Earley & Ang, 2003; King & Baxter-Magolda, 2005; King & Howard Hamilton, 2003; Pope & Reynolds, 1997; Pope, et al., 2004); 2) **declarative knowledge**: specific

knowledge about diverse cultures including socio-linguistic differences (Bennett, 1993; Castellanos, et al., 2007; Earley & Ang, 2003; King & Baxter-Magolda, 2005; King & Howard Hamilton, 2003; Pope & Reynolds, 1997; Pope, et al., 2004); 3) **behaviors:** ability to listen, observe, interpret, analyze, evaluate, and then effectively apply knowledge to communication with diverse others (Bennett, 1993; Castellanos, et al., 2007; Earley & Ang, 2003; King & Baxter-Magolda, 2005; King & Howard Hamilton, 2003; Pope & Reynolds, 1997; Pope, et al., 2004); and 4) **metacognitive capabilities:** cultural awareness and deep understanding and knowledge about diverse cultures and oppressed groups (including contexts, roles, and impact of culture on world-views) (Bennett, 1993; Earley & Ang, 2003; King & Baxter-Magolda, 2005).

## **Conclusion**

Research led me to the conclusion that a culturally competent student affairs practitioner has the ability and responsibility to positively shape the educational, social, and developmental trajectory of students (Castellanos, et al., 2007; Howard-Hamilton, et al., 1998; McEwen & Talbot, 1998; Pope & Mueller, 2004), thus influencing educational gains (Antonio, 2001, Astin, 1993, Gurin, et al., 2002; Gurin, et al., 2004), the ways campus is experienced (Ancis, et al., 2000; Milem, et al., 2005; Manning & Coleman-Boatwright 1991; Harper & Antonio, 2008), and persistence (Astin, 1984; Tinto, 1993). However, literature also indicates that in order to realize any of these gains, the practitioner must be able to interact effectively with a wide array of students from a multitude of backgrounds representing both domestic as well as international cultures (Ancis, et al., 2000; Ebberts & Henry, 1990; Harper & Antonio, 2008) and that it is critical that preparatory programs are able to assess current levels of competency so as to

better match a developmental program to the students' current capacities (Deardorff, 2006; Gayles & Kelly, 2007). Scholars also documented practical issues associated with the current scholarship on multicultural competency that must be addressed in order for student affairs as a profession to better meet the needs of students. These issues include how competence is defined (Bennet & Bennet, 2004; Deardorff, 2006; King & Baxter-Magolda, 2005; Pope & Reynolds, 1997), assessed (Gayles & Kelly, 2007; McEwen & Roper, 1994), and enhanced (King & Howard-Hamilton, 2003; Pope & Mueller, 2005; Talbot, 1996).

In chapter two, I chronicle the evolution of student affairs core competencies including the addition and infusion of what has been termed "multicultural competency." I then discuss the theoretical lenses and research used to conceptualize and study multicultural competency among student affairs practitioners. Once these areas have been discussed, I introduce a new theoretical construct and assessment instrument designed to assess cultural competency. In subsequent chapters, I use the newer instrumentation to assess the intercultural competency of a sample of student affairs practitioners. Further, I will investigate the congruency between self and peer-assessed perceptions of intercultural competency among a subset of the sampled student affairs professionals.

## **Chapter 2: Review of Literature**

As indicated in chapter 1, students attending US colleges and universities today are more diverse from those attending 50 years ago. Historical events including the Civil Rights movement, coupled with legislative and legal actions including the introduction of the G.I. Bill, Brown vs. the Board of Education, Affirmative Action, and Regents of the University of California vs. Bakke led to a national understanding of the limited numbers of diverse students attending US higher education institutions (St. Clair, 2007). In order to amend this problem, US higher education began and arguably continues to increase efforts to extend admittance beyond the youth of White, middle, and upper class families to include students diverse in culture, race, gender, age, sexual orientation, and ability. Recruitment and retention of these students has become an essential role of student affairs administrators (Jenkins, 1999; Stage & Manning, 1992; Strange & Alston, 1998).

Over a relatively short period of time, research on the educational outcomes associated with rapidly diversifying college environments began to proliferate. The value and benefit of encouraging a broad array of students from a variety of cultural, ethnic, and racial backgrounds has been demonstrated. Scholars have indicated that interactions with diverse others: enhances intellectual development (Pike & Kuh, 2006), leads to students' openness and willingness to challenge their own beliefs (Pascarella et al., 1996; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001), promotes both racial understanding (Astin, 1993; Milem, 1994) and civic engagement (Gurin et al., 2002), and enhances leadership development, cultural knowledge (Antonio, 2001; Hurtado, 2001), and multicultural competencies (Hu & Kuh, 2003).

It is clear that promoting intercultural awareness and competency development has become an imperative for colleges and universities (Association of American Colleges and Universities, 2007; Harper & Antonio 2008). Student affairs educators play an important role in the advancement of the multicultural agenda by (a) creating welcoming and supportive campus policies, programs, and services (Howard Hamilton, 2000; Jones, Castellanos, & Cole, 2002; Pope, Reynolds, & Mueller, 2004; Talbot, 2003) and (b) attempting to increase the cultural competency of students (St. Clair, 2007). In order to fulfill their role however, scholars argue that student affairs professionals must possess key intercultural competencies (Castellanos, et al., 2007; Howard-Hamilton, Phelps, & Torres, 1998; Jenkins & Walton, 2008; King & Howard Hamilton, 2003; Reynolds & Pope, 1997; Talbot, 1996). The problem is that while its importance has been well documented, the scholarship has yet to provide a consistent definition of intercultural competence (Castellanos, et al., 2007; Deardorff, 2006; King, & Howard-Hamilton 2003; Pope, et al., 2004), and has not produced adequate methods for assessing efforts toward its development among professionals (Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003).

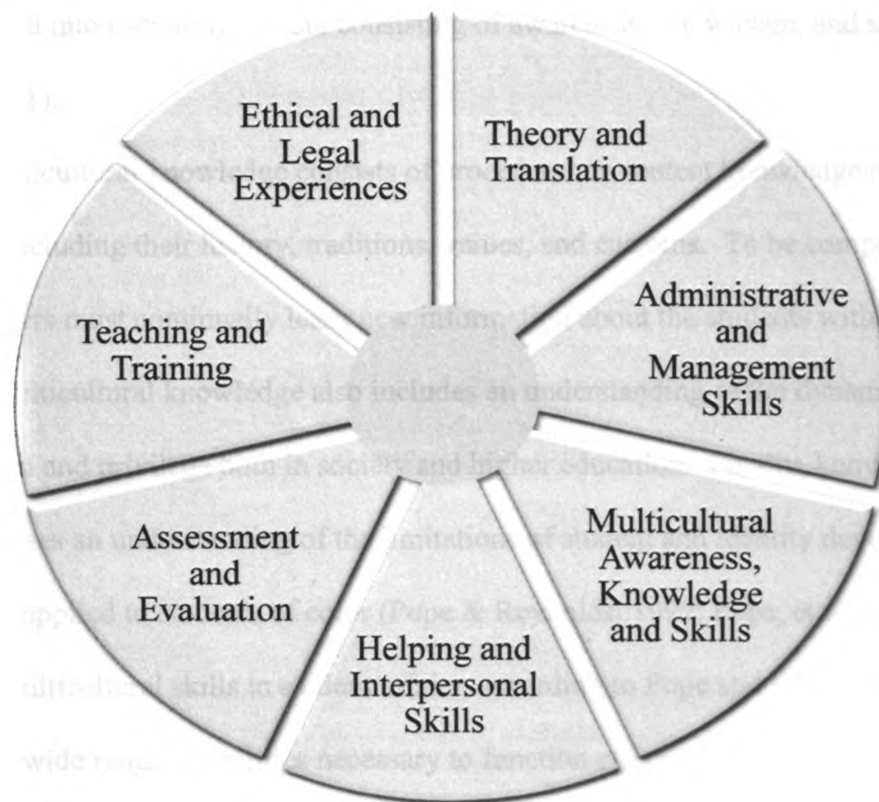
In this chapter, I contextualize the bodies of literature that inform intercultural competence in student affairs. I begin by discussing the theoretical lenses used to conceptualize both multicultural and intercultural competence among student affairs practitioners. I then highlight research conducted using these conceptualizations and introduce a new theoretical construct and assessment measure that has the potential to contribute greatly to the scholarship regarding intercultural competency. Finally, I will review the research based upon this new construct.

## **Multi and Intercultural Competence of Student Affairs Practitioners**

Scholarship identifying core competencies for student affairs practitioners has grown over time with significant contributions by Delworth and Hanson (1989), Barr (2000), and Creamer, et al. (2001). Scholars have increasingly argued that conceptualizations of competence should include multicultural awareness, skills, and knowledge (Ebbers & Henry, 1990, King & Howard-Hamilton, 2001; McEwen & Roper, 1997; Pope & Reynolds, 1997). Accordingly, in what has proven itself to be a groundbreaking expansion of the then widely accepted core competencies, Pope and Reynolds (1997) proposed a new model of student affairs competencies that includes multicultural competence. Building upon previous scholarship, this newer model is comprised of the following core elements: (a) administrative and management skills (supervision, budgeting, and planning), (b) theory and translation (ability to apply theory to practice), (c) ethical and legal experience (decision making, upholding ethical standards), (d) teaching and training (consulting, presenting, and facilitating training), (e) assessment and evaluation (program evaluation, policy analysis, and research); (f) helping and interpersonal skills (counseling, advising, and conflict resolution/mediation), and (g) multicultural competence (knowledge, skills, and awareness). In 2008, the governing board of the American College Personnel Association re-examined the competency areas. Though these have not been applied to the Pope and Reynolds model, the student affairs core competencies have been reaffirmed. These, parenthetically aligned with the Pope and Reynolds' elements, include: (a) Leadership and administration/management (administrative and management skills), (b) Student learning and development (theory and translation), (c) Ethics and legal foundations (Ethical and

legal experiences), (d) Teaching (teaching and training), (e) Assessment, evaluation and research (assessment and evaluation), (f) Advising and helping (helping and interpersonal skills), (g) Pluralism and inclusion (multicultural competence) (American College Personnel Association, 2008). The model developed by Pope and Reynolds (1997) assumes that in order to be effective in practice, all student affairs practitioners should have some level of basic competency in each of the seven areas as seen in Figure 1. Dissimilar to prior conceptions of core student affairs competencies, Pope and Reynolds (1997) argued that it is not acceptable to marginalize multicultural competence by relegating it to one or a small group of specially trained individuals. Instead, they contended that not only should multicultural competence be afforded equal status as one

Figure 1. The Dynamic Model of Student Affairs Competencies



Adapted from "Student affairs core competencies: Integrating multicultural awareness, knowledge and skills," by R.L. Pope and A.L. Reynolds, 1997, *Journal of College Student Development*, 38, p. 269.

of the seven competencies, but also that *all* student affairs practitioners should have a fundamental level of awareness, knowledge, and skills with regard to multiculturalism. As is suggested by the open area at the center, this model posits that there is a dynamic relationship between each of the competencies. Accordingly, a capable student affairs' professional has integrated knowledge, skills, and abilities both between and across competency areas (Mueller, 1999).

Pope and Reynolds (1997) did not stop with the inclusion of multicultural competence within a core competency model. Rather, synthesizing multicultural literature in both higher education and counseling psychology, they further expanded the conceptualization of what it means to be multiculturally competent. Specifically, they developed a list of 33 cultural competencies for student affairs practitioners, and categorized into a tripartite model consisting of awareness, knowledge, and skills (please see Table 1).

Multicultural knowledge consists of procedural or content knowledge about other cultures including their history, traditions, values, and customs. To be competent, practitioners must continually learn new information about the students with whom they work. Multicultural knowledge also includes an understanding of the dynamics of oppression and privilege both in society and higher education. Finally, knowledge encompasses an understanding of the limitations of student and identity development theory as applied to students of color (Pope & Reynolds, 1997; Pope, et al., 2004).

Multicultural skills in student affairs, according to Pope and Reynolds (1997), include a wide range of abilities necessary to function effectively with and for students of color. These skills include effective cross-cultural communication, expanded cross-

cultural interactions, and culturally sensitive program and policy development reflective of one's own learning about cultural difference. Finally, multicultural awareness includes the values, attitudes, and assumptions essential for working with diverse others.

Table 1

Characteristics of Multiculturally Competent Student Affairs Practitioners

| Multicultural Awareness   | Multicultural Knowledge   | Multicultural Skills   |
|---|---|--|
| A belief that differences are valuable and that learning about others who are culturally different is necessary and rewarding   | Knowledge of diverse cultures and oppressed groups (i.e. history, traditions, values, customs, resources, issues)   | Ability to identify and openly discuss cultural differences and issues   |
| A willingness to take risks and see them as necessary and important for personal and professional growth  | Information about how change occurs for individual values and behaviors   | Ability to assess the impact of cultural differences on communication and effectively communicate across those differences |
| A personal commitment to justice, social change and combating depression  | Knowledge about the ways that cultural differences affect verbal and nonverbal communication  | Capability to empathize and genuinely connect with individuals who are culturally different from themselves                |
| A belief in the value and significance of their own cultural heritage and world-view as a starting place for understanding others who are culturally different from themselves. | Knowledge about how gender, class, race and ethnicity, language, nationality, sexual orientation, age, religion or spirituality, disability, and ability affect individuals and their experiences | Ability to incorporate new learning and prior learning in new situations.  |
| A willingness to self-examine and when necessary, challenge and change, their own values, world-views, assumptions and biases   | Information about culturally appropriate resources and how to make referrals  | Ability to gain the trust and respect of individuals who are culturally different from themselves                          |
| An openness to change and belief that change is necessary and positive  | Information about the nature of institutional oppression and power  | Capability to accurately assess their own multicultural skills, comfort level, growth and development.                     |

(continued)

**Table 1 (Continued). Characteristics of Multiculturally Competent Student Affairs Practitioners**

| Multicultural Awareness  | Multicultural Knowledge   | Multicultural Skills  |
|--|---|---|
| A belief that cultural differences do not have to interfere with effective communication or meaningful relationships | Knowledge about within-group differences and understanding of multiple identities and multiple oppressions.               | Ability to challenge and support individuals and systems around oppression issues in a manner that optimizes multicultural interventions. |
| Awareness of their own cultural heritage and how it affects their world-view, values and assumptions.                | Information and understanding of internalized oppression and its impact on identity and self-esteem                       | Ability to make individual group and institutional multicultural interventions  |
| Awareness of their own behavior and its impact on others   | Knowledge about institutional barriers which limit access and success in higher education for members of oppressed groups | Ability to use cultural knowledge and sensitivity to make more culturally sensitive and appropriate interventions                         |
| Awareness of the interpersonal process which occurs within a multicultural dyad                                      | Knowledge about the systems theories and how systems change   |   |

Note. From “Student Affairs Core Competencies: Integrating Multicultural Awareness, knowledge and skills,” by R.L. Pope and A.L. Reynolds, 1997, *Journal of College Student Development*, 38, p. 271.

### **King and Baxter Magolda’s (2003) Model of Intercultural Maturity**

While the Pope and Reynolds (1997) tripartite model of multicultural competence has arguably become the gold standard for student affairs, it has not escaped critical review. King and Baxter Magolda (2005) argued that while the model of intercultural (multicultural) competence originally posited by Pope and Reynolds (1997) serves as a useful starting point, it is limited by its heavy reliance on “assessment of attitudes as a proxy for competence” (p. 572). They argued, from a human development lens, that the model stops short of addressing the developmental complexity that affords a learner the ability to understand and accept difference without feelings of self-threat. Without this meta-cognitive ability, individuals find it difficult if not impossible to use knowledge in an intercultural interaction. In other words, those individuals whose cognitive abilities

are less developed have a more difficult time functioning appropriately cross-culturally.

King and Baxter Magolda (2005) proposed a framework of intercultural maturity that describes how individuals become increasingly capable of understanding and acting in effective and appropriate ways. Their model draws from student and adult developmental models, including Kegan's (1994) model of lifespan development and Bennett's (1993) model of intercultural sensitivity. Though not empirically tested, King and Baxter Magolda argued that development occurs along three dimensions: cognitive, intrapersonal, and interpersonal. Specifically, a developmentally mature individual is one who has the cognitive capacity to shift perspectives and behaviors and to use multiple cultural frames of reference. This individual also has an interpersonal capacity to openly engage and challenge his or her own views, beliefs, and personal identities within a global or national context. Finally, this individual possesses the capacity to engage interdependently, grounded in an understanding and appreciation of human difference and the ways human differences are manifested in community practices and social systems. This individual is also willing to work to maintain the rights of others. Development in all three dimensions is required in order for individuals to effectively use their knowledge and skills when working with diverse others (King & Baxter-Magolda, 2005).

### **Bennett's (1993) Developmental Model of Intercultural Sensitivity**

Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS) clarified the role of cognitive complexity the development of intercultural competence. Bennett's model delineates six markers of intercultural development that range from the less sophisticated ethnocentric to more sophisticated ethno-relativistic stages of development. While Bennett (1993) wrote about human development, I apply the concepts to student affairs professionals specifically.

The Bennett model (1993) grew from recognition that within educational practice, a broader, more sophisticated conceptual framework for analysis and understanding of diversity was necessary (Bennett & Bennett, 2004). Bennett (1993) defined intercultural competence as the ability to communicate and relate appropriately in a variety of cross cultural situations and contexts. Though the primary emphasis of intercultural competence is on a behavioral skill set, there is a key recognition that no behavior exists independent of thought and emotion, collectively termed mindset. The mindset refers to the practitioner's awareness of various cultural contexts, ability to create useful frameworks for comparing and contrasting cultures (e.g., communication styles, cultural values, and norms), and clear understanding of how to employ cultural generalizations without stereotyping (Bennett & Bennett, 2004). The mindset also includes an emotional facet: a practitioner's attitude, curiosity, and tolerance for ambiguity that result in motivation to seek out cultural differences (Bennett & Bennett, 2004).

According to Bennett (1993, 2001), the ability of the practitioner to comprehend cultural diversity is dependant upon an understanding of culture itself. He refers to culture in both objective and subjective terms. Similar to Pope and Reynolds' (1997)

conception of knowledge, objective culture refers to the institutionalized aspects of culture including political and economic systems as well as cultural artifacts produced including art, music, and cuisine. While objective cultural knowledge is important, it is insufficient. A deeper level of cultural understanding, termed subjective culture, is also important to the development of cultural competence (Bennett & Bennett, 2004).

Subjective culture can be thought of as the way in which culture is experienced based upon one's socialization. Objective and subjective culture work in iterative and evolving concert where objective culture is internalized through socialization and subjective culture is externalized through behavior and role expression (Bennett & Bennett, 2004). Thus, the real crux of creating a climate of respect for diversity in higher education is in understanding the different values, beliefs, and behaviors that occur within one's subjective experience of culture and acting affirmatively and appropriately so as to foster acceptance of difference (Bennett & Bennett, 2004).

Bennett's (1993) model also speaks to intercultural skill sets including the practitioner's ability to analyze information, predict possible areas for misunderstanding, and adapt appropriately to the context. Skill sets can be thought of as an expanded repertoire of behavior that includes the ability to recognize cultural bias and act in a manner that is more appropriate to another culture. The implication of the intercultural competency model is that knowledge, attitude and behavior must work in concert for development to occur (Bennett, 2001).

In summary, both Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS) and King and Baxter Magolda's (2005) Developmental Model of Intercultural Maturity (DMIM) suggest that as one develops, less sophisticated thought

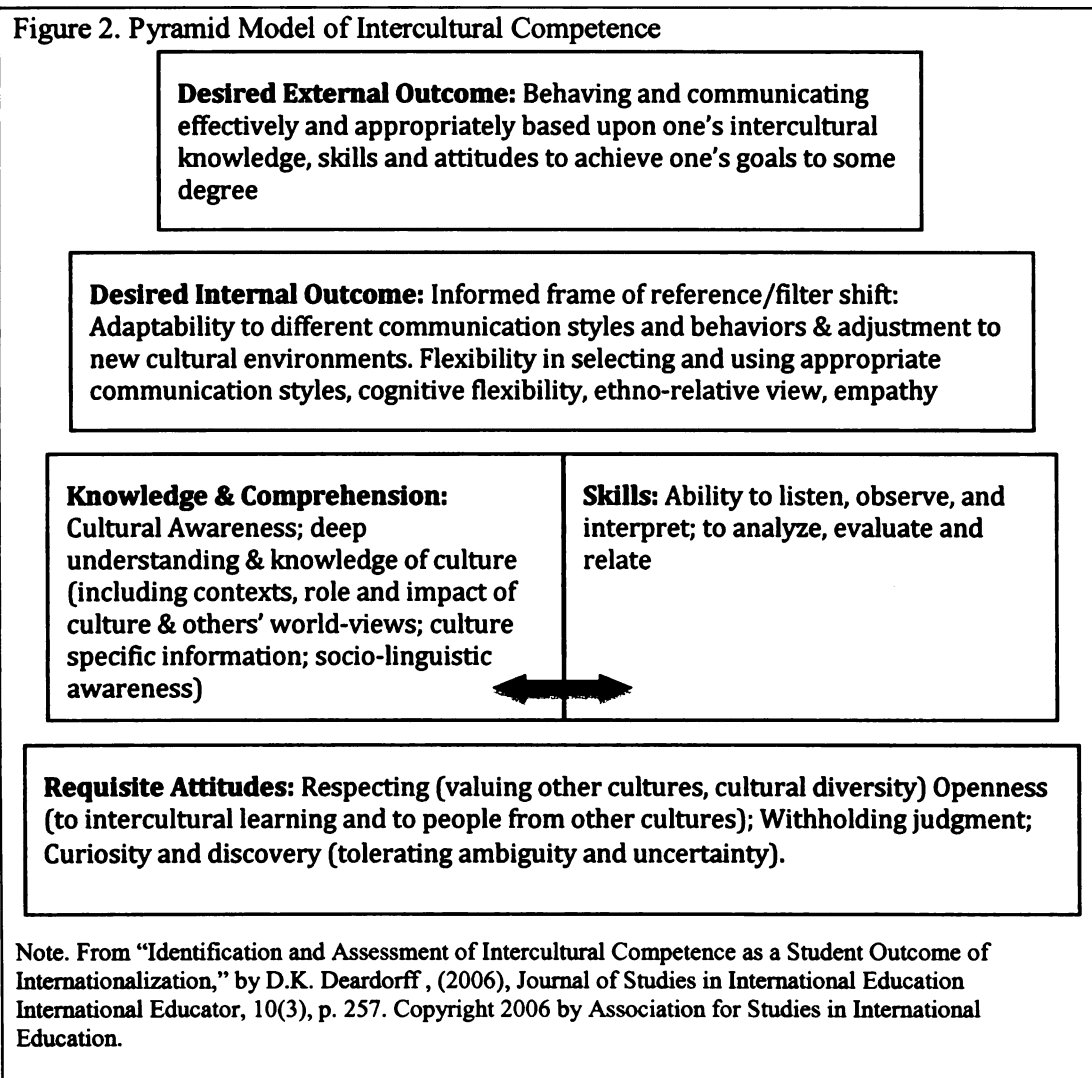
processes involving concrete thinking and absolute knowledge are replaced by more complex thought processes. These more complex processes consider context, judgment based upon experience, and evidence from multiple sources. While the Dynamic Model of Multicultural Competence proposed by Pope and Reynolds (1997) specifically discusses knowledge, skills and awareness, it arguably stops short of including the developmental aspects regarding how one thinks about cultural difference.

### **Deardorff's (2006) Models of Intercultural Competence**

Educational researcher Darla Deardorff (2006) used Delphi research technique to better understand and subsequently develop a model of intercultural competence. Employing both quantitative and qualitative methods, Deardorff (2006) synthesized expert knowledge regarding what constitutes intercultural competence and how it should be assessed. Her research culminated in a consensus among 80% of intercultural scholars surveyed regarding 22 essential elements of competence. Deardorff (2006) originally presented these in a pyramid model of intercultural competence, in which lower levels are posited to enhance or contribute to higher levels of competence (see Figure 2).

At the base of the pyramid, requisite attitudes (including respect, openness, curiosity, and discovery) are, according to the scholars, fundamental to intercultural competence. The attributes contained in Deardorff's (2006) base are parallel to the emotional aspects of the 'mindset' described by Bennett and Bennett (2004). The second area defined by the scholars as critical to inter-cultural competence is knowledge, comprehension, and skills (Deardorff, 2006). This area consists of cultural awareness, deep understanding and knowledge of culture, culture specific information, and sociolinguistic awareness. It also includes an individual's ability to listen, observe,

interpret, analyze, evaluate, and relate information (Deardorff, 2006). Deardorff's second level is parallel to Bennett's (1993) conceptualization of knowledge of objective culture.



A unique element of the Deardorff (2006) pyramid model of intercultural competence is its emphasis on both internal and external outcomes of competence. The internal outcome is akin to the development of cognitive complexity (Kegan, 1982). It includes the ability to adapt to different communication styles, behaviors, and new

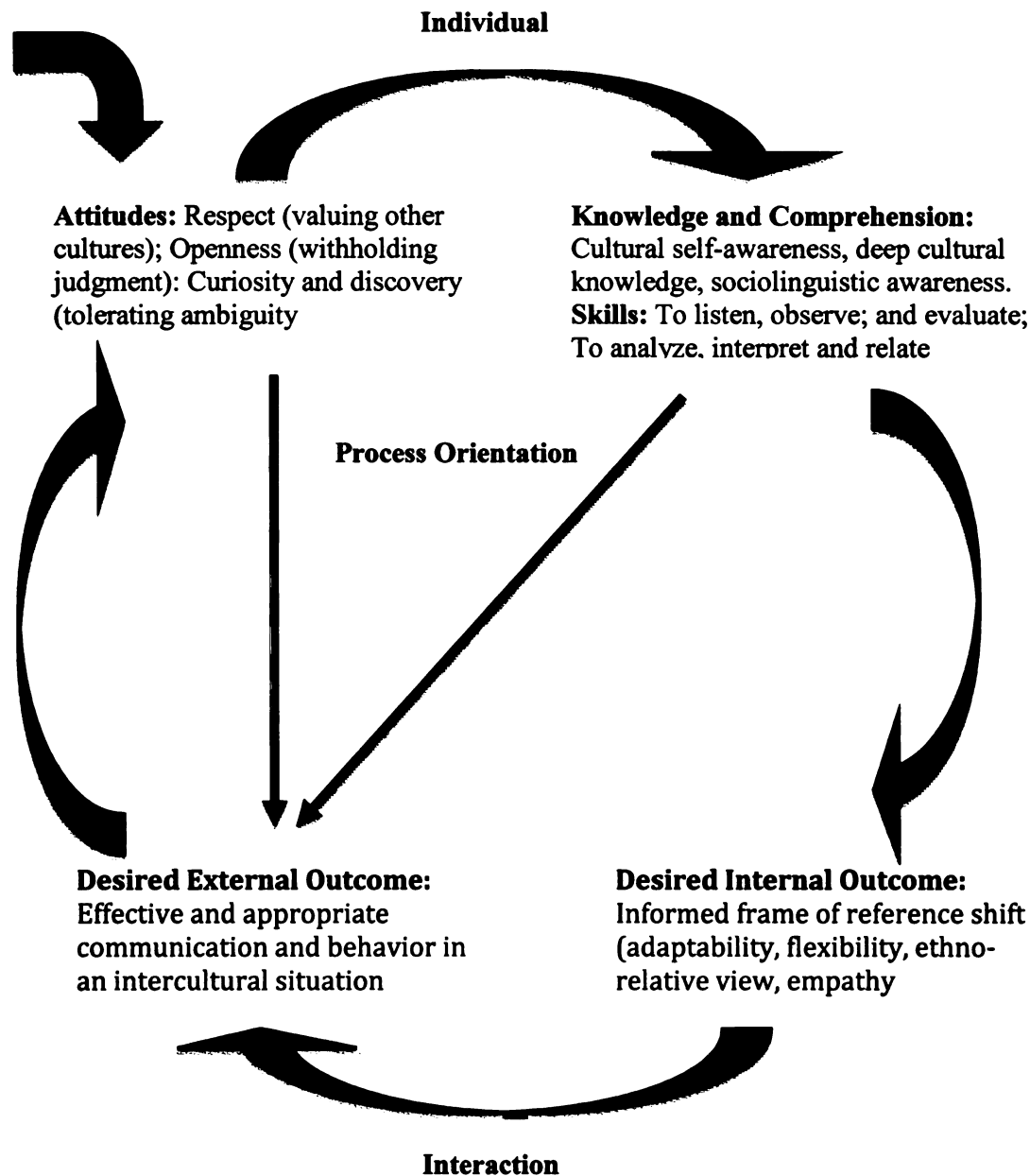
environments. It also speaks to flexibility of cognitive processing as well as behavior, and the development of an ethno-relative world-view. Bennett (1993) also addresses to these two dimensions though he terms them collectively as “intercultural skills.” Deardorff (2006) proposed that development can occur within each of the four levels and can also be assessed as a general form of intercultural competence.

Reflecting the notion that intercultural competence is more of a process than individual stages of development, Deardorff amended her pyramid model (Spitzberg & Changnon, 2009). Though still reliant upon the four aspects of competence identified in her research, she proposed that the development of intercultural competence is a process. This model implies a simultaneous developmental process that continually feeds into itself at the various levels of development.

To summarize, there are three common threads regarding the definition of intercultural competence. Bennett (1993), Deardorff (2006), King and Baxter-Magolda (2005), and Pope and Reynolds (1997) each indicate that intercultural competence includes: 1) requisite attitudes and motivation: awareness of, openness to, and value for learning about cultural difference and ability to not only tolerate ambiguity but also withhold judgment about cultural differences; 2) declarative knowledge: specific knowledge about diverse cultures including socio-linguistic differences; and 3) behavior: ability to listen, observe, interpret, analyze, evaluate, and then effectively apply knowledge to communication with diverse others. However, Bennett (1993), Deardorff (2006), and King and Baxter-Magolda (2005) also include metacognitive capabilities: cultural awareness and deep understanding and knowledge about diverse cultures and

oppressed groups (including contexts, roles, and impact of culture on world-views) in their definition of intercultural competence.

Figure 3. Deardorff's (2009) Process Model of Intercultural Competence.



Note. From "Conceptualizing Intercultural Competence" by B.H. Spitzberg and G. Changnon, (2009). In: The SAGE Handbook of Intercultural Competence," D.K. Deardorff, (Ed.), p. 33. Copyright 2009 by SAGE Publications, Inc.

## **Research About Intercultural Competence Among Student Affairs Practitioners**

Research regarding the intercultural competence of student affairs practitioners has almost exclusively used the more narrow term “multicultural” to describe competence, referring primarily to one’s knowledge, skills, and abilities within a domestic context. I prefer the more global term “intercultural competence,” because it incorporates one’s knowledge, skills, and abilities within both a domestic and global context. In this section, I use multicultural because it is the standard within the student affairs profession.

Though scholars in the field of student affairs consistently identify the need for concrete multicultural skills (Barr & Associates, 2000; Pope & Reynolds, 1997), only Pope and Reynolds (1997) identify specific multicultural competencies for student affairs practitioners. In addition, until 2000, researchers had not developed psychometrically sound and conceptually anchored instrumentation for evaluating student affairs professionals’ multicultural competencies (Pope & Mueller, 2000). This issue was addressed with the development and initial validation of the Multicultural Competence in Student Affairs – Preliminary 2 scale (MCSA-P2) (Pope & Mueller, 2000).

The MCSA-P2 scale is based upon the awareness, skill, and knowledge tripartite model and includes statements based upon the 33 competencies developed by Pope and Reynolds (1997). While results of initial test and validation of the MCSA-P2 revealed a high level of internal consistency, the results of a factor analysis led to the conclusion that the instrument is best represented by a one, as opposed to a three-factor model of multicultural competency.

Until recently (Castellanos, et al., 2007), the MCSA-P2 was the only instrument designed and used to assess multicultural competence within Student Affairs (Mueller & Pope, 2001, 2003; Pope & Mueller, 2005). Though the MCSA-P2 is not without conceptual problems, researchers have argued that it demonstrates sufficient reliability and validity, and thus is an adequate measure (King & Howard Hamilton, 2003; Marina, 2003; Martin, 2005; Mastrodicasa, 2004; Miklitsch, 2005; Mueller & Pope, 2001, 2003; Pope & Mueller, 2005; Weigand, 2005).

Multicultural competence research is limited (Castellanos, et al., 2007; King, & Howard Hamilton, 2003; Marina, 2003; Martin, 2005; Mastrodicasa, 2004; Miklitsch, 2005; Mueller & Pope, 2001; Pope, & Mueller, 2000, 2005; Weigand, 2005), however, themes have emerged. To begin, it appears that socially marginalized group members, including individuals of color, and gay, lesbian, bisexual, and transgender individuals tend to self-report higher competency levels than non-marginalized individuals (King & Howard-Hamilton, 2003; Martin, 2005; Miklitsch, 2005; Mueller & Pope, 2001, 2003; Pope & Mueller, 2005). The implied argument is that the knowledge and insights gained as a consequence of being a member of a marginalized group result in a higher degree of competence. Just one study (Castellanos, et al., 2007) demonstrated contradictory evidence, suggesting that age, gender, and race do not significantly predict multicultural skill. Related, researchers have indicated that the higher one's racial consciousness and knowledge, the higher one's multicultural competence (Castellanos. et al.; Mueller & Pope, 2003; King and Howard Hamilton, 2003). Taken in totality, perhaps it is contextual understanding of identity, not the identity itself, which contributes to multicultural competence.

Research has also demonstrated that individuals for whom multicultural issues are made particularly salient through work or personal interest have higher levels of competency (King & Howard-Hamilton, 2003; Mueller & Pope, 2001; 2003; Pope & Mueller, 2005). Scholars have indicated that salience can be enhanced through a variety of experiences. For example, King and Howard-Hamilton, (2003), Miklitsch (2005), and Weigand (2005) stated that salience is enhanced through intercultural education and training experiences. Other researchers, including King and Howard Hamilton (2003), Martin (2005), Mueller and Pope (2003), and Pope and Mueller (2005) indicated that serving on committees, engaging in multicultural coursework, multicultural research, and participation in planning and implementing programs and policies increases salience. Finally, Martin (2005) and Mueller and Pope (2001, 2003) pointed out that salience is increased by participating in ongoing conversation with supervisors, and/or engaging in intentional conversations with diverse others. The implication is that engagement in ongoing learning and dialogue about difference and or with individuals different than one's self influences the development of multicultural understanding, knowledge, skills and abilities.

Though not as consistently demonstrated as the findings previously discussed, there are nonetheless three additional noteworthy findings in the multicultural competency literature. To begin, one of the seven contributory factors to multicultural competency identified by Martin (2005) was travel or geographic exposure. Given that travel outside the United States requires some level of initiation, this finding demonstrated some consistency with Mueller and Pope's (2001) assertion that competency is positively associated with disposition to seek out opportunities to learn

about diverse others. Second, Mueller and Pope (2003) found a mild, but significant, relationship between White racial consciousness and age, suggesting that as age increases, individuals become less confused about and reliant on others for perspectives on racial attitudes. This relationship between White racial consciousness and age lends support to King and Baxter-Magolda's (2005) and Bennett's (1993) assertion that intercultural competence has a developmental component not readily evidenced via the tripartite model.

To this point, I have discussed the various ways in which scholars within the field of student affairs have come to understand, define, and measure intercultural competence. As is evident, though intercultural competence is a compelling priority for student affairs practitioners (Deardorff, 2006; Flowers & Howard-Hamilton, 2002; Hunter, 2004; King, & Howard-Hamilton, 2003; Kirkwood, 2001; McTighe Musil, 2006), neither a theoretically sound conceptualization nor instrumentation has been introduced (Ang, et al., 2007; Deardorff, 2006; King & Baxter Magolda, 2005; Mueller & Pope, 2000). Cross-cultural researchers Earley and Ang (2003) developed a conceptualization and instrumentation that responds to this need.

### **An Alternative Theoretical Conceptualization of Intercultural Competence**

Developed by Earley and Ang (2003), and based upon contemporary theories of intelligence, the multi-dimensional construct Cultural Intelligence (CQ) is defined as an individual's capacity to function and manage effectively in culturally diverse settings (Ang, Van Dyne, & Koh, 2005; Early & Ang, 2003). Similar to the MCSA-P2, measures of cultural intelligence are targeted at understanding performance in situations involving cross-cultural interactions arising from differences in race, ethnicity, and/or nationality

(Ang, et al., 2007). The purpose of this section is to describe CQ as a theoretically based construct. Accordingly, I will provide an overview of the conceptual framework of cultural intelligence. I will then detail research that has been conducted using this conceptualization. Finally, I will identify the advantages of this construct and accompanying instrumentation.

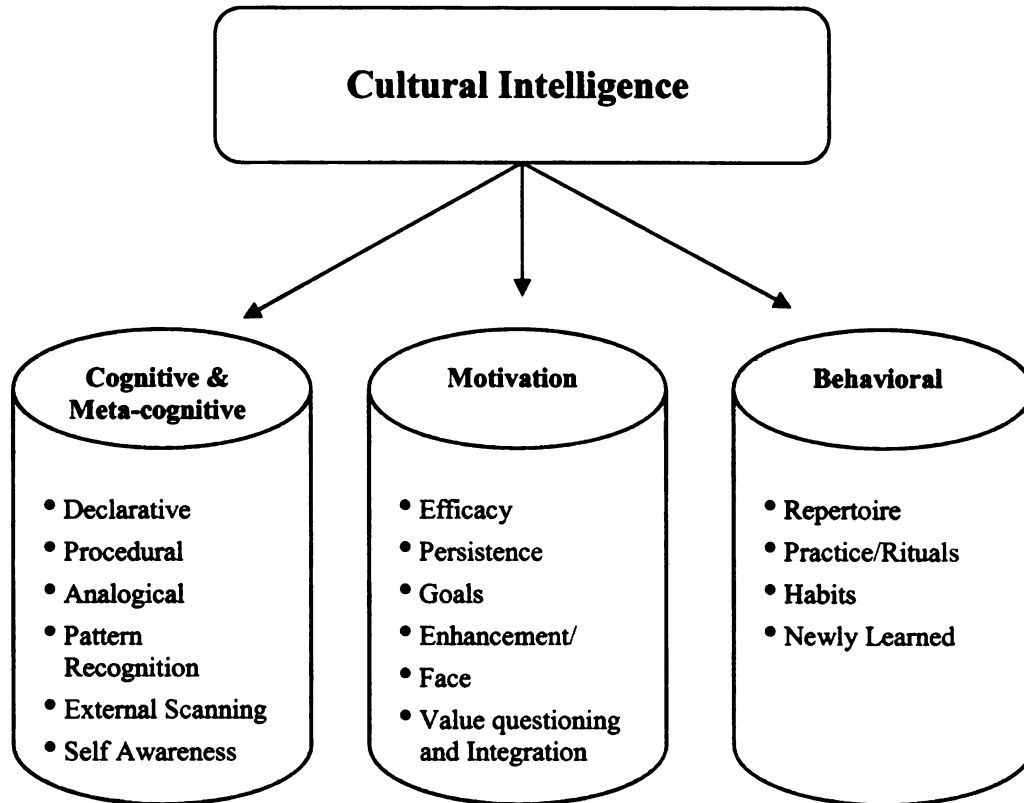
### **Overview of Conceptual Framework.**

Cultural Intelligence (CQ) is defined as an individual's capacity to function effectively in culturally diverse settings. CQ is comprised of three dimensions: cognition includes two sub-dimensions, learned or procedural knowledge (cognition) and abstract reasoning (meta-cognition), motivation, and behavior (Earley & Ang, 2003). This section defines and highlights the theoretical underpinnings of the facets of cultural intelligence as defined by Earley and Ang (See Figure 4 as adapted from Early and Ang, 2003, p. 67).

### **Cognitive and Meta-cognitive CQ.**

The cognitive and meta-cognitive facets of cultural intelligence (CQ) represent the cognitive abilities that are used to create new conceptions of how to function and operate with a new culture as well as culture-specific knowledge (both declarative and procedural) (Earley & Ang, 2003). Earley and Ang (2003) drew not only from reasoning frameworks but also from several theories of cognitive development including self, social cognition, and role-identity theory to develop the cognitive facet of CQ. These capture knowledge of self as a filter of socially generated information, role identities that comprise the social context for self concept, and the mechanisms employed as information is processed and attributions are made.

Figure 4. Model of Cultural Intelligence (Earley and Ang, 2003, p. 67)



Note: Adapted from "Cultural intelligence: Individual Interactions Across Cultures," by C.P. Earley, and S. Ang, 2003, Stanford, CA: Stanford University Press.

The meta-cognitive facet mirrors King and Baxter Magolda's (2005) constructive developmental theory of intercultural maturity and Bennett's (1993) conception of intercultural sensitivity. Each combines conceptions of meta-cognitive development and identity theory. According to each of the three models, individuals who have strong cognitive ability have the capacity to create an internal self that is open to challenges to their world-view (Bennett, 1993; Earley & Ang, 2003; King & Baxter Magolda, 2005). Further, they have ability to shift both perspective and behaviors to adapt to alternative cultural world-views. Finally, they have the capacity to think in a culturally relativistic manner, to engage in meaningful interdependent relationships with diverse others, and to

understand and appreciate the value of human difference. Put simply, at the cognitive level, CQ represents the cognitive abilities that are used to create new conceptions of how to function and operate with a new culture as well as culture-specific knowledge (Earley and Ang, 2003).

### **Motivational CQ.**

Motivation is one factor of CQ that has been neglected in all but Bennett's (1993) model of intercultural competence. Beyond openness, motivation incorporates not only the extent of interest but also, more importantly, the drive to be successful in unfamiliar cultural situations (Earley & Ang, 2003; Templer, Tay, & Chandrasekar, 2006).

Individuals high in motivational CQ are intrinsically inspired to experience new and varied cross-cultural encounters. They also value new experiences and interacting with individuals different from themselves. Motivation serves to explain Mueller and Pope's (2001) finding that competency was positively associated with a disposition to seek out opportunities to learn about diverse others.

It is difficult to discuss motivational CQ without first touching upon the notion of self-concept as it directs and motivates adaptation to new cultural surroundings (Templer, et al., 2006). According to Brophy (2004), the value aspects of motivation are associated with more descriptive aspects of self-concept, especially one's thoughts about traits, interests, and performance. He stated:

We gravitate toward learning opportunities that we view as supportive of our perceived, ideal or ought selves; we are indifferent toward learning opportunities that we view as irrelevant to these self-concepts, and we seek to avoid learning opportunities that we view as antithetical to them... this is especially the case

with the inner core of self-concepts that constitute our identity. (Brophy, 2004, p. 261)

Self-concept, according to Earley and Ang (2003) refers to three self-preservation motives underlying cognitive structures: self-enhancement, self-efficacy, and self-consistency. Briefly, self-efficacy is “a judgment of one’s capability to accomplish a certain level of performance” (Bandura, 1986, p. 391). According to Bandura, people tend to avoid tasks and situations that they perceive to exceed their cognitive and or behavioral capabilities. Self-efficacy plays an important role in motivational CQ because successful cultural interaction is based on one’s general sense of interpersonal confidence in the new setting.

Self-consistency refers to an individual’s desire to maintain schematic coherence and consistency in experiences and cognition (Cross & Markus, 1994). Self-consistency motives give rise to several process outcomes. To begin, people strive for a continuity of image across time (Cross & Markus, 1994). Second, individuals construct views consistent with their self-image (Brophy, 2004; Cross & Markus, 2004; Earley & Ang, 2003). Finally, individuals are resistant to information that is inconsistent with their self-image (Brophy, 2004; Earley & Ang, 2003). Earley and Ang (2003) argued there are two important aspects of self-consistency that impact motivation as well as overall cultural intelligence: 1) it leads to active construction of memories and selective perceptions that align with previous events; and 2) it activates and directs individuals to engage congruently with their current values and norms.

In summary, motivation plays a key role in the development of intercultural competency. Those with high motivational CQ have a strong interest in and drive to be

successful in unfamiliar cultural circumstances. These individuals are highly efficacious, willing confront new learning situations, obstacles, and setbacks with great vigor rather than withdraw (Bandura, 1997). They are more likely to engage in goal setting so as to more effectively deal with new circumstance. These individuals are also less invested in preservation of an idealized self and thus willing to take the social risks necessary to learn about individuals dissimilar to themselves. Alternatively, those with lower motivational CQ have a strong internal desire for consistency that may result in an inability for personal adjustment, and a poor capacity for incorporating highly disparate ideas. An individual with a high consistency motive may display personal rigidity, ignoring or rejecting information inconsistent with self-image, even if that information is critical for understanding the new culture (Brophy, 2004; Skaalvik, 1997).

### **Behavioral CQ.**

It is evident that developing one's cultural intelligence involves knowing what do to and how to do it as well as the requisite motivation to persist despite obstacles. Though an individual can possess these capabilities, if ones behavioral repertoire is limited, so too will be success. The behavioral facet of CQ speaks directly to the ability to both acquire and act upon newly acquired behaviors so as to be competent in cross cultural situations (Earley & Ang, 2003).

There are a few issues that directly impact one's ability to manifest behavioral cultural intelligence. Earley and Ang (2003) note that because language conveys many subtleties of a person's culture, lacking the aptitude for at least some level of language proficiency will adversely impact behavioral aspect of CQ. Another, more indirect issue has to do with an individual's reinforcement history. That is, a specific psychological

reinforcement history may bear a strong relevance to his or her execution of a particular behavior in a new cultural setting. For example, one might have an intensely negative visceral reaction when presented with an entre consisting of raw squid, a delicacy in some cultures. This physiological reaction demonstrates the power of an individual's reinforcement history over behavioral CQ.

Behavior requires not only one's willingness to persist over time but also an aptitude to determine what behaviors are desirable and how to learn them (Earley & Ang, 2003). Thus, the behavioral facet of CQ is often a product of both the cognitive and the motivational facets of CQ. This does not imply however that behavioral CQ is wholly contingent upon the other two. An individual can potentially overcome a behavioral issue by endeavoring to master both physical and emotional reactions.

It would however be incorrect to indicate that merely being an effective actor equates to high behavioral CQ. Also important to behavioral CQ is the ability to use behavioral cues provided by others to interpret not only their actions but also their behavioral motives (Earley & Ang, 2003). This ability is tied significantly to both the cognitive and meta-cognitive facets of CQ, as one must possess the psychological structure that serves to guide our acquisition of behaviors, observational abilities, and subsequent initiation of reactions.

In summary, the behavioral dimension speaks specifically to one's ability to generate appropriate behaviors based upon meta-cognitive and cognitive knowledge of diverse others. Though closely related, it does not follow that if one has high meta-cognitive and knowledge CQ that one will have high behavioral CQ (Ang, et al., 2006; Early & Ang, 2003).

## Comparison Across Models

The Pope and Reynolds (1997) tripartite model of multicultural competence does not neatly fit into the four-factor structures identified by either Deardorff (2006) or by Earley and Ang (2003). In order to compare and contrast these models, I have re-arranged the list of 33 multicultural competencies developed by Pope and Reynolds (1997) into the format defined by Deardorff (2006) and Earley and Ang (2003) (see Table 2). In doing so, it becomes clear that the tripartite model is too restrictive and imprecise, possibly having lead to the development of assessment instruments including the MCSA-P2 that are unable to fit a four-factor model of intercultural competence.

Table 2

### Comparisons Between Conceptualizations of Intercultural Competency

| Bennett (1993), Deardorff (2006), Earley & Ang (2003)  | Pope and Reynolds (1997)   |
|--|--|
| <b>Mindset (Bennett, 1993)</b> Awareness of cultural contexts; Ability to create frameworks for understanding cultures; Appropriate cultural generalizations; Attitude, curiosity and tolerance for ambiguity.                                       | A – differences valuable; willing to take risks; Openness to change and understanding that it is important; belief that difference need not impact relationships |
| <b>Attitude (Deardorff (2006)</b> Respect for and valuing other cultures and cultural diversity; Openness to intercultural learning and people from other cultures, withholding judgment; Curiosity, discovery and willingness to tolerate ambiguity |  |
| <b>Motivation (Earley &amp; Ang, 2003)</b> Interest and confidence in functioning effectively in culturally diverse settings. Energy applied to learning about and functioning in cross-cultural situations.   |  |

Table 2 continues

Table 2 continued. Comparisons Between Conceptualizations of Intercultural Competency

| Bennett (1993), Deardorff (2006), Earley & Ang (2003)   | Pope and Reynolds (1997)   |
|---|--|
| <p><b>Objective and Subjective Culture (Bennett, 1993)</b><br/>Objective: Knowledge of political and economic systems, cultural artifacts Subjective: The way in which culture is experienced; socialization of culture</p>   | <p>A – Awareness of own world view and how it impacts world view</p>   |
| <p><b>Knowledge comprehension (Deardorff, 2006)</b><br/>Cultural self-awareness; deep understanding and knowledge of culture (including contexts, roles and impacts of culture on other's world-views). Culturally specific information, sociolinguistic awareness</p>  | <p>K – diverse cultures and oppressed groups (history, values, customs, etc); within group differences; multiple identities</p>  |
| <p><b>Knowledge (Earley &amp; Ang, 2003)</b> How cultures are similar and different. Includes: Political/ economic; interpersonal; and socio-linguistics knowledge</p>  |  |
| <p><b>Intercultural Skills (Bennett, 1993)</b> Ability to recognize cultural bias; flexibility in cognitive processing; development of an ethno-relative world-view</p>   | <p>A – significance of own culture and world view; examine/challenge change world view; acceptance of other views/acceptance of ambiguity</p>  |
| <p><b>Desired internal Outcomes &amp; Skills (Deardorff, 2006)</b> Informed frame of reference/filter Adaptability to different communication styles and behaviors, adjustment to new cultural environments. Flexibility: selecting &amp; using appropriate communication styles and behaviors; cognitive flexibility. Ethno-relative view; Empathy. Ability to listen, observe and interpret; to analyze, evaluate and relate.</p> | <p>K – how gender, class, race/ethnicity, language, nationality, orientation, age, religious, disability and ability affect individuals and their experiences.</p>   |
| <p><b>Meta-cognition (Earley &amp; Ang, 2003)</b> How a person makes sense of culturally diverse experiences. Includes: Awareness, planning, and checking.</p>  | <p>S – ability to identify differences (split – “openly discuss” in behavior section); ability to assess the impact of cultural difference (split – moved “communicate effectively across difference” to behavior; ability to incorporate new learning and prior learning into new situations; accurately assess own skills, comfort, growth; differentiation between differences and similarities</p> |
| <p><b>Intercultural Skills continued (Bennett, 1993)</b> Act in a manner that is appropriate to the cultural context. Incorporates verbal and non-verbal behaviors</p>  | <p>A – how behavior impacts others; awareness of interpersonal process within a dyad</p>   |
| <p><b>Desired External Outcomes (Deardorff, 2006)</b><br/>Behaving And communicating effectively and appropriately based upon one's intercultural knowledge, skills and attitudes</p>   | <p>K – ways cultural differences affect verbal and nonverbal communication</p>   |
| <p><b>Behavior (Earley &amp; Ang, 2003)</b> An individual's capability to adapt verbal and nonverbal behavior to make it appropriate to diverse cultures. It involves having a flexible repertoire of behavioral responses that suit a variety of situations.</p>   | <p>S – ability to openly discuss differences (split “identify” placed with strategy); communicate effectively across differences (split – moved “assess impact of differences” to strategy); empathize and connect with diverse others; gain trust and respect; challenge and support individuals and systems; ability to use knowledge in situations</p>  |

## **Measurement of Cultural Intelligence**

Amending Earley and Ang's (2003) model by dividing the cognitive dimension into meta-cognition and cognition, Ang, Van Dyne, Koh, and Ng (2004) developed a four-factor model of cultural intelligence and subsequently, the Cultural Intelligence Survey (CQS) assessment instrument. I detail specific information regarding the development and validation of this instrument in chapter 3. Here, I discuss the research that has been done using this measure.

The most comprehensive examination of the four-factor model of cultural intelligence was published in 2007 (Ang et al., 2007). In addition to reviewing the theoretical conceptualizations of the four CQ dimensions, the researchers described the development and cross-validation (N= 1,360) of the multidimensional cultural intelligence scale (CQS) across samples, time, and countries. Ang et al., (2007) also reported the results of three studies (N=794) in field and educational development settings that tested substantive predictions of CQ dimensions.

Utilizing the Cultural Intelligence Scale (CQS), developed by Ang., et al., (2007), these studies were designed to assess: (a) whether meta-cognitive CQ and cognitive CQ are predictors of cultural judgment and decision-making effectiveness; and (b) if motivational CQ and behavioral CQ are predictors of cultural adaptation. In order to triangulate their findings, the measure remained constant while the populations, settings, and tasks varied. The first sample was comprised of undergraduate students from universities in the United States (N= 235, 45% female, average age = 22) and Singapore (N= 358; 76% female, average age = 19). The second sample consisted of international businesspersons participating in a three-day executive development program at a public

university in Singapore (31% local, 64% male, average age = 28). The third sample was selected in an effort to extend the findings from the first two instructional settings to a field setting. In this study, 103 foreign professionals and their supervisors (83% male, average age 34 years, average job tenure 2.6 years), were recruited from 12 countries. Collectively, these studies demonstrated a systematic pattern of relationships between the dimensions of CQ and specific intercultural effectiveness outcomes. Even after controlling for individual characteristics including general cognitive ability, emotional intelligence, age, sex, cross-cultural adaptability, personality correlates, rhetorical sensitivity, dyadic similarity, and cross-cultural experiences, CQ demonstrated a unique explanatory power in predicting three aspects of intercultural effectiveness: cultural judgment and decision-making, cultural adaptation, and task performance.

Because of the newness of the construct, substantive empirical research is limited. However, a few other studies have been published. To begin, Ang, Van Dyne, and Koh (2006) for example, administered the 20 item, 4 factor CQS to 465 undergraduate business students at a large university in Singapore and then re-administered the instrument six weeks later to 338 students (attrition = 27%). Women comprised 77% of the participants and the participant average age was 20.17 years. After controlling for age, gender, years of experience interacting with diverse others, Ang, et al., (2007) demonstrated that the four dimensions of CQ are related to and yet distinct from personality traits in meaningful ways. Another study, conducted by Templer, Tay, and Chandrasekar (2006), examined the motivational CQ of just under 200 professional business persons (79% men, 37% middle management, 15% senior management, 37%

holding Master's degrees or Ph.D.s). These researchers demonstrated that CQ predicted adjustment of global professionals.

More recently, Tarique & Takeuchi (2008), after controlling for age and gender, found the frequency of international travel experience of a sample group undergraduate students was strongly and positively related to all four dimensions of CQ: meta-cognition ( $r = .61$ ), cognition ( $r = .48$ ), motivation ( $r = .53$ ), and behavior ( $r = .56$ ). Tarique and Takeuchi (2008) also reported that the number of trips had a stronger positive moderating effect on meta-cognitive CQ and motivational CQ for individuals who had shorter trips and a weaker effect for individuals who took longer trips.

Similarly, Crowne (2006) also found that exposure to other cultures led to higher meta-cognitive, cognitive, behavioral, and motivational CQS outcomes. However, she studied more intensive experiences including work and study abroad. Crowne (2006) demonstrated that education abroad predicted all four of the CQS factors while employment abroad predicted only the meta-cognitive domain. She speculated that individuals choosing to study abroad likely did so because of a high interest in other cultures and a desire to experience and explore other countries. However, individuals who go abroad for work may be motivated to do so for reasons such as higher pay or career advancement, and thus may not seek cultural knowledge during their experiences and may not be concerned about how well cultural interactions are managed.

Crowne (2008) extended her initial findings by attempting to differentiate between number and type of international travel as antecedents to each of the four CQS dimensions. She found that motivational CQ was higher for individuals who visited more countries for vacation and other short-term purposes. However, meta-cognitive,

cognitive, and behavioral CQ tended to be higher in those who visited more countries for extended periods, including travel for employment or education.

Finally, Tay, Westman, and Chia (2008) explored the intercultural experiences of business travelers on short-term international assignments. These researchers found short-term international business travel to be significantly and positively related to only cognitive CQ. Though they expected to find short-term international business to be related to each dimension, they speculated that because of the duration and task specific nature of the work, these individuals were not afforded time or opportunity to interact sufficiently enough to build confidence and efficacy for intercultural interactions. Further, they did not have the support for or expectation that they reflect, adapt and develop more complex thought processes or behaviors.

#### **Advantages of the CQ Construct and Instrumentation**

The construct of CQ adds significantly to the understanding of intercultural competence. To begin, similar to the tripartite model of multicultural competence, CQ is a set of abilities rather than preferred ways of behaving. However, it is substantially different from the tripartite model because it measures abilities from an etic, or culturally non-specific perspective (Ng & Early, 2006). Second, CQ affords consideration to ability to read, understand, and adapt to emotion within varied cultural contexts (Ang, et al., 2007). The ability to adapt to varied cultural contexts is critically important because emotional cues are symbolically constructed and transmitted within a culture. The ability to understand emotions in one's home culture does not translate automatically into an ability to decode emotions in unfamiliar cultures (Ang, et al., 2007).

A third advantage of CQ is that it specifically assesses the four factors that have been defined by experts as critical to intercultural competency and thus, has the potential to significantly inform current research regarding intercultural competency in student affairs. Cultural intelligence aims to integrate culture and intelligence, recognizing that individuals will differ in ability to adapt to new cultural settings. CQ, in alignment with Deardorff's (2006) model of intercultural competence, can be developed and enhanced (Ang, et al., 2007; Ng & Early, 2006). Accordingly, the CQS, designed from the theoretical model of cultural intelligence, provides practitioners the ability to assess strengths and limitations and develop a plan for personal development or development of subordinates. Similarly, assessment of CQ provides faculty members the ability to accurately assess current as well as on-going development of students. It also allows faculty members the ability to assess curricular outcomes targeted at development of intercultural competence.

### **Limitations of Current Research**

There are several substantive reasons why continuing this research is important. To begin, the vast majority of research has been reliant upon the MCSA-P2, an instrument based on the tripartite model of multicultural competence. Yet, as indicated by Mueller and Pope (2000), there are theoretical or conceptual concerns with the tripartite model and/or the MCSA-P2 scale. Specifically, the MCSA-P2 represents a one, not three, factor model of multicultural competence.

Mueller and Pope (2000) posited two explanations regarding why the MCSA-P2 represents a one as opposed to a three-factor model. They indicated that the questions in the MCSA-P2 may not represent domains that are conceptually and behaviorally distinct,

largely due to the overlap that exists between knowledge, skills, and awareness. They also indicated that the prompter statements used in the MCSA-P2 may not be sensitive enough to differentiate between the overlapping domains. Based upon the newness of the instrument and these conceptual issues, further research, including incorporation of additional instrumentation is merited (Mueller & Pope, 2000).

To continue, scholars have offered critical critique of the MCSA-P2, indicating that it does not assess meta-cognitive abilities associated successful intercultural work (King & Baxter Magolda, 2005). Further, another critique offered is that the MCSA-P2 assesses attitudes as a proxy for competence (King & Baxter Magolda, 2005). The final critique offered of the MCSA-P2 relates to its limited scope, focusing almost exclusively on race and ethnicity (Mastrodicasa, 2004; Miklitsch, 2005). Given an ever-increasing understanding of the importance of addressing intercultural competence from a variety of perspectives both domestic as well as international, this critique is significant (Olson, Evans & Shoenberg, 2007; Sorrells & Nakagawa, 2008).

More broadly, in addition to the critiques of the MCSA-P2 instrument, scholars have noted that the quantitative research conducted to date has utilized only self-report measures. A question often posed within the scholarship relates to how findings might differ if, in addition to self-report, observers were also asked to complete assessments of practitioners' intercultural competence (Castellanos, et al., 2007; King & Howard-Hamilton, 2003; Pope & Mueller, 2005).

In addition to conceptual and theoretical issues, several questions emerge from the research regarding intercultural competence that merit further exploration. To begin, with just one exception (Castellanos, et al., 2007), the literature seems to conclusively assert

that those practitioners who are members of historically marginalized groups are more likely to be multicultural competent than White practitioners (King, & Howard-Hamilton, 2003; Martin, 2005; Miklitsch, 2005; Mueller, & Pope, 2001, 2003; Pope, & Mueller, 2005). Yet, knowledge of the history, culture, and life experiences of one group does not translate into knowledge of all groups, nor does it follow that an individual from one marginalized group can interact effectively across multiple cultures (Ang, et al., 2007). This, coupled with the Castellanos, et al. (2007) findings, raises a question about the relationship between demographic variables, including marginalized status and intercultural competence.

A final line of inquiry relates to what role if any moderating variables (including years of professional service in student affairs, functional work area, frequency of on-going training regarding intercultural issues, amount of time spent outside the US, direct work experience with diverse others, and conversations about issues of diversity with supervisors or peers) play in the development of cultural competency among student affairs practitioners.

## **Conclusion**

Educators and scholars have defined global knowledge and engagement as well as intercultural competence as essential learning outcomes for not only students but also the practitioners who work with them (Deardorff, 2006; Flowers & Howard-Hamilton, 2002; Hunter, 2004; King & Howard-Hamilton, 2003; Kirkwood, 2001; McTighe Musil, 2006; Templer, et al., 2006). Yet, as scholars have noted, efforts to understand how competency is defined and measured have been neglected (Ang, et al., 2007; Deardorff, 2006). As demonstrated, Earley and Ang (2003) have, based upon contemporary theories of

intelligence, attempted to respond to this problem by developing the multi-dimensional construct, cultural intelligence.

Earley and Ang (2003), drawing on the universal aspects of intelligence theory, argue that at a biological level, one must have the capacity to regulate elementary sensory functions including perception, sensation, and attention. Further, at a meta-cognitive level, cultural intelligence represents executive cognitive function including the cognitive processes of representation, abstract reasoning, problem solving, and decision-making. In addition, individuals deemed culturally intelligent must possess some form of crystallized, formal, learned declarative, and or experiential procedural knowledge in one or multiple cultural domains. Finally, culturally intelligent individuals have developed and use a repertoire of verbal and non-verbal behaviors that represent their ability to adapt to surroundings as well as to new stimuli. In summary, Earley and Ang (2003) defined cultural intelligence as being comprised of cognitive, meta-cognitive, motivational, and behavioral dimensions.

Adding significantly to both the measurement of intelligence as well as the conceptualization of intercultural competence, CQ integrates culture and intelligence, recognizing that individuals will differ in ability to adapt to new cultural settings. Based upon the strengths of the CQ construct, an empirically reliable and valid measure has been developed and, though relatively new, demonstrates promise for appropriate assessment of intercultural competency.

### **Chapter 3: Methodology**

Though the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to specifically define how it is understood by practitioners (Castellanos, et al., 2007; Deardorff, 2006; King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004), and fewer have designated methods for assessing efforts toward its development among professionals (Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003). In chapter 2, I chronicled the ways in which intercultural competency has been defined and assessed in student affairs. I also introduced a theoretical construct (Cultural Intelligence) and instrument (Cultural Intelligence Survey) designed to assess intercultural competency. The purpose of chapter 3 is four-fold. First, I expand upon the information provided in chapter 2, detailing the development and validation of both the Cultural Intelligence Survey (CQS), and the Multicultural Competence in Student Affairs – Preliminary 2 (MCSA-P2). Second, I detail the methodology I used to address my research questions. Here, I discuss the sample, sampling techniques, and statistical procedures I used. Then I discuss the research design I used to carry out the study. Finally, I describe the demographic provide of the individuals who agreed to participate in this study.

The research questions addressed by this dissertation are:

- 1) Are there relationships between demographic characteristics (gender identification, age, marginalized status, or race and ethnicity) and intercultural competency of student affairs practitioners?
- 2) Which and to what degree, do variables including: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural

issues, (c) amount of time spent outside the US, and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners?

3) Are student affairs practitioner self and peer-assessments of intercultural competency related?

### **Research Design**

The nature of the research questions led me to conduct a quantitative research study with a sample group of 465 student affairs practitioners. Participants were solicited via e-mail through the American College Personnel Association and through student affairs graduate programs. I used three web-based instruments to carry out the research design, a Personal Data Form I developed to gather participant demographic information, the Cultural Intelligence Survey (CQS) developed by Ang, Van Dyne, Koh, and Ng (2004), and the Multicultural Competence in Student Affairs – Preliminary 2, developed by Pope and Mueller (2000). These instruments can be found in Appendices A, B, and C respectively. In the subsequent section, I describe the development and validation of both the CQS and the MCSA-P2. I then elaborate on why I chose these two instruments.

#### **Cultural Intelligence Survey.**

I used the Cultural Intelligence Survey (CQS) as the primary measure of intercultural competency of student affairs administrators. Ang, et al. (2004) developed the CQS to measure an individual's capacity to function and manage effectively in culturally diverse settings. This measure is targeted at understanding performance in situations involving cross-cultural interactions arising from differences in race, ethnicity, and or nationality. Using the theoretical model of cultural intelligence developed by

Earley and Ang (2003), the four factors comprising the theoretical construct of cultural intelligence reflect the perspective that intelligence is multifaceted and is developed as a result of the interaction between the individual and his or her environment. According to Earley and Ang (2003), the four factors associated with cultural intelligence include: meta-cognition, cognition, behavior, and motivation. At the meta-cognitive level, intelligence relates to executive functions including representation, abstract reasoning, problem solving, and decision-making. Related, the cognitive dimension incorporates learned, declarative, or crystallized knowledge. The behavioral dimension speaks to one's capacity to regulate elementary sensory functions including perception, sensation, and attention. This area includes overt behaviors, both verbal and non-verbal, that represent one's ability to adapt to surroundings as well as to new stimuli. Finally, the motivational aspect is comprised of one's value for as well as self-efficacy to learn about cultural difference.

Utilizing current literature from educational and cognitive psychology to operationalize meta-cognition and motivation, and human relations and intercultural communication literature to identify knowledge and behavioral constructs, Ang, et al. (2007) developed the Cultural Intelligence Scale (CQS). With the ultimate goal of developing a parsimonious scale comprised of just four to six items for each of the four CQ dimensions, these researchers created a 40-item scale. Following administration of the 40-item scale to a sample (N=576) of undergraduate students (mean age = 20; 74% female) in Singapore, the researchers retained the 20 items with the strongest psychometric properties.

The CQS uses a 7-point likert scale for each of the 20 prompter statements. Both participants and observers respond to prompter statements with a strongly disagree, moderately disagree, slightly disagree, neutral, slightly agree, moderately agree, or strongly agree response. Results of instrument testing indicated that the four factors have moderate inter-correlations and acceptable variances. In addition, they indicate that the item-to-total correlations for each subscale demonstrate a strong relationship between the items and their scales, supporting internal consistency (Ang, et al., 2007). The composite as well as individual scale reliabilities are as follows:

|                       |     |
|-----------------------|-----|
| Composite Reliability | .70 |
| Meta-cognitive        | .72 |
| Cognitive             | .86 |
| Motivation            | .76 |
| Behavioral            | .83 |

The researchers (Ang et al., 2007) then conducted three studies with three sample populations across two nations (the United States and Singapore) in order to assess generalizability of the CQS across samples, time, and countries. Findings indicated that the cross-validation sample (N=447) demonstrated good fit for the hypothesized four-factor model. Standardized loadings were significantly different from zero with moderate correlations between factors and acceptable variances. Item-to-total correlations for each subscale demonstrated strong relationships between items and their scales, thus supporting internal consistency. The composite as well as individual scale reliabilities were as follows:

|                       |     |
|-----------------------|-----|
| Composite Reliability | .70 |
| Meta-cognitive        | .77 |
| Cognitive             | .84 |
| Motivation            | .77 |
| Behavioral            | .84 |

A subset of respondents (N=204) from Singapore completed the CQS four months after the first administration. Statistical evidence of this test indicated that the four-factor model remained consistent across time and countries. Using a sequential test of model invariance, Ang, et al. (2007) assessed equivalence of the CQS in the US and Singapore samples.

#### **Multicultural Competence in Student Affairs – Preliminary 2 Scale.**

The secondary measure of intercultural competence of student affairs administrators I used was the Multicultural Competence in Student Affairs – Preliminary 2 (MCSA-P2). Pope and Mueller (2000) developed this instrument based on the tripartite model (awareness, skills, and knowledge) initially conceptualized within the field of counseling psychology (see Sue et al., 1982). Its 34 prompter statements draw upon the characteristics of a multicultural practitioner suggested by Pope and Reynolds (1997). Sample questions from the MCSA-P2 include: (awareness) Within the last month, I can recall a personal interaction where racial dynamics played a significant role, (knowledge) I can discuss at length the limitations of student development theories as they apply to students of color, and (skill) I can discuss at length current issues facing students of color in higher education. The MCSA-P2 survey is designed using a 7-point likert scale for

each of the 34 prompter statements. Participants are asked to respond to prompter statements with a 1 (not at all accurate) to a 7 (very accurate) response.

Pope and Mueller (2000) conducted a study to examine the applicability of the instrument. One hundred-ninety individuals representing a number of identity groups as well as levels of experience, education, and functional areas within student affairs participated in the study. The researchers, in addition to employing a personal data form, asked participants to complete the MCSA-P2, a Social Desirability Scale (SDS), and the Quick Discrimination Index (QDI). The SDS, according to the researchers, is a true-false inventory designed to measure approval-seeking behavior. The QDI, a 30-item Likert type self-report inventory, measures attitudes about racial diversity and gender issues.

The results of the initial test and validation of the MCSA-P2 revealed a high level of internal consistency (coefficient alpha = .91). The alpha coefficients for the comparison instruments were similar to what would have been expected based upon documentation of previous use of these instruments (Pope & Mueller, 2000). The results of the Pearson product-moment correlations between the MCSA-P2 and the QDI demonstrated a positive and significant relationship ( $r = .66$ ;  $p < .01$ ) indicating that those who are more sensitive and aware of race and gender issues are also more culturally competent. Finally, Pearson product-moment correlation analysis was also conducted between the MCSA-P2 and the SDS. The researchers found a minimal and non-significant relationship suggesting that social desirability contamination was not a concern.

In the process of survey development, Pope & Mueller (2000) conducted a factor analysis to determine the best-fit structure. Based upon the results, the researchers

determined that the items were best presented by a one-factor structure for general multicultural competence as opposed to the three-factor model from which it had been developed. The one factor model accounted for 26% of the variance.

### **Rationale for the Use of Two Instruments.**

I chose to use both the CQS and the MCSA-P2 because each addresses substantive limitations of the other. To begin, while the research regarding the reliability and validity of the CQS is impressive, it may provide only a limited view of intercultural competence. Specifically, one of the premises upon which the Pope and Reynolds (1997) conception of multicultural competence in student affairs was developed is the notion that competent student affairs professionals possess knowledge of relevant developmental theory, multicultural resources, and issues of power and privilege. The CQS does not assess these areas.

Pope and Mueller (2000) state that the MCSA-P2 is best represented by a one as opposed to a three-factor model of multicultural competence. They posit that the inability of the MCSA-P2 to represent a three-factor model may be explained in two ways. They indicate that the prompter statements used in the MCSA-P2 may not represent domains that are conceptually or behaviorally distinct. They also hypothesize that there may be a high degree of overlap between the domains of the tripartite model (knowledge, skills, and awareness). Unlike the MCSA-P2, the CQS has been demonstrated to fit a four-factor model and does represent domains that are conceptually and behaviorally distinct. In addition, the CQS was designed to be not only a self-report measure but also has the capability to assess observer feedback of intercultural

competency. Thus, the CQS arguably may provide a clearer picture into intercultural competence.

### **Human Subjects Review and Timeline**

The procedures described in this section of the chapter explain the steps taken to ensure confidentiality and privacy of the professionals participating in this study. The consent forms (please see Appendix D, E, and F) describe the limited risks associated with this study and emphasized to respondents that their participation was voluntary. I aggregated survey results so as to prevent an individual or institution from being singled out.

Because of the rigor of the development and empirical testing of the CQS and the MCSA-P2, conducting a pilot study with the instruments was unnecessary. The application was sent to the human subjects review committee in late September 2008 and was approved in mid-October 2008. Once I received permission to proceed, I contacted the American College Personnel Association's Director of Educational Programs and Publications to obtain the access to the organizational list-serves. Permission was granted to begin gathering data in January 2009 using only one sub-set of the membership. I selected Residence Life because it represented the largest single professional group in ACPA. Accordingly, formal data collection began in spring 2009.

### **Participants and Sampling Techniques**

The number of participants required to complete a statistical analysis is dependant upon the number of cells in a factorial design (Wiersma, 1995). I elected to use a factorial design with between two and three variables and at most 24 cells. I explain the factors to be examined at the end of this chapter. Wiersma recommends at least ten

subjects per cell as an adequate minimum sample size. Thus, I sought a minimum of 240 participants. Participation in the study was limited to those with at least a bachelor's degree who work primarily as practitioners within student affairs or student services departments. Because their work is qualitatively different from that of student affairs practitioners, I also excluded faculty members, and clerical and support staff personnel from participation.

I used two processes to draw the sample group. The initial group of participants was solicited from a sample of student affairs professionals who, in spring 2009, were affiliated the American College Personnel Association (ACPA), a professional organization that represents and serves more than 7000 student affairs professionals. In February 2009, I sent a blanket e-mail invitation to all members of the American College Personnel Association (ACPA) who identified as Residence Life staff members. The text of this e-mail is located in Appendix G. To widen the representation of the sample, I also sent an e-mail to the chairs of the each of the ACPA commissions and standing committees requesting that they forward the research invitation to their membership. I have included a complete list of the ACPA commission and committees receiving the e-mail, the email text, and the email attachment in Appendices H, I, and J. The invitation asked individuals interested in participating to send me their contact information as well as the names and e-mail contact information for five individuals they believed could assess their intercultural knowledge, skills, and awareness. I input this data into an excel spreadsheet and subsequently used the data to send participants and participant observers and e-mail containing the survey links. The e-mail text (containing the survey links) I

sent to the participants and participant observers is located in Appendix K and L respectively.

Though the number of participants (N = 52) was small, the number of peer observers willing to participate was adequate for analysis (N = 188). As evidenced in Table 3, the self survey group included 52% (N=28) women, 45% (N= 24) men, 9% (N= 5) African American or Black, 8% (N= 4) Asian, 2% (N=2) Native Hawaiian or other Pacific Islander, 77% (N=41) White, 2% (N=1) Latino or Hispanic, and 2% (N=1) Non-Resident Alien. Also demonstrated in Table 3, the observer group was comprised of 62% (N=117) women, 36% (N= 68) men, 13% (N=24) African American or Black, 7% (N= 13) Asian, 66% (N=124) White, 5% (N=10) Latino or Hispanic, and 9% (N= 16) identified with two or more racial or ethnic groups.

Table 3  
Gender and Racial and Ethnic Demographics

|  | Number of<br>Participants | % of<br>Participants | Number of<br>Observers | % of<br>Observers |
|--|---------------------------|----------------------|------------------------|-------------------|
| Women                                    | 28                        | 52                   | 117                    | 62                |
| Men                                      | 24                        | 45                   | 68                     | 36                |
| African American or Black                | 5                         | 9                    | 24                     | 13                |
| Asian                                    | 4                         | 8                    | 13                     | 7                 |
| American Indian/ Alaska<br>Native        | 2                         | 2                    | 0                      | 0                 |
| Latino/ Hispanic                         | 1                         | 2                    | 10                     | 5                 |
| White                                    | 41                        | 77                   | 124                    | 66                |
| Non-Resident Alien                       | 1                         | 2                    | 1                      | 0                 |
| 2 or More Racial or Ethnic<br>Identities | 0                         | 0                    | 16                     | 9                 |

The limited number of volunteer participants may have been due to the requirement that participants submit not only their names and contact information but also the names and contact information for five colleagues, peers, or students whom they believed could accurately assess their intercultural competence. In order to secure a larger sample, I changed the format of the study, requesting that future volunteers fill out an anonymous self-report survey. Unlike the first group of participants, the participants solicited through the second attempt could maintain anonymity.

I solicited the second group of participants by contacting a variety of individuals who had access to large groups of professional and graduate student affairs practitioners. I began by sending an e-mail request to the student affairs program chairs of each student affairs administration program listed on the ACPA website (please see Appendix M). This request asked program chairs to send an e-mail invitation for participation to alumni and graduate student list serves maintained by the department (please see Appendix N). I also sent an e-mail request to the chairs of each of the state delegations of ACPA asking that they send my e-mail invitation for participation to members of their delegations (please see Appendix O). This process yielded 413 survey participants. As a consequence of this broad approach to recruitment, I cannot know how many individuals received the invitation to participate, and thus cannot calculate a sample return rate. However, I did compare the demographics of the final sample to the known demographics of the ACPA membership, which I discuss below.

I retained the data from the first sample in one file so I could conduct a correlation analysis to establish what if any relationship exists between self and peer observations of intercultural intelligence. This data set included 52 practitioners and 188 observers.

These data were also combined with the second data set containing 413 participants to augment the second sample size. The combined data set contains 465 participants. The demographic profile of the participants is detailed in Table 4. Also contained in Table 4 is demographic breakdown of the membership of the American College Personnel Association. I included this information to demonstrate the degree to which the participant sample mirrored the membership of ACPA. Though 11 participants did not disclose their gender identity, 28.8% (N=134) identified as male, 68.6% (N = 319) as female, and .2% (N = 1) as transgender. Eleven participants also did not indicate a racial or ethnic identity group affiliation. Of the 454 individuals who disclosed these data, 76.9% (N = 349) identify as White, 9% (N=41) as African American or Black, 4.2% (N = 19) as Asian, Native Hawaiian or other Pacific Islander, .7% (N = 3) as American Indian or Alaska Native, and 6.2% (N = 28) ascribe themselves to two or more racial and or ethnic groups. The majority of the participants (56.1%, N = 261) identified themselves as Christian. Therefore, 43.9% (N = 204) are either non-Christian or do not identify with any religion. Eighty-three or 17.8% of the participants identify as gay, lesbian, or bisexual. Three percent (N = 15) identified themselves as having a disability. Finally, though no participants identified themselves as Non-resident aliens, 2.6 (N = 12) did identify as international.

In terms of educational attainment, 24% (N = 111) of the participants hold a Bachelors degree. However, within this group, 22% (N = 101) are currently in Master's program. The majority of respondents, 62% (N = 288) have earned a Master's degree, while 12.1% (N=57) have earned a terminal degree. Of the advanced degrees completed, the majority are in student personnel, higher education, or educational administration.

These three degree programs comprised 78.9% (N = 358) of all individuals who volunteered to participate in this study.

Table 4

Demographic Profile of Study Participants Compared to ACPA Membership

| Variable                   | Categories  | Participant |             | ACPA |
|----------------------------|---|-------------|-------------|------|
|                            |   | #           | % Reporting | %    |
| Gender Identity            | Female  | 319         | 70.3        | 55   |
|                            | Male  | 134         | 29.5        | 36   |
|                            | Transgender   | 1           | .2          | N/A  |
|                            | Not Disclosed   | 11          |             | 9    |
| Racial and Ethnic Identity | African American or Black                               | 41          | 9           | 15   |
|                            | Native American/ Alaska Native                          | 3           | .7          | 0    |
|                            | Asian   | 19          | 4.2         | 3    |
|                            | White   | 349         | 79.9        | 73   |
|                            | Latino or Hispanic                                      | 14          | 3.1         | 5    |
|                            | Non-Resident Alien                                      | 0           | 0           | 0    |
|                            | Identify with 2 or more groups ACPA terms "multiracial" | 28          | 6.2         | 2    |
|                            | Other   | 0           | 0           | 0    |
|                            | Not Disclosed   | 11          |             | 0    |
| Identity Status            | Gay, Lesbian or Bisexual                                | 83          | 17.8        | -    |
|                            | Non-Christian, Not religiously affiliated               | 204         | 43.9        | -    |
|                            | Disabled  | 15          | 3.2         | -    |
|                            | International   | 12          | 2.6         | -    |

Table 4 Continues

**Table 4 continues. Demographic Profile of Study Participants Compared to ACPA Membership**

| Variable                      | Categories                 | Participant |             | ACPA |
|-------------------------------|----------------------------|-------------|-------------|------|
|                               |                            | #           | % Reporting | %    |
| Highest Degree Attained       | Associates                 | -           | -           | 0    |
|                               | Bachelors                  | 10          | 2.2         | 20   |
|                               | Masters (in progress)      | 101         | 22.1        | -    |
|                               | Masters                    | 288         | 63.2        | 58   |
|                               | Educational Specialist     | 5           | 1.1         | 0    |
|                               | Doctorate                  | 52          | 11.4        | 19   |
|                               | Other                      | -           | -           | 1    |
|                               | Not Disclosed              | 9           | -           | 0    |
| Graduate Degree Area of Study | Student Personnel          | 149         | 32.8        | -    |
|                               | Higher Education           | 486         | 41          | -    |
|                               | Counselor Education        | 23          | 5.1         | -    |
|                               | Counseling Psychology      | 12          | 2.6         | -    |
|                               | Educational Psychology     | 6           | 1.3         | -    |
|                               | Educational Administration | 23          | 5.1         | -    |
|                               | Social Work                | 2           | .4          | -    |
|                               | Other                      | 53          | 11.7        | -    |
|                               | Not Disclosed              | 11          | -           | -    |

Note. A dash (-) in a cell indicates that information was not available or requested. Percentages were based upon the number of participants responding.

Table 5 presents information about the type and size of institutions at which participant report employment. Eighty-five percent of participants work in either public (N = 290) or private (N = 132) four-year institutions. The participant sample was fairly evenly split

between institutional size categories. Nearly 23% (N = 104) work in institutions larger than 30,000 student enrollment, another 24% (N= 108) work in institutions with 20,000-29,000 student enrollment. The sample also included 22% (N = 100) and 20% (N = 91) working at institutions enrolling between 10,000-19,999 and 2,000-10,000 respectively. The smallest group, comprising only 11% (N = 52) were practitioners working at institutions with fewer than 1,999 student enrollment.

**Table 5**

**Type and Size of Employing Institutions and Current Status**

| Variable           | Categories                         | Participant |    | ACPA |
|--------------------|------------------------------------|-------------|----|------|
|                    |                                    | N           | %  | %    |
| Institutional Type | 4 Year Public                      | 290         | 66 | 56   |
|                    | 4 Year Private                     | 132         | 30 | 35   |
|                    | 2 Year Public                      | 14          | 3  | 4    |
|                    | 2 Year Private                     | 6           | 1  | 0    |
|                    | Profit/Not for Profit Co. or Other | -           | -  | 5    |
|                    | Not Disclosed                      | 23          | -  | -    |
| Institution Size   | > 30,000                           | 104         | 23 | 18   |
|                    | 20,000-29,999                      | 108         | 24 | 20   |
|                    | 10,000-19,999                      | 100         | 22 | 24   |
|                    | 2,000-9,999                        | 91          | 20 | 26   |
|                    | Fewer than 1,999                   | 52          | 11 | 11   |
|                    | Not Disclosed                      | 10          | -  | -    |

Table 5 continues

**Table 5. Type and Size of Employing Institutions and Current Status Continued**

| Variable   | Categories   | Participant |      | ACPA |
|--|--|-------------|------|------|
|  |  | N           | %    | %    |
| Functional Area<br>(* Note: ACPA asks members to “check all that apply” but does not combine numbers to create a “multiple responses” category. The number of functional areas represented totals more than 14,000.) | Disabled Student Services  | 4           | .9   | 3    |
|  | GLBT Awareness   | 2           | .4   | 7    |
|  | International Student Services   | 11          | 2.4  | 5    |
|  | Multicultural Affairs  | 19          | 4.2  | 12   |
|  | Religious Programs   | 5           | 1.1  | 3    |
|  | Residence Life and Housing   | 163         | 35.8 | 25   |
|  | Women’s Affairs  | 5           | 1.1  | 5    |
|  | Other  | 179         | 39.3 | 6    |
|  | Multiple Responses   | 67          | 14.7 | -    |
|  | Not Disclosed  | 10          |      | -    |
| Current Position Title/<br>Status  | Graduate student   | 92          | 20.2 | 22   |
|  | Entry level (includes Advisor, Counselor; Residence Hall/Area Director         | 133         | 29.3 | 18   |
|  | Mid Level (includes Assistant Dean/Director; Associate Dean/Director; Director | 149         | 32.8 | 30   |
|  | Senior Level (includes Dean, Vice President)                                   | 17          | 3.7  | 11   |
|  | Other  | 64          | 14.1 | 18   |
|  | Not Disclosed  | 10          |      | -    |

Note. A dash (-) in a cell indicates that information was not available or requested. Percentages were based upon the number of participants responding.

Participants were also asked to identify the functional area most representative of their current responsibilities. A significant percentage of respondents (35.8%, N = 163) were employed in departments of housing and residence life. Another 10% (N = 46) were employed in what might be characterized as offices serving historically marginalized

populations. One hundred seventy-nine (39.3%) participants indicated that they were employed in “other” student affairs departments. Due to a coding error, functional areas that comprise the “other” category are indeterminate.

Compared to members of ACPA, participants in entry-level positions, including Advisor, Counselor or Residence Hall Director/Area Director were slightly over-represented (29.3% compared to 18%). At the other end of the hierarchy, while 11% of ACPA’s members are senior level practitioners, including Deans and Vice Presidents, only 3.7%, (N = 17), of survey respondents were senior level practitioners. Given the slight over-representation of entry-level practitioners in the sample, it is not surprising that more than half (60.1%) of the respondents reported working fewer than 13 years. Participant work experience in student affairs ranges between 0 to 44 years, the mean number worked was 8 years (See Table 6).

Participants provided, and I illustrated in Table 6, a variety of demographic information designed to uncover how the outcome of this research is comparable to prior research on intercultural competence. For example, Mueller and Pope (2003) suggested that there is a positive relationship between age and multicultural competence. Thus, ascertaining the age range of this sample was important in order to establish the degree to which one’s intercultural competence, as measured by the CQS, might be related to one’s age. Participants ranged in age from 21 to 72, with a mean age of 33 years.

Participants were asked to respond to the questions identified in Table 6 with numerical frequencies. However, some individuals provided written explanations, for example “numerous times;” or “too many to count.” Because I could not quantify this data, the responses to these questions were omitted. Other individuals provided ranges for

Table 6

## Additional Demographic Information

| Variable  | Mean  | Median | Mode | Min. | Max. |
|---|-------|--------|------|------|------|
| Age (continuous)  | 33.1  | 30.00  | 24   | 21   | 72   |
| Years of professional work experience in Student Affairs  | 8.01  | 5      | 4    | 0    | 44   |
| Number of workplace conversation with individuals of a different race, ethnicity religion, sexual orientation, gender identity or ability status over a two week span         | 32.39 | 20     | 50   | 0    | 1000 |
| Number of conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference over a two-week span | 10.10 | 5      | 5    | 0    | 1000 |
| Number of multicultural workshops or training programs attended over a two year period  | 7.22  | 5      | 2    | 0    | 100  |
| Number of times have traveled outside the US since age 18   | 6.69  | 3      | *    | 0    | 350  |

\* Multiple modes exist. The smallest value is shown.

frequencies. Where ranges were provided, I calculated and entered into the data set the mean of the range. For example, I calculated a respondent's response of 10-20 conversations as  $(10 + 20) / 2$ , or 15 conversations.

Other researchers, including King and Howard-Hamilton (2003), Marina (2003), Martin (2005), Miklitsch (2005), Mueller and Pope (2001, 2003), Pope and Muller (2005), and Weigand (2005) reported a positive relationship between regular engagement with multicultural issues, through training, conversation, or work, and competence. Of the 422 participants responding to the prompt, "Please indicate the numerical frequency of workplace conversations you typically have with individuals of a different race,

ethnicity, religion, sexual orientation, gender identity or ability status over the course of a two week period,” nearly 50% reported having workplace conversations 5 (6.4%, N = 27), 10 (9.5%, N = 40), 20 (6.9%, N = 29), 30 (5.2, N = 22), 50 (10.4%, N = 44), or 100 (8.3%, N = 35) times within a two-week period. The responses ranged from 0 (N=6) interactions to 1000 (N=2). The data was positively skewed by the 7% (N = 28) who reported between 100-1000 workplace conversations with individuals different than themselves over the course of a two-week time period. The mean number of conversations was 49.64. Prior to data analysis, I collapsed these responses into categorical data. I did this in order to maintain the integrity of the responses provided while adjusting for the 7% of outlying responses. After data was collapsed, the mean number of conversations was brought down to 32.39 over a two-week time period.

Among participants, though many workplace conversations *with* individuals whose identities are different than their own were reported, few workplace conversations *about* difference were reported. Over a two-week period, the number of reported workplace conversations with supervisors and or peers regarding multicultural issues ranged significantly (from 0 to 1000). The mean number of workplace conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference was 15.43 (N = 433). Again, prior to analysis, I collapsed responses into categorical data in order to accommodate outliers. The adjusted average number of conversations about difference was 10.10 over a two-week period. Nearly 75% (74.1%, N = 322) reported having fewer than 10 workplace conversations with co-workers or supervisors about identity status differences over a two-week period.

Of the 75%, 7.2% (N = 31) reported having no conversations about identity differences in a typical two-week time period.

In terms of personal and professional development, though the mean number of training programs attended over a two-year period was 7.22, the modal response was just two (14.8%, N= 66). This is not to say that practitioners are not engaged in these types of on-going training opportunities. More than 70% (72%, N = 343) of practitioners reported participating in between 2-10 training and workshop experiences over the course of two years. A little over 10% (12.1%, N = 54) participated in only one (4.7%, N = 21) or no training experiences (7.4%, N = 33) over a two-year period.

Finally, Martin (2005) reported that there may be a positive relationship between international travel and or living experience and intercultural competency. Among survey participants, though 14.1% (N=63) have not traveled outside the United States since the age of 18, 62.6% (N=279) reported travel outside the United States from 1-5 times. The mean number of times participants reported traveling abroad was 6.69. Others had more immersive experiences, living abroad for periods ranging from 1 to 6 or more continuous months. Just under one third (30.6%) of survey participants reported living abroad for at least one month (See Table 7).

Table 7

Time Spent Living Outside the US

| Number of continuous months lived outside the US     | Number | %    |
|--|--------|------|
| I have never lived outside the US.                   | 271    | 59.7 |
| I lived abroad less than one month                   | 44     | 9.7  |
| I lived abroad between one and six months            | 94     | 20.7 |
| I lived abroad more than six months (please specify) | 45     | 9.9  |
| Not Disclosed  | 11     |      |

**Data Analysis**

The Statistical Package for the Social Sciences (SPSS) was used for all data analysis. Because I was interested in drawing inferences about specific identity groups and understanding the relationship between variables, I used a combination of inferential and correlational techniques to conduct this study (Creswell, 2008). I used both independent samples t-tests and ANOVAs to address my first research question. Specifically, I used these tests to determine the relationship between demographic characteristics (gender identification, race and ethnicity, and identity status) and intercultural competency of student affairs practitioners. I extended my analysis of demographic variables and intercultural competence by conducting factorial ANOVA to determine the interaction of gender and race and ethnicity on competence.

My second question was designed to understand which and to what degree do variables including (a) age, (b) years of professional service in student affairs, (c) frequency of workplace conversations about diversity, (d) frequency of on-going training regarding intercultural issues, (e) amount of time spent outside the US, and (f) direct

experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners. I began by using correlation matrices to demonstrate what if any relationship existed between CQS and MCSA-P2 scores and the seven independent variables identified in the question. I then used correlation matrices to demonstrate what if any relationship existed between each of the sub-dimensions of cultural intelligence and the seven independent variables listed above.

Beyond understanding the differences between groups, I was interested in explaining the relationship among variables to intercultural competency. Thus, I conducted a step-wise multiple linear regression analysis to investigate the extent to which the identified variables (years of professional service, functional work area, frequency of on-going training regarding intercultural issues, amount of time spent outside the US, direct experience with diverse others, or frequency of on-going conversations about diversity) relate to intercultural competency, and the proportion of the variance in intercultural competence uniquely associated with each of the variables.

The purpose of my third question was to reveal what if any relationship exists between student affairs practitioner self and peer-assessments of intercultural competency. I used correlation analysis to compare composite CQS self and peer-assessments and then to compare each of the four CQS sub-dimension self and peer-assessments.

## **Conclusion**

The purpose of this chapter was four-fold. I began this chapter by detailing both the development and validation of the Cultural Intelligence Survey (CQS) and the Multicultural Competence in Student Affairs – Preliminary 2 (MCSA-P2). I also

described the research design and methods I used to explore intercultural competence among student affairs practitioners. Then I detailed the data collection procedures and statistical methods used in the research design. Finally, I described the demographic profile of the volunteers who agreed to participate in this research design.

The variables in this study were assessed using three instruments: a personal data form that I developed, the Cultural Intelligence Survey (Ang et al., 2007), and the Multicultural Competence in Student Affairs – Preliminary 2 (Pope & Mueller, 2000). A sample of 465 student affairs practitioners participated in the study. A small sub-group, including 52 practitioners, also submitted the names and e-mail contact information for between three and five observers they believed could accurately assess their intercultural competence. A total of 188 peer observers participated, affording the ability to better understand the relationship between participant and observer assessment of cultural intelligence. The four research questions I identified required the use of a combination of inferential and correlational techniques.

In the subsequent chapter, I report the statistical findings based upon the analysis I have described. Specifically, I report the results of correlation matrices used to demonstrate the relationship between each of the independent variables (age, years of professional work experience in student affairs, frequency of workplace conversations about diversity, frequency of interactions with diverse others, amount of training in intercultural issues, and experience traveling or living abroad) and the dependant variable (cultural intelligence). I also report findings of the factorial ANOVA used to determine the proportion of variability in Cultural Intelligence (dependant variable) explained by looking at the intersection of gender and race and ethnicity. Further, I detail the findings

of the third statistical procedure, step-wise multiple linear regression analysis, used to investigate the extent to which moderating variables (years of professional service, functional work area, frequency of on-going training regarding intercultural issues, amount of time spent outside the US, direct experience with diverse others, and frequency of on-going conversations about diversity) were related to intercultural competency, and the proportion of the variance in intercultural competence uniquely associated with each of the variables above and beyond others. Finally, I explain the findings of correlation analysis used to explore the relationship between self and peer or student assessed intercultural competency.

## **Chapter 4: Study Results**

The purpose of this study was two-fold. First, I introduced the Cultural Intelligence Survey (CQS), developed by Ang, Van Dyne, Koh, and Ng (2004), to the field of student affairs. This instrument is designed to assess intercultural competency and has demonstrated its generalizability across sample groups, time, and countries (Ang, et al., 2007). The second purpose was to use not only the CQS but also the Multicultural Competence in Student Affairs – Preliminary 2 (MCSA–P2), developed by Pope and Mueller (2000), to address three research questions:

- 1) Are there relationships between demographic characteristics (gender identification, age, marginalized status, or race and ethnicity) and intercultural competency of student affairs practitioners?
- 2) Which and to what degree do the following variables: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US (both travel as well as living), and (d) direct experience with diverse others or talking about cultural difference impact the outcome of assessment of intercultural cultural competency among student affairs practitioners?
- 3) Are student affairs practitioner self and peer-assessments of intercultural competency related?

Chapter 1 focused on understanding the problem and its importance to the student affairs profession. Specifically, although the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to define what it means to be interculturally competent (Castellanos, et al., 2007; Deardorff,

2006; King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004) and fewer have designated methods for assessing efforts toward its development among professionals (Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003). The second chapter detailed the literature that informs the problem and led to the development of the three research questions previously outlined. The third chapter explained the research instruments and statistical tests used to address the research questions. It also detailed demographic information gleaned from the study participants. Chapter four focuses specifically on describing the research findings of a spring 2009 study conducted to better understand the intercultural competency of student affairs administrators using the CQS, the MCSA-P2, and a Personal Data Form (PDF) I developed.

The CQS is a 20-item instrument that assesses an individual's capacity to function and manage effectively in culturally diverse settings (Ang, et al., 2004). It includes four factors: meta-cognition (executive functions including representation, abstract reasoning, problem solving, and decision-making), cognition (learned, declarative, or crystallized knowledge), behavior (one's capacity to regulate elementary sensory functions including perception, sensation, and attention), and motivation (one's value for as well as self-assessed efficacy to learn about cultural difference). The MCSA-P2 is a 34-item instrument designed to assess multicultural knowledge, skills, and awareness required of student affairs practitioners to work across racial boundaries and with racial issues within college campus milieu (Pope & Mueller, 2000). Other variables, including those related to participant demographics and work experiences were assessed using a Personal Data Form (PDF) I developed. I begin chapter four by highlighting the preliminary analysis of

the instrumentation I used to conduct this research. I then move to the primary analysis. In this section, I document and discuss the outcomes of each of the statistical analysis I conducted to address the research questions. I conclude chapter four by summarizing the findings of my research.

### **Preliminary Analysis**

Because the CQS has been newly introduced to student affairs, the preliminary analysis is used to not only establish the reliability of the instrument with the sample group of student affairs practitioners but also its validity. I used inter-item correlation analysis and Cronbach's Alpha to establish the reliability of the CQS as well as each of each of its four sub-dimensions. Validity of the CQS was conducted using Pearson's Product Moment correlation to assess the relationship between the CQS and the MCSA-P2. Four-hundred-sixty-five student affairs practitioners participated in this study. Table 8 contains the descriptive statistics for the CQS and each of the four sub-dimensions.

Table 8

Descriptive Statistics: CQS and Four Sub-Dimensions

|                | Mean   | Std. Deviation | N   |
|----------------|--------|----------------|-----|
| Composite CQ   | 5.0500 | .92227         | 465 |
| Meta-cognition | 5.8097 | .88712         | 465 |
| Cognition      | 4.0814 | 1.28775        | 465 |
| Motivation     | 5.5196 | 1.04929        | 465 |
| Behavior       | 5.1351 | 1.19640        | 465 |

The CQS utilizes a 7-point likert scale from strongly disagree (1) to strongly agree (7). Each of the four sub-dimensions, meta-cognition, cognition, motivation, and behavior are separate factors that contribute to the composite CQS score. The CQS sub-

scale means were computing by averaging the numerical responses to the questions comprising the sub-scale. As seen in Table 8, the highest participant self-assessed scores were in the sub-dimension of meta-cognition and the lowest participant scores were in the area of cognition. Thus, participants believed their capacity to reason abstractly and to utilize executive functions including representation, perspective taking, problem solving, and decision-making, surpassed what they believe they have learned about cultures and cultural differences.

The Inter-item correlation analysis is a test designed to assess the internal consistency of a data-set. The results of this test, as seen in Table 9, indicate that the four factors have moderate inter-correlations and item-to-total (sub-dimension to composite) correlations that are both positive and greater than .7.

Table 9

Inter-item and Item-to-Total Correlations: CQS and Four Sub-Dimensions

|                | Composite<br>CQS | Meta-<br>cognition | Cognition | Motivation | Behavior |
|----------------|------------------|--------------------|-----------|------------|----------|
| Composite CQ   | -                | .752*              | .859*     | .819*      | .810*    |
| Meta-cognition |                  | -                  | .537*     | .533*      | .564*    |
| Cognition      |                  |                    | -         | .594*      | .518*    |
| Motivation     |                  |                    |           | -          | .564*    |

\* Sig. (2-tailed) < .01. N = 465

Item-to-total correlations for each subscale demonstrate strong relationships between items and their scales, supporting internal consistency. Tables 10 through 13 contain inter-item and item-to-total correlations for the sub-dimensions of the CQS.

Table 10

## Meta-Cognition CQ Inter-Item and Item-Total Correlation Matrix

| Question numbers and statements   | 2.     | 3.     | 4.     | Meta-cognition |
|---|--------|--------|--------|----------------|
| 1. I am conscious of the cultural knowledge I use when interacting with people of different cultural backgrounds. | .815** | .515** | .560** | .859**         |
| 2. I am conscious of the cultural knowledge I apply to cross-cultural interactions.                               |        | .512** | .566** | .861**         |
| I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.                 |        |        | .476** | .767**         |
| I check the accuracy of my cultural knowledge as I interact with people from different cultures.                  |        |        |        | .809**         |

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 11

## Cognition CQ Inter-Item and Item-to-Total Correlation Matrix

| Question Numbers and Statements   | 6.     | 7.     | 8.     | 9.     | 10.    | Cognition |
|---|--------|--------|--------|--------|--------|-----------|
| 5. I know the legal and economic systems of other cultures.                 | .697** | .702** | .602** | .537** | .547** | .824**    |
| 6. I know the values and religious beliefs of other cultures.               |        | .769** | .713** | .560** | .684** | .880**    |
| 7. I know the marriage systems of other cultures.                           |        |        | .714** | .538** | .622** | .869**    |
| 8. I know the arts and crafts of other cultures.                            |        |        |        | .531** | .627** | .835**    |
| 9. I know the rules (e.g., grammar) of other languages.                     |        |        |        |        | .637** | .766**    |
| 10. I know the rules for expressing non-verbal behaviors in other cultures. |        |        |        |        |        | .821**    |

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 12

## Motivational CQ Inter-Item and Item-to-Total Correlation Matrix

| Question Numbers and Statements   | 12.    | 13.    | 14.    | 15.    | Motivation |
|---|--------|--------|--------|--------|------------|
| 11. I enjoy interacting with people from different cultures.                                    | .531** | .478** | .404** | .439** | .665**     |
| 12. I enjoy living in cultures that are unfamiliar to me.                                       |        | .618** | .551** | .650** | .851**     |
| 13. I am confident that I can socialize with locals in a culture that is unfamiliar to me.      |        |        | .669** | .639** | .853**     |
| 14. I am confident that I can get accustomed to the shopping conditions in a different culture. |        |        |        | .729** | .828**     |
| 15. I am sure I can deal with the stresses of adjusting to a culture that is new to me.         |        |        |        |        | .858**     |

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 13

## Behavioral CQ Inter-Item and Item-Total Correlation Matrix

| Question Number and Statement   | 17.    | 18.    | 19.    | 20.    | Behavior |
|---|--------|--------|--------|--------|----------|
| 16. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it. | .727** | .608** | .556** | .533** | .815**   |
| 17. I change my non-verbal behavior when a cross-cultural situation requires it.                    |        | .689** | .621** | .603** | .862**   |
| 18. I use pause and silence differently to suit different cross-cultural situations.                |        |        | .654** | .681** | .865**   |
| 19. I vary the rate of my speaking when a cross-cultural situation requires it.                     |        |        |        | .702** | .832**   |
| 20. I alter my facial expressions when a cross-cultural interaction requires it.                    |        |        |        |        | .838**   |

\*\* Correlation is significant at the 0.01 level (2-tailed).

Tables 10-13 indicate that the questions designed to represent each of the four factors have moderate inter-correlations and item-total correlations that are both positive and, with the exception of one question, greater than .7. Further, the item-to-total correlations for each subscale demonstrate strong relationships between items and their scales, also supporting internal consistency.

The composite as well as individual scale reliabilities of the CQS are as follows:

|                       |      |
|-----------------------|------|
| Composite Reliability | .936 |
| Meta-cognitive        | .835 |
| Cognitive             | .910 |
| Motivation            | .868 |
| Behavioral            | .897 |

Prior research conducted using the MSCA-P2 indicated that the scale best fit a one-factor model for measurement of multicultural competency (Mueller, 1999, Pope & Mueller, 2000). I therefore elected to conduct only Cronbach's Alpha. The reliability of the MCSA-P2 was .961.

The distributions of both the CQS as well as the MCSA-P2 are shown in Figures 5 and 6 respectively. The mean participant (N = 465) CQS score was 5.05 (sd = 0.922) and participant scores were normally distributed. The mean MCSA-P2 score was 5.7964 (sd = .85532). Though normally distributed, participant scores were positively skewed. The mean MCSA-P2 score was significantly higher ( $p < .01$ ) than the mean CQS score.

Figure 5. CQS Distribution

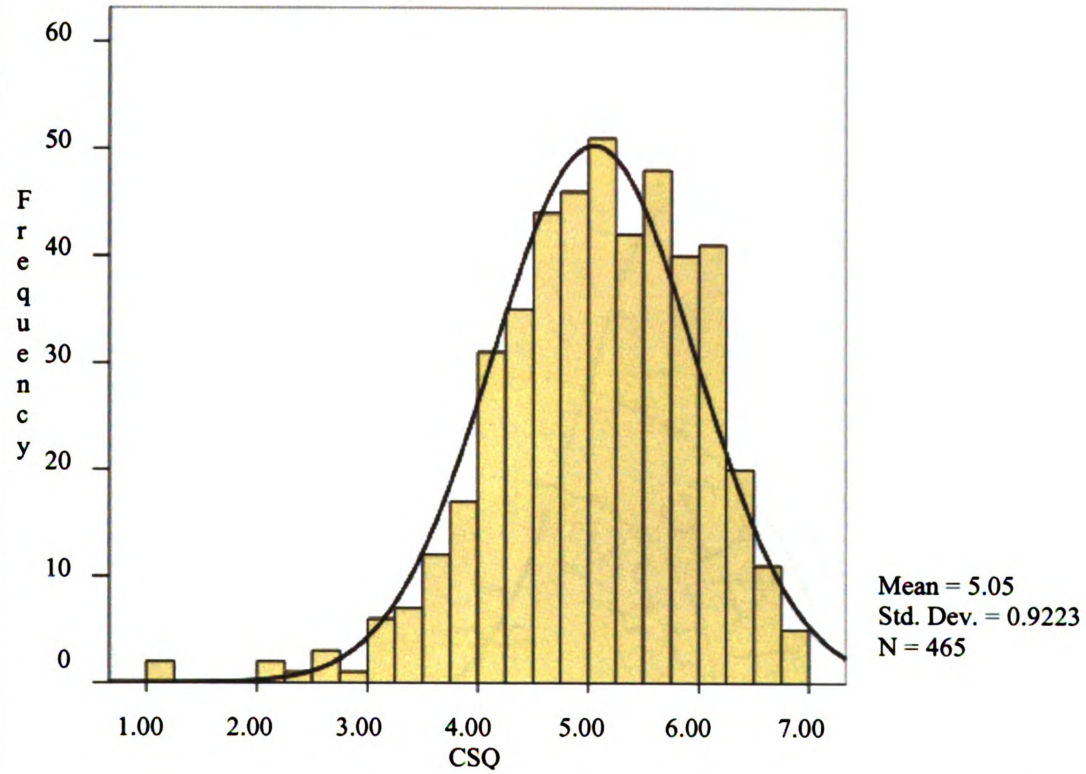
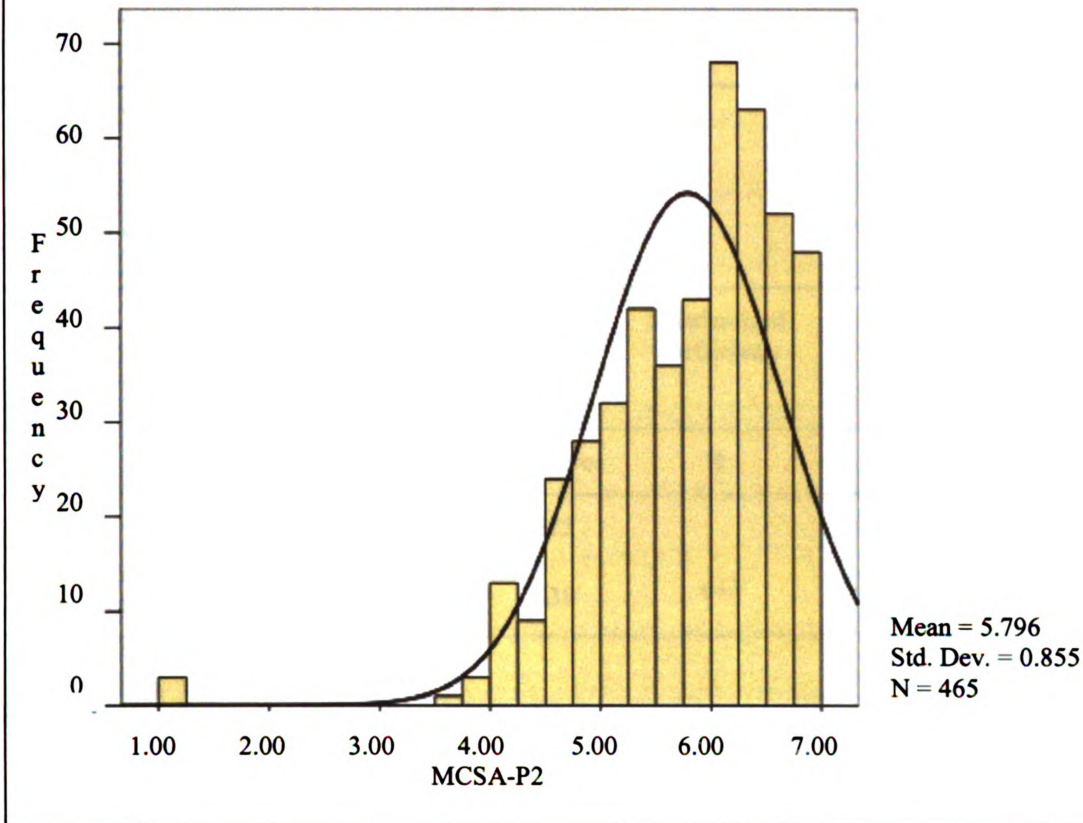


Figure 6. MCSA-P2 Distribution



The Pearson Product Moment Correlation was calculated to determine the relationship between the CQS and the MCSA-P2. I found a moderate correlation ( $r(463) = .643, p < .001$ ), indicating a significant linear relationship between the 2 measures. I then calculated a simple linear regression to predict participant CQS outcome based participant MCSA-P2 outcome. As seen in Table 14, a significant regression equation was also found ( $F(1, 463) = 325.614, p < .001$ ), with an  $R^2$  of .413. Participants' predicted CQS is equal to  $1.03 + .693 (\text{MCSA-P2})$ .

Table 14

**CQS and MCSA-P2 Model Summary**

| Model | R       | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---------|----------|-------------------|----------------------------|
| 1     | .643(a) | .413     | .412              | .70743                     |

Predictor: (Constant), MCSA-P2

Table 15

**CQS and MCSA-P2 Coefficients**

| Model                    | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|--------------------------|-----------------------------|------------|---------------------------|--------|------|
|                          | B                           | Std. Error | $\beta$                   |        |      |
| (Constant)               | 1.034                       | .225       |                           | 4.596  | .000 |
| Multicultural Competence | .693                        | .038       | .643                      | 18.045 | .000 |

Dependent Variable: CQS

**Primary Analysis**

The purpose of the primary analysis is to address the three research questions posed in chapter 1. These included:

1. Are there relationships between demographic characteristics (including gender identification, age, marginalized status, race, and ethnicity) and intercultural competency of student affairs practitioners?
2. Which and to what degree do variables including: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US, and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners?

3. Are student affairs practitioner self and peer-assessments of intercultural competency related?

Each of these questions will be addressed in sequential order. I have separated the remainder of this chapter into three sections, each identified by the number and brief descriptor of the question under investigation. Section one includes data yielded from independent samples t-tests and ANOVAs that were used to determine the relationship between participant demographic characteristics and intercultural competency as assessed by the CQS and the MCSA-P2. Extending the depth of study, section one also includes the outcomes of a factorial ANOVA designed to ascertain what interactions exist between two of the variables under investigation.

In the second section, I detail the findings of a correlation analysis conducted to explore the relationship between seven independent variables and intercultural competency as assessed by the CQS and the MCSA-P2. In addition, I highlight the outcomes of a correlation analysis used to determine the degree to which each of the variables was related to the four sub-dimensions of CQS including meta-cognition, cognition, motivation, and behavior. Finally, I present the findings of a multiple linear regression analysis conducted to learn more about the extent to which the independent variables could be used to predict participant CQS results.

In the third section, I detail the outcomes of both independent samples t-tests and correlation analysis conducted to determine the relationship between self and peer assessed intercultural competence as measured by the CQS. This section details not only an analysis of differences between participant and observer assessment of composite CQS but also an analysis of participant and observer differences in outcomes with regard

to each of the four sub-dimensions. At the conclusion of section 3 is a chapter summary, highlighting the findings contained within the chapter and providing a brief outline of the contents of chapter 5.

### **Question 1: Demographic Characteristics and Intercultural Competency.**

I used both independent samples t-tests and ANOVAs to determine the relationship between demographic characteristics (gender identification, race and ethnicity, and identity status) and intercultural competency of student affairs practitioners. My purpose in conducting this analysis was to determine if the outcomes of the CQS would be consistent with the findings of past research of intercultural competency of student affairs administrators.

#### ***Gender Identity.***

Though the on-line survey software required participants to answer all questions contained in both the CQS and the MCSA-P2, they were able to omit demographic information from the PDF if they chose. A total of 465 practitioners participated in this research. However, only 454 participants disclosed their gender identity. Within this group, 134 participants identified themselves as men and 319 as women. Because the sample size was so small, the one participant who identified as transgender was excluded from analysis.

The descriptive statistics based upon gender identification of the participants are located in Table 16. The mean CQS self reported score for women ( $m = 5.1238$ ,  $sd = .85882$ ) was higher than the mean CQS score for men ( $m = 5.0052$ ,  $sd = .89056$ ). The mean MCSA-P2 self reported score for women ( $m = 5.8441$ ,  $sd = .75292$ ) was lower than the mean MCSA-P2 score of men ( $m = 5.8464$ ,  $sd = .75814$ ).

Table 16

## Descriptive Statistics for CQS and MCSA-P2 Based on Gender

|         | Gender | N   | Mean   | Std. Deviation | Std. Error Mean |
|---------|--------|-----|--------|----------------|-----------------|
| CQS     | Male   | 134 | 5.0052 | .89056         | .07693          |
|         | Female | 319 | 5.1238 | .85882         | .04808          |
| MCSA-P2 | Male   | 134 | 5.8464 | .75814         | .06549          |
|         | Female | 319 | 5.8441 | .75292         | .04216          |

I calculated an independent-samples t test comparing both the mean CQS and MCSA-P2 self-reported scores of female and male participants. As the data in Table 17 indicates, I found no significant difference in either the CQS scores ( $t(451) = .185, p > .05$ ) or the MCSA-P2 scores ( $t(451) = .976, p > .05$ ) based upon gender identification.

Table 17

## T-test for Equality of CQS and MCSA-P2 Mean Scores Based on Gender

|         |                         | Levene's Test for Equality of Variances |      | t-test for Equality of Means |     |               |                 |                       |   |        |
|---------|-------------------------|---|------|------------------------------|-----|---------------|-----------------|-----------------------|---|--------|
|         |                         | F                                       | Sig. | T                            | Df  | Sig. (2-tail) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |        |
|         |                         |   |      |                              |     |               |                 |                       | Lower                                     | Upper  |
| CQS     | Equal variances assumed | .810                                    | .369 | -1.327                       | 451 | .185          | -.11860         | .08939                | -.29427                                   | .05707 |
| MCSA-P2 | Equal variances assumed | .004                                    | .948 | .030                         | 451 | .976          | .00233          | .07767                | -.15030                                   | .15497 |

### ***Race and Ethnicity.***

I computed a one-way ANOVA comparing first the CQS and then the MCSA-P2 self-report scores for six racial and ethnic groups: African American or Black, Native American or Alaska Native, Asian, Hawaiian or other Pacific Islander, White, Latino or Hispanic, and individuals who identify with two or more racial or ethnic groups. As seen in Table 18, the lowest self-report scores were found with African American and Black participants and the highest from Latino and Hispanic participants. Only three individuals identified as Native American or Alaska Native. While I did not exclude this group, it is important to critically consider outcomes associated with such a small number of participants.

**Table 18**

**Descriptive Statistics of CQS Scores Based on Race and Ethnicity**

|                                   | N   | Mean | Std.<br>Devi-<br>ation | Std.<br>Error | 95% Confidence<br>Interval for Mean |                | Min. | Max. |
|-----------------------------------|-----|------|------------------------|---------------|-------------------------------------|----------------|------|------|
|                                   |     |      |                        |               | Lower<br>Bound                      | Upper<br>Bound |      |      |
| African-American or Black         | 41  | 4.88 | .979                   | .153          | 4.58                                | 5.19           | 2.05 | 6.50 |
| Native American/ Alaska<br>Native | 3   | 5.87 | .480                   | .277          | 4.67                                | 7.06           | 5.35 | 6.30 |
| Asian                             | 19  | 5.48 | .627                   | .144          | 5.18                                | 5.78           | 4.05 | 6.50 |
| White                             | 349 | 5.01 | .851                   | .046          | 4.92                                | 5.10           | 2.30 | 7.00 |
| Latino/ Hispanic                  | 14  | 5.87 | .658                   | .176          | 5.49                                | 6.25           | 4.65 | 6.70 |
| 2 or more groups identified       | 28  | 5.47 | .759                   | .143          | 5.17                                | 5.76           | 3.60 | 6.60 |
| Total                             | 454 | 5.08 | .866                   | .041          | 5.00                                | 5.16           | 2.05 | 7.00 |

The results of the ANOVA indicated a significant difference among the various racial and ethnic groups on the CQS ( $F(5, 448) = 5.872, p < .01$ ). I used the Fisher Least

Significant Difference (LSD) test to determine the nature of the differences in CQS scores between the racial and ethnic groups. This analysis, shown in Table 19, revealed

Table 19

One-Way ANOVA of CQS Based on Race and Ethnicity

| Race or Ethnicity              | Race or Ethnicity              | Mean Difference | Std. Error | Sig. | 95% Confidence Interval |             |
|--------------------------------|--------------------------------|-----------------|------------|------|-------------------------|-------------|
|                                |                                |                 |            |      | Lower Bound             | Upper Bound |
| African-American               | Native American/ Alaska Native | -.983           | .505       | .052 | -1.974                  | .009        |
|                                | Asian                          | -.595 *         | .234       | .011 | -1.055                  | -.135       |
|                                | White                          | -.129           | .139       | .353 | -.403                   | .144        |
|                                | Latino/ Hispanic               | -.984 *         | .261       | .000 | -1.497                  | -.471       |
|                                | 2 or More Identities           | -.584 *         | .207       | .005 | -.990                   | -.177       |
| Native American/ Alaska Native | Asian                          | .388            | .524       | .460 | -.642                   | 1.418       |
|                                | White                          | .853            | .489       | .082 | -.108                   | 1.814       |
|                                | Latino/ Hispanic               | -.001           | .537       | .998 | -1.056                  | 1.054       |
|                                | 2 or more Identities           | .399            | .512       | .437 | -.608                   | 1.406       |
| Asian                          | White                          | .465 *          | .199       | .020 | .075                    | .856        |
|                                | Latino/ Hispanic               | -.389           | .297       | .191 | -.973                   | .195        |
|                                | 2 or More Identities           | .011            | .251       | .965 | -.482                   | .504        |
| White                          | Latino/ Hispanic               | -.854 *         | .223       | .000 | -1.306                  | -.402       |
|                                | 2 or More Identities           | -.454 *         | .166       | .006 | -.780                   | -.129       |
| Latino/Hispanic                | 2 or More Identities           | .400            | .276       | .148 | -.142                   | .943        |

\* The mean difference is significant at the .05 level.

that participants who self-identified as either African American/Black (N = 41) or White (N = 349) had self-reported scores that did not differ significantly from one another but

were significantly lower ( $m = 4.8841$ ,  $sd = .97861$  and  $m = 5.0136$ ,  $sd = .85054$  respectively) than participants who identified as Asian ( $N = 19$ ,  $m = 5.4789$ ,  $sd = .62679$ ), Latino or Hispanic ( $N = 14$ ,  $m = 5.8679$ ,  $sd = .65826$ ), or who identified with two or more racial or ethnic groups ( $N = 28$ ,  $m = 5.4679$ ,  $sd = .75917$ ).

I ran a second ANOVA based upon race and ethnicity, this time including MCSA-P2 score as the dependant variable. The descriptive statistics are illustrated in Table 20 and the ANOVA results in Table 21.

Table 20

Descriptive Statistics for MCSA-P2 Scores Based on Race and Ethnicity

|                               | N   | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Min. | Max. |
|-------------------------------|-----|------|----------------|------------|----------------------------------|-------------|------|------|
|                               |     |      |                |            | Lower Bound                      | Upper Bound |      |      |
| African-American/Black        | 41  | 6.12 | .643           | .100       | 5.92                             | 6.32        | 4.27 | 6.94 |
| Native American/Alaska Native | 3   | 6.34 | .390           | .225       | 5.38                             | 7.31        | 6.06 | 6.79 |
| Asian                         | 19  | 6.27 | .577           | .132       | 5.99                             | 6.55        | 4.94 | 7.00 |
| White                         | 349 | 5.74 | .772           | .041       | 5.66                             | 5.82        | 3.64 | 7.00 |
| Latino/ Hispanic              | 14  | 6.32 | .484           | .129       | 6.04                             | 6.60        | 5.30 | 7.00 |
| 2 or More Identities          | 28  | 6.08 | .657           | .124       | 5.82                             | 6.33        | 4.42 | 6.97 |
| Total                         | 454 | 5.84 | .758           | .036       | 5.77                             | 5.91        | 3.64 | 7.00 |

The results of the ANOVA indicated a significant difference among the various racial and ethnic groups on the MCSA-P2 ( $F(5, 448) = 5.772$ ,  $p < .01$ ). I used the Fisher Least Significant Difference (LSD) test to determine the nature of the differences in scores between the racial and ethnic groups. This analysis, shown in Table 21, revealed

that participants who self-identified as White (N = 349) had significantly lower self-reported scores (m = 5.7413, sd = .77163) than any other racial or ethnic identity group including African American or Black (N = 41, m = 6.1183, sd .65250), Asian (N = 19, m = 6.2711, sd = .57044), Latino or Hispanic (N = 14, m = 6.3182, sd = .63182), or those identifying with more than one identity group (N = 28, m = 6.0758, sc .65714).

Table 21

One-Way ANOVA of MCSA-P2 Scores Based on Race and Ethnicity

| (I) Race or Ethnicity         | (J) Race or Ethnicity         | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------------------|-------------------------------|-----------------------|------------|------|-------------------------|-------------|
|                               |                               |                       |            |      | Lower Bound             | Upper Bound |
| African-American/Black        | Native American/Alaska Native | -.225                 | .442       | .611 | -1.093                  | .644        |
|                               | Asian                         | -.153                 | .205       | .456 | -.556                   | .250        |
|                               | White                         | .377 *                | .122       | .002 | .137                    | .617        |
|                               | Latino/Hispanic               | -.20                  | .229       | .383 | -.650                   | .250        |
|                               | 2 or More Identities          | .043                  | .181       | .815 | -.314                   | .399        |
| Native American/Alaska Native | Asian                         | .072                  | .459       | .875 | -.830                   | .975        |
|                               | White                         | .602                  | .429       | .161 | -.240                   | 1.444       |
|                               | Latino/Hispanic               | .025                  | .470       | .957 | -.899                   | .949        |
|                               | 2 or More Identities          | .268                  | .449       | .551 | -.615                   | 1.150       |
| Asian                         | Native American/Alaska Native | -.072                 | .459       | .875 | -.975                   | .830        |
|                               | White                         | .530 *                | .174       | .002 | .188                    | .872        |
|                               | Latino/Hispanic               | -.047                 | .260       | .857 | -.559                   | .465        |
|                               | 2 or More Identities          | .195                  | .220       | .374 | -.236                   | .627        |

Table 21 Continues

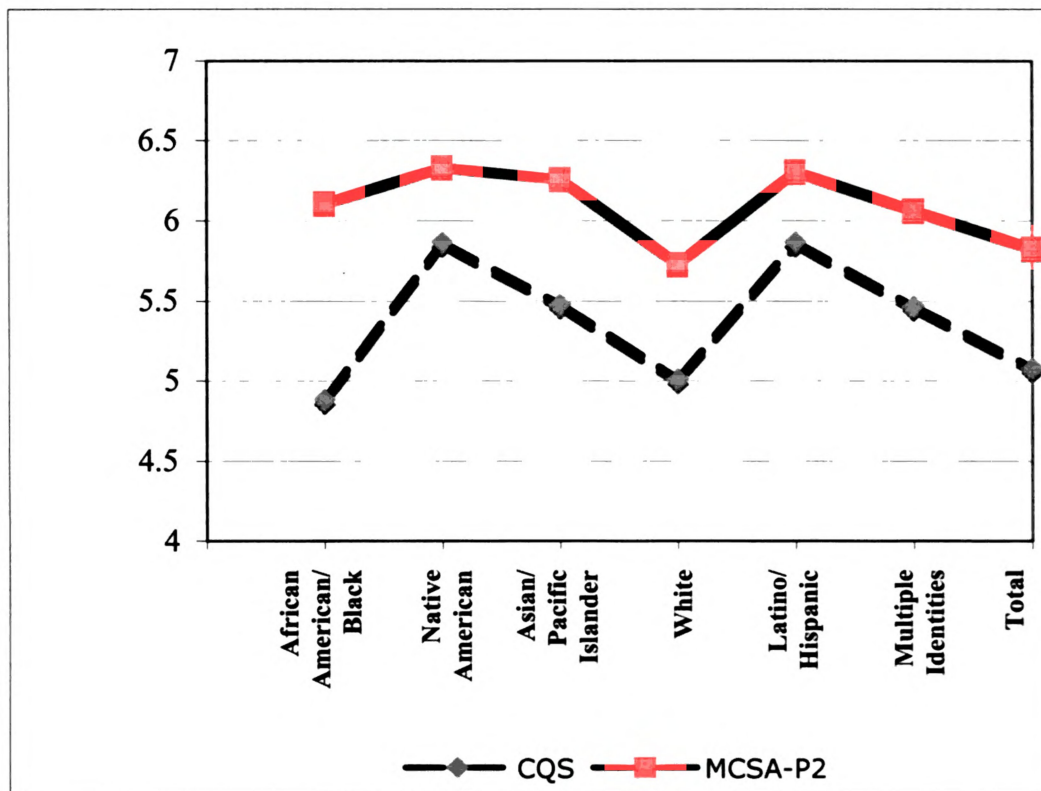
Table 21 continued. One-Way ANOVA of MCSA-P2 Based on Race and Ethnicity

| Race or Ethnicity | Race or Ethnicity    | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------|----------------------|-----------------------|------------|------|-------------------------|-------------|
|                   |                      |                       |            |      | Lower Bound             | Upper Bound |
| White             | Latino/Hispanic      | -.577 *               | .201       | .004 | -.973                   | -.181       |
|                   | 2 or More Identities | -.335 *               | .145       | .022 | -.620                   | -.049       |
| Latino/Hispanic   | 2 or More Identities | .242                  | .242       | .317 | -.233                   | .718        |

\* The mean difference is significant at the .05 level.

A means plot for the CQS and the MCSA-P2, located in Figure 7, illustrates the mean differences between the CQS and MCSA-P2 based upon race and ethnicity. The

Figure 7. Differences in CQS and MCSA-P2 Mean Scores By Race and Ethnicity



difference between the CQS and the MCSA-P2 scores with regard to African American and Black participants is evident. Where other identity group CQS and MCSA-P2 scores differed by between .47 and .79 points, the differences between African American and Black CQS and MCSA-P2 scores was 1.22 points.

Beyond gender identity, and race and ethnicity, I also wanted to understand how other aspects of participant identity might be related to CQS and MCSA-P2 self-assessed scores. Accordingly, I looked for differences in scores based upon sexual orientation, religious identity, ability status, and identity as an international student affairs practitioner. Participants were invited to indicate their association with as many of these groups as they believed correctly described their identity. For each of the identity groups, I have first provided a table illustrating the descriptive statistics and then a table illustrating the t-test results for both the CQS and the MCSA-P2.

### ***Sexual Orientation.***

Just over 20% (N = 83) of the participants in this study identified as gay, lesbian, or bisexual. As indicated in Table 22, the mean differences between the CQS and the MCSA-P2 varied considerably with the MCSA-P2 scores at the higher end of a seven-point Likert scale. In addition, the mean scores of each instrument demonstrate GLB identified participants had higher self-report scores on both the CQS as well as the MCSA-P2.

Table 22

## Descriptive Statistics of CQS and MCSA-P2 Scores Based on Sexual Orientation

|         | Identity | N   | Mean   | Std. Deviation | Std. Error Mean |
|---------|----------|-----|--------|----------------|-----------------|
| CQS     | Straight | 382 | 5.0195 | .93760         | .04797          |
|         | GLB      | 83  | 5.1904 | .83919         | .09211          |
| MCQS-P2 | Straight | 382 | 5.7448 | .86159         | .04408          |
|         | GLB      | 83  | 6.0336 | .78812         | .08651          |

The independent-samples t-test (please see table 23), calculated to compare the mean CQS score of participants who identified as gay, lesbian, or bisexual (N = 83) to the mean CQS score of participants who identified as straight (N = 382), indicated no significant difference between the two groups ( $t(463) = -1.53, p > .05$ ). The mean CQS

Table 23

## T-Test for Equality of CQS and MCSA-P2 Means Based on Sexual Orientation

|         |                        | Levene's Test for Equality of Variances |      | t-test for Equality of Means |     |               |            |                  |   |       |
|---------|------------------------|---|------|------------------------------|-----|---------------|------------|------------------|---|-------|
|         |                        | F                                       | Sig. | T                            | Df  | Sig. 2-tailed | Mean Diff. | Std. Error Diff. | 95% Confidence Interval of the Difference |       |
|         |                        |   |      |                              |     |               |            |                  | Lower                                     | Upper |
| CQS     | Equal variance assumed | .00                                     | .96  | -1.53                        | 463 | .13           | -.17       | .11              | -.39                                      | .05   |
| MCSA-P2 | Equal variance assumed | .15                                     | .70  | -2.81                        | 463 | .01**         | -.29       | .10              | -.49                                      | -.09  |

\*\* Significance at .01 level (two-tailed)

score of those identifying as lesbian, gay, or bisexual ( $m = 5.19$ ,  $sd = .84$ ) was not significantly different from the mean CQS score of participants identifying as straight ( $m = 5.02$ ,  $sd = .94$ ).

The independent t-test comparing the mean MCSA-P2 scores of participants who identified as gay, lesbian, or bisexual to the mean MCSA-P2 scores of those identifying as straight yielded a result that was significantly different ( $t(463), -2.81, p < .01$ ). The mean MCSA-P2 score of participants identifying as gay, lesbian, or bisexual ( $m = 6.0336$ ,  $sd = .79$ ) was significantly higher than those identifying as straight ( $m = 5.75$ ,  $sd = .86$ ).

### ***Religious Identity.***

All of the 465 survey participants included information about their religious identity. As evidenced in Table 24, the number of individuals identifying as non-Christian was 204 and the number of individuals identifying as Christian was 261.

**Table 24**

**Descriptive Statistics of CQS and MCSA-P2 Scores Based on Religious Identity**

|         | Identity      | N   | Mean  | Std. Deviation | Std. Error Mean |
|---------|---------------|-----|-------|----------------|-----------------|
| CQS     | Non-Christian | 204 | 5.033 | .998           | .067            |
|         | Christian     | 261 | 5.063 | .861           | .053            |
| MCSA-PA | Non-Christian | 204 | 5.812 | .976           | .068            |
|         | Christian     | 261 | 5.784 | .749           | .046            |

I computed an independent-samples t-test to compare the mean score of participants identifying as non-Christian ( $N = 204$ ) to the mean scores of participants identifying as Christian ( $N = 261$ ). As seen in Table 25, I found no significant difference in either the

CSQ scores ( $t(463) = -.34, p > .05$ ), or the MCSA-P2 scores ( $t(463) = -.35, p > .72$ ).

The mean of participants identifying as non-Christian (CQS  $m = 5.03, sd = 1.0$ ; MCSA-P2  $m = 5.81, sd = .98$ ) was not significantly different from the mean of participants identifying as Christian (CQS  $m = 5.06, sd = .86$ ; MCSA-P2  $m = 5.78, sd = .75$ ).

Table 25

T-Test for Equality of CQS and MCSA-P2 Means based on Religious Identity

|         |                               | Levene's Test<br>for Equality<br>of Variances |      | t-test for Equality of Means |     |                   |                         |                                  |   |             |
|---------|-------------------------------|---|------|------------------------------|-----|-------------------|-------------------------|----------------------------------|---|-------------|
|         |                               | F   | Sig. | t                            | Df  | Sig. 2-<br>tailed | Mean<br>Differ-<br>ence | Std.<br>Error<br>Differ-<br>ence | 95% Confidence<br>Interval of the<br>Difference |             |
|         |                               |   |      |                              |     |                   |                         |                                  |   |             |
|         |                               |   |      |                              |     |                   |                         |                                  |   | Lower Upper |
| CQS     | Equal<br>variances<br>assumed | 2.477   | .116 | -.344                        | 463 | .731              | -.0297                  | .086                             | -.199   | .140        |
| MCSA-P2 | Equal<br>variances<br>assumed | 2.883   | .090 | .354                         | 463 | .724              | .028                    | .080                             | -.129   | .185        |

***Ability Status.***

Of the 465 survey participants, 15 self-disclosed a disability. Though a small number, 15 is sufficiently large enough to conduct a t-test. Interestingly, as evidenced in Table 26, the mean CQS self-report scores were higher for individuals who identified as able-bodied while the MCSA-P2 self-report scores were lower for individuals who identified as able-bodied.

Table 26

## Descriptive Statistics of CQS and MCSA-P2 Scores based upon Ability Status

|         | Identity    | N   | Mean | Std. Deviation | Std. Error Mean |
|---------|-------------|-----|------|----------------|-----------------|
| CQS     | Able Bodied | 450 | 5.06 | .908           | .043            |
|         | Disabled    | 15  | 4.88 | 1.303          | .336            |
| MCSA-P2 | Able Bodied | 450 | 5.79 | .858           | .040            |
|         | Disabled    | 15  | 6.01 | .759           | .196            |

I computed an independent-samples t-test to compare the mean score of participants identifying as able-bodied (N = 450) to the mean scores of participants identifying as disabled (N= 15). As seen in Table 27, no significant difference was found in either the

Table 27

## T-Test for Equality of CQS and MCSA-P2 Means Based on Ability Status

|         |                         | Levene's Test for Equality of Variances |      | t-test for Equality of Means |     |               |                 |                       |   |       |
|---------|-------------------------|---|------|------------------------------|-----|---------------|-----------------|-----------------------|---|-------|
|         |                         | F                                       | Sig. | T                            | Df  | Sig. 2-tailed | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|         |                         |   |      |                              |     |               |                 |                       | Lower                                     | Upper |
| CQS     | Equal variances assumed | 3.67                                    | .056 | .725                         | 463 | .469          | .176            | .242                  | -.300                                     | .652  |
| MCSA-P2 | Equal variances assumed | .329                                    | .567 | -.993                        | 463 | .321          | -.223           | .224                  | -.664                                     | .218  |

CSQ scores ( $t(463) = -.73, p > .05$ ), or the MCSA-P2 scores ( $t(463) = -.99, p > .05$ ). The mean of participants identifying as able-bodied (CQS  $m = 5.06, sd = .91$ ; MCSA-P2  $m = 5.79, sd = .86$ ) was not significantly different from the mean of participants identifying as disabled (CQS  $m = 4.88, sd = 1.30$ ; MCSA-P2  $m = 6.01, sd = .76$ ).

### ***International Status.***

The descriptive statistics for individuals identifying as international are located in Table 28. CQS mean scores are consistently lower than MCSA-P2 scores, regardless of international status. In addition, the mean CQS ( $m = 5.04$ ) score and the mean MCSA-P2 ( $m = 5.79$ ) for U.S.-born participants are lower than those of international participants.

Table 28

Descriptive Statistics of CQS and MCSA-P2 Scores Based on International Status

|         | Identity      | N   | Mean | Std. Deviation | Std. Error Mean |
|---------|---------------|-----|------|----------------|-----------------|
| CQS     | U.S. Born     | 453 | 5.04 | .924           | .043            |
|         | International | 12  | 5.53 | .759           | .219            |
| MCSA-P2 | U.S. Born     | 453 | 5.79 | .860           | .040            |
|         | International | 12  | 6.09 | .626           | .181            |

I computed an independent-samples t-test to compare the mean score of participants identifying as US citizens ( $N = 453$ ) to the mean scores of participants identifying as International ( $N = 12$ ). As seen in Table 29, I found no significant difference in either the CSQ scores ( $t(463) = -1.81, p > .05$ ), or the MCSA-P2 scores ( $t(463) = -1.21, p > .05$ ). The mean of participants identifying as US citizens (CQS  $m = 5.04, sd = .92$ ; MCSA-P2  $m = 5.79, sd = .86$ ) was not significantly different from the mean of participants identifying as international (CQS  $m = 5.53, sd = .76$ ; MCSA-P2  $m = 6.09, sd = .63$ ).

Table 29

## T-Test for Equality of CQS and MCSA-P2 Means Based on International Status

|             |                               | Levene's Test<br>for Equality<br>of Variances |      | t-test for Equality of Means |     |                   |                        |                                 |   |             |
|-------------|-------------------------------|---|------|------------------------------|-----|-------------------|------------------------|---------------------------------|---|-------------|
|             |                               | F   | Sig. | T                            | Df  | Sig. 2-<br>tailed | Mean<br>Differ<br>ence | Std.<br>Error<br>Differ<br>ence | 95% Confidence<br>Interval of the<br>Difference |             |
|             |                               |   |      |                              |     |                   |                        |                                 |   |             |
|             |                               |   |      |                              |     |                   |                        |                                 |   | Lower Upper |
| CSQ         | Equal<br>variances<br>assumed | 1.129   | .289 | -1.812                       | 463 | .071              | -.488                  | .269                            | -1.016  | .041        |
| MC<br>SA-P2 | Equal<br>variances<br>assumed | 2.261   | .133 | -1.209                       | 463 | .227              | -.302                  | .250                            | -.794   | .189        |

**Interaction of Identity Statuses.**

In addition to comparing the mean CQS scores of participants by gender, race and ethnicity, sexual orientation, religious difference, ability status, and international status, I was also interested in assessing the effects of the interactions of these identities. I began by conducting a factorial ANOVA based upon the interaction of gender and race or ethnicity. Table 30 illustrates the descriptive statistics of this question and Table 31 the findings. Wiersma (1995) recommends at least ten participants for each cell in a factorial ANOVA. Several cells, highlighted in grey, were not populated by an appropriate number for analysis. This should be considered as the outcomes are being evaluated. Because the sample size was too small, the one participant identified as transgender was not continued in the analysis.

Table 30

## Descriptive Statistics of CQS by Gender and Race and Ethnicity

| Gender                   | Race and Ethnicity             | Mean   | Std.<br>Deviation | N   |
|--------------------------|--------------------------------|--------|-------------------|-----|
| Male                     | African-American/ Black        | 4.7533 | .83184            | 15  |
|                          | Native American/ Alaska Native | 6.3000 | .                 | 1   |
|                          | Asian                          | 5.6214 | .55742            | 7   |
|                          | White                          | 4.9351 | .91037            | 101 |
|                          | Latino/Hispanic                | 5.4875 | .73527            | 4   |
|                          | 2 or More Identities           | 5.5583 | .42002            | 6   |
|                          | Total                          | 5.0052 | .89056            | 134 |
| Female                   | African-American/ Black        | 4.9596 | 1.06236           | 26  |
|                          | Native American/ Alaska Native | 5.6500 | .42426            | 2   |
|                          | Asian                          | 5.4682 | .65509            | 11  |
|                          | White                          | 5.0474 | .82619            | 246 |
|                          | Latino/Hispanic                | 6.0200 | .59638            | 10  |
|                          | 2 or More Identities           | 5.4432 | .83428            | 22  |
|                          | Total                          | 5.1167 | .85683            | 317 |
| Total Male<br>and Female | African-American/ Black        | 4.8841 | .97861            | 41  |
|                          | Native American/ Alaska Native | 5.8667 | .48045            | 3   |
|                          | Asian                          | 5.5278 | .60664            | 18  |
|                          | White                          | 5.0158 | .85077            | 348 |
|                          | Latino/Hispanic                | 5.8679 | .65826            | 14  |
|                          | 2 or More Identities           | 5.4679 | .75917            | 28  |
|                          | Total                          | 5.0843 | .86666            | 452 |

Table 31 highlights the findings of the factorial ANOVA of the between-subject effects of CQS by gender, and race and ethnicity. A significant main effect for race and ethnicity was found ( $F(5, 439) = 5.119, p < .05$ ). Participants who identified African American or Black ( $N = 41$ ) or White ( $N = 349$ ) had self-reported scores that did not differ significantly from one another but were significantly lower mean scores ( $m = 4.8841, sd = .97861$  and  $m = 5.0158, sd = .85077$  respectively) than participants who identified as Asian ( $N = 19, m = 5.5278, sd = .60664$ ), Latino or Hispanic ( $N = 14, m = 5.8679, sd = .65826$ ), or who identified with two or more racial or ethnic groups ( $N = 28, m = 5.4679, sd = .75917$ ). However, the main effect for gender was not significant ( $F(2, 439) = .117, p > .05$ ). The interaction of gender and race and ethnicity was also not significant ( $F(5, 439) = .423, p > .05$ ). The effect of the participants' race or ethnicity was not influence by their gender.

Table 31

Between-Subject Effects: CQS by Gender, Race and Ethnicity

| Source          | Type III Sum of Squares | Df  | Mean Square | F       | Sig. |
|-----------------|-------------------------|-----|-------------|---------|------|
| Corrected Model | 24.075(a)               | 12  | 2.01        | 2.799   | .001 |
| Intercept       | 537.705                 | 1   | 537.71      | 750.152 | .000 |
| Gender          | .168                    | 2   | .08         | .117    | .889 |
| Race            | 18.347                  | 5   | 3.67        | 5.119   | .000 |
| Gender * Race   | 1.517                   | 5   | .30         | .423    | .832 |
| Error           | 314.673                 | 439 | .71         |         |      |
| Total           | 12022.960               | 452 |             |         |      |
| Corrected Total | 338.748                 | 451 |             |         |      |

a R Squared = .071 (Adjusted R Squared = .046)

I was also interested in assessing the effects of the interactions of race or ethnicity and gender identity on the MCSA-P2. As with the CQS, I conducted a factorial ANOVA based upon the interaction of gender, and race or ethnicity. Table 32 illustrates the descriptive statistics of this question and Table 34 the findings. Wiersma (1995) recommends at least ten participants for each cell in a factorial ANOVA. As with the CQS ANOVA, several cells, highlighted in grey, were not populated by an appropriate number for analysis. This should be considered as the outcomes are being evaluated. In Table 32

**Descriptive Statistics of MCSA-P2 by Gender and Race and Ethnicity**

| Gender | Race                           | Mean   | Std.<br>Deviation | N   |
|--------|--------------------------------|--------|-------------------|-----|
| Male   | African-American/ Black        | 5.9939 | .59791            | 15  |
|        | Native American/ Alaska Native | 6.0606 | .                 | 1   |
|        | Asian                          | 6.2078 | .34392            | 7   |
|        | White                          | 5.7648 | .79300            | 101 |
|        | Latino/Hispanic                | 6.2273 | .45924            | 4   |
|        | 2 or More Identities           | 6.1414 | .91104            | 6   |
|        | Total                          | 5.8464 | .75814            | 134 |
| Female | African-American/ Black        | 6.1900 | .66758            | 26  |
|        | Native American/ Alaska Native | 6.4848 | .42855            | 2   |
|        | Asian                          | 6.4325 | .56531            | 11  |
|        | White                          | 5.7356 | .76033            | 246 |
|        | Latino/Hispanic                | 6.3545 | .51288            | 10  |
|        | 2 or More Identities           | 6.0579 | .59667            | 22  |
|        | Total                          | 5.8437 | .75524            | 317 |

Table 32 Continues

**Table 32 continued. Descriptive Statistics of MCSA-P2 by Gender and Race and Ethnicity**

| Gender                   | Race                           | Mean   | Std.<br>Deviation | N   |
|--------------------------|--------------------------------|--------|-------------------|-----|
| Total Male<br>and Female | African-American/ Black        | 6.1183 | .64250            | 41  |
|                          | Native American/ Alaska Native | 6.3434 | .38964            | 3   |
|                          | Asian                          | 6.3451 | .49238            | 18  |
|                          | White                          | 5.7397 | .77222            | 348 |
|                          | Latino/Hispanic                | 6.3182 | .48408            | 14  |
|                          | 2 or More Identities           | 6.0758 | .65714            | 28  |
|                          | Total                          | 5.8409 | .75832            | 452 |

addition, because the sample size was too small, the one transgender-identified participant was not continued in the analysis.

Table 33 highlights the findings of the factorial ANOVA of the between-subject effects of MCSA-P2 by gender and race and ethnicity. A significant main effect for race and ethnicity was found ( $F(5, 439) = 4.671, p < .05$ ). Participants who identified White ( $N = 349$ ) had self-reported scores that were significantly lower ( $m = 5.7397, sd = .77222$ ) than participants who identified as African American or Black ( $N = 41, m = 6.1183, sd = .64250$ ), Asian ( $N = 19, m = 6.3451, sd = .49238$ ), Latino or Hispanic ( $N = 14, m = 6.3182, sd = .48408$ ), or who identified with two or more racial or ethnic groups ( $N = 28, m = 6.0758, sd = .75832$ ). However, the main effect for gender was not significant ( $F(2, 439) = .2445, p > .05$ ). The interaction of gender and race and ethnicity was also not significant ( $F(5, 439) = .305, p > .05$ ). The effect of the participants' race or ethnicity was not influenced by their gender.

Table 33

## Between-Subject Effects: MCSA-P2 by Gender, Race, and Ethnicity

| Source          | Type III Sum of Squares | df  | Mean Square | F        | Sig. |
|-----------------|-------------------------|-----|-------------|----------|------|
| Corrected Model | 19.966(a)               | 12  | 1.664       | 3.051    | .000 |
| Intercept       | 599.653                 | 1   | 599.653     | 1099.692 | .000 |
| Gender          | 2.667                   | 2   | 1.333       | 2.445    | .088 |
| Race            | 12.734                  | 5   | 2.547       | 4.671    | .000 |
| Gender * Race   | .831                    | 5   | .166        | .305     | .910 |
| Error           | 239.383                 | 439 | .545        |          |      |
| Total           | 15679.880               | 452 |             |          |      |
| Corrected Total | 259.349                 | 451 |             |          |      |

a R Squared = .077 (Adjusted R Squared = .052)

I originally proposed conducting factorial ANOVAs examining participant CQS scores based upon the interaction between gender, race and ethnicity, sexual orientation, religious difference, ability status and international status. However, two issues precluded analysis beyond the intersection of race and ethnicity and gender. To begin, because differences based upon gender and based upon each of the other marginalized statuses did not demonstrate significance, conducting a factorial analysis was futile. Second, though an ANOVA based upon race and ethnicity did yield significant differences between racial and ethnic groups, the number of participants in each cell of a two (marginalized identity) x six (race and ethnicity) factorial ANOVA design was smaller than advisable to conduct an analysis (Wiersma, 1995). Therefore, I did not conduct a factorial analysis based upon the intersection of race and ethnicity and each of the marginalized statuses.

### **Question 1: Summary of Findings.**

Independent samples t-tests were calculated to learn if there were significant differences in CQS and MCSA-P2 scores based upon various facets of the participants' identities. With the exception of race and ethnicity, there were no significant differences in CQS scores based upon identities (gender identity, sexual orientation, religious identity, ability status, and international status) of the participants. Alternatively, there were significant differences in MCSA-P2 scores based upon race and ethnicity as well as sexual orientation. No other significant differences in MCSA-P2 scores based upon identity were found. In addition to the t-tests, a factorial ANOVA was conducted to determine if there was an interactive effect between participants' race and ethnicity and their gender identities. While a factorial ANOVA of both the CQS and MCSA-P2 scores based upon the intersection of race and ethnicity and gender identity did yield a significant main effect based upon race and ethnicity, no significant main effect based on gender identity or the interaction of race and ethnicity and gender identity materialized.

### **Question 2: Age, Life Experience, and Intercultural Competency.**

The second question I sought to examine was: which and to what degree do the variables: (a) age, (b) years of professional service in student affairs, (c) frequency of workplace conversations about diversity, (d) frequency of on-going training regarding intercultural issues, (e) amount of time spent outside the US, and (f) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners? To address this question, I used both correlation and step-wise regression analysis. I began by using correlation matrices to demonstrate what if any relationship existed between CQS and MCSA-P2 scores and the

seven independent variables identified in the question. I then used correlation matrices to demonstrate what if any relationship existed between each of the sub-dimensions of cultural intelligence and the seven independent variables listed above. Subsequent to the correlation analyses, I used step-wise linear regression analysis to learn more about the extent to which the independent variables predict participant CQS results.

Before beginning the analysis, I transformed the data for all but two (age and number of years worked in student affairs) of the variables contained in Table 35 from continuous to categorical data. I did this in order to create the normality of distribution required for a regression analysis while maintaining the integrity of the responses provided by participants. The necessity of this step is most vividly exhibited in the response for the question asking participants about the number of conversations with individuals whose identities were dissimilar to their own over during a typical two-week time period. Responses ranged from 0-1000. The seven percent (N = 28) of individuals reporting more than 100 conversations positively skewed the data and resulted in a mean of 49.64. Collapsing the data normalized the data and brought the mean to 32.39 conversations over a two-week period.

Though the ranges established for each variable were different, each variable range was equal and no data was excluded from analysis. The upper-most range for each variable was grouped by “x through highest” and included a small percentage of respondents: less than 1% (work experience in student affairs and conversations about issues of difference), 2.6% (age), 4.1% (workshop and training attendance), (6%) conversations with diverse others, and 6.7% (travel outside the US). Table 34 describes

how each of the independent variables in the analysis was initially measured and subsequently collapsed into categorical data.

**Table 34**

**Independent Variables Used in Correlation and Regression Analyses**

| Variable  | Number of Data Categories | Format used in Correlation and Regression Analysis               |
|---|---------------------------|--|
| Number of continuous months living outside the US       | 4                         | Categorical data   |
| Race and ethnicity                                      | 6                         | Categorical data   |
| Gender  | 3                         | Categorical data   |
| Sexual orientation                                      | 2                         | Categorical data   |
| Religious identity                                      | 2                         | Categorical data   |
| Ability status  | 2                         | Categorical data   |
| International status                                    | 2                         | Categorical data   |
| Frequency of on-going training                          | 21                        | Continuous data to 20 workshops, then collapsed at 21+ workshops |
| Travel outside the US                                   | 9                         | Collapsed into categorical data – by 2, then capped at 16+       |
| On-going conversations about diversity/multiculturalism | 7                         | Collapsed into categorical data – by 10, then capped at 60+      |
| Direct work experience with diverse others              | 7                         | Collapsed into categorical data – by 10, then capped at 60+      |
| Years of professional Service                           | -                         | Continuous   |
| Age   | -                         | Continuous   |

***Correlation Matrices.***

The data presented in Table 35 illustrates the correlation analysis of CQS and MCSA-P2 with each of the seven independent variables: age, number of years of professional work in student affairs, frequency of workplace conversations with

individuals whose identities differed from that of the participants, frequency of workplace conversations about identity differences, workshops and training program attendance,

Table 35

Relationship of Demographic Variables to MCSA-P2 and CQS

|  |                     | CQS     | MCSA-P2 |
|--|---------------------|---------|---------|
| Age  | Pearson Correlation | .069    | .10 *   |
|  | N                   | 437     | 437     |
| Number of years worked in student affairs  | Pearson Correlation | .128 ** | .156 ** |
|  | N                   | 439     | 439     |
| Numerical frequency of workplace conversation typically had with individuals of a different race, ethnicity, religion, sexual orientation, gender identity or ability status over the course of a two week period. | Pearson Correlation | .143 ** | .219 ** |
|  | N                   | 422     | 422     |
| Numerical frequency of conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference  | Pearson Correlation | .197 ** | .297 ** |
|  | N                   | 435     | 435     |
| Number of multicultural workshops or training programs attended over the past two years  | Pearson Correlation | .217 ** | .406 ** |
|  | N                   | 447     | 447     |
| Number of times traveled outside the US since the age of 18  | Pearson Correlation | .354 ** | .188 ** |
|  | N                   | 446     | 446     |
| Number of continuous months lived outside the US   | Pearson Correlation | .382 ** | .189 ** |
|  | N                   | 454     | 454     |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

frequency of travel outside the US, and number of continuous months lived outside the US. Though the strength of the relationships was different, the outcome of the correlation analysis for the relationship of both the CQS and the MCSA-P2 were consistent. With the exception of age, there were significant relationships between each of the seven variables and each of the two measures. Specifically, the Pearson product-moment correlation coefficient, calculated for the relationship between both CQS and MCSA-P2 and age, resulted in an extremely weak correlation that was not significant for the CQS ( $r(435) = .069, p > .05$ ) but was significant for the MCSA-P2 ( $r(435) = .10, p < .05$ ). Age was not related to the participant CQS but was related to the MCSA-P2 score. Though weak for both the CQS ( $r(437) = .128, p < .01$ ) and the MCSA-P2 ( $r(437) = .156, p < .01$ ) the relationship between years of professional work in student affairs and the two measures is nonetheless both positive and significant.

The frequency of conversations about diversity was positively and significantly related to self-reported intercultural competence scores as measured by both the CQS ( $r(435) = .197, p < .01$ ) as well as MCSA-P2 ( $r(435) = .297, p < .01$ ). Similarly, the relationship between participant CQS ( $r(422) = .143, p < .01$ ) and participant MCSA-P2 ( $r(422) = .219, p < .01$ ) and interactions with diverse others are also positive and significant.

There was a marked difference in the results of the CQS and the MCSA-P2 with respect to the relationship of the scores and the number of multicultural workshops or training programs attended by study participants. When the Pearson product-moment correlation coefficient was calculated for the relationship between CQS and number of training sessions or workshops attended, a significant but weak correlation was found ( $r$

(445) = .217,  $p < .01$ ) indicating that that while there is a relationship between training and intercultural competence, it is only slight. Alternatively, when the Pearson product-moment correlation coefficient was calculated for the relationship between training session and workshop attendance and the MCSA-P2, a significant and moderate correlation was found ( $r(445) = .406$ ,  $p < .01$ ) indicating a moderate relationship between training and intercultural competency.

The Pearson product-moment correlation coefficient, calculated to explore the relationship between number of continuous months living abroad and intercultural competence, yielded a significant and moderate correlation between the CQS and experience living abroad ( $r(452) = .382$ ,  $p < .01$ ). However, though significant, only a weak correlation was found between MCSA-P2 and experience living abroad ( $r(452) = .189$ ,  $p < .01$ ). Similarly, a significant and moderate correlation was found between the CQS and participant experience traveling abroad ( $r(444) = .354$ ,  $p < .01$ ), while only a weak, though significant, correlation was found between the MCSA-P2 and experience traveling abroad ( $r(444) = .118$ ,  $p < .01$ ).

To summarize, the variables most strongly associated with higher CQS scores were number of continuous months living outside the US ( $r = .382$ ), frequency of travel outside the US ( $r = .354$ ), and intercultural training and workshop attendance ( $r = .217$ ). The variables most strongly associated with higher MCSA-P2 scores included training and workshop attendance ( $r = .406$ ), frequency of conversations about racial, ethnic, religious, sexual orientation, gender identity or ability status differences ( $r = .297$ ), and frequency of conversations with individuals whose identities differed from those of the participants ( $r = .219$ ). The number of years worked in student affairs was found to have

the weakest relationship with both the CQS ( $r = .133$ ) and the MCSA-P2 ( $r = .162$ ).

Finally, age was not significantly related to intercultural competency as measured by the CQS but was significantly related to intercultural competence as measured by the MCSA-P2.

***CQS Sub-dimensions: Meta-cognition, Cognition, Motivation and Behavior.***

Developed by Ang, et al. (2004), the CQS measures an individual's capacity to function and manage effectively in culturally diverse settings. This measure is designed to assess performance in situations involving cross-cultural interactions arising from differences in race, ethnicity, and or nationality. Using the theoretical model of Cultural Intelligence developed by Earley and Ang (2003), the four factors comprising the theoretical construct of cultural intelligence reflect the perspective that intelligence is multifaceted and is developed as a result of the interaction between the individual and his or her environment. The four factors associated with cultural intelligence include meta-cognition, cognition, behavior, and motivation. Meta-cognition relates to higher order thought processes (executive functions) including representation, abstract reasoning, problem solving, and decision-making. The cognitive dimension incorporates learned, declarative, or crystallized knowledge. The behavioral dimension relates to one's ability to regulate elementary sensory functions including perception, sensation, and attention. This area includes overt behaviors, both verbal and non-verbal, that relate to one's ability to adapt to surroundings as well as to new stimuli. Finally, the motivational aspect is comprised of one's value for and self-efficacy to learn about cultural difference.

While the sub-dimensions (factors) of cultural intelligence are interrelated, each can be enhanced through personal efforts directed toward: 1) development of higher order

cognitive abilities, 2) acquisition of cultural knowledge, 3) regulation of culturally specific behaviors, and 4) enhancing value for and self-confidence in engaging in intercultural settings. Because the four sub-dimensions can be developed independent of one another, understanding what factors related to development is important. Two variables associated with maturation: age and number of years worked in student affairs, and five behavioral variables: workplace conversations with individuals whose identities are different from one's own, workplace conversations about cultural difference, intercultural workshop and training experience, travel outside and living outside the US were tested to determine if relationships existed between the independent variables each of the four dimension of cultural intelligence (dependant variables). Table 36 contains the descriptive statistics for the dependant and independent variables under investigation. Subsequent to Table 36 are three additional tables, each illustrating the results of Pearson product-moment correlations between each of the four sub-dimensions (dependant variables) and the six independent variables identified previously.

Table 36

**CQS Sub-Dimension and Independent Variable Descriptive Statistics**

|   | Mean  | Std.<br>Deviation | N   |
|---|-------|-------------------|-----|
| Meta-cognition*   | 5.81  | .887              | 465 |
| Cognition*  | 4.08  | 1.288             | 465 |
| Motivation*   | 5.52  | 1.049             | 465 |
| Behavior*   | 5.14  | 1.196             | 465 |
| Age   | 30.87 | 9.922             | 437 |
| Number of years worked in student affairs   | 7.52  | 7.624             | 439 |
| Numerical frequency of workplace conversation you typically have with individuals of a different race, ethnicity, religion, sexual orientation, gender identity or ability status over the course of a two week period ** | 32.39 | 36.074            | 422 |
| Numerical frequency of conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference **  | 10.10 | 13.381            | 435 |
| Number of multicultural workshops or training programs attended over the past two years **  | 1.81  | 1.080             | 454 |
| Number of times traveled outside the US since the age of 18   | 5.81  | .887              | 465 |
| Number of continuous months lived outside the US ***  | N/A   | N/A               | N/A |

\* Average of likert scale, 1= Strongly Disagree – 7 = Strongly Agree

\*\* Continuous data collapsed into categorical data (see Table 35 for a full explanation ranges used)

\*\*\* Categorical Data. 1 = never lived outside the US, 2 = lived abroad less than 1 month, 3 = lived abroad between 1-6 months, 4 = lived abroad more than 6 months

The analysis of the effects of the independent variables on the dependant variables, as illustrated in Table 37, begins with age and years worked in student affairs. Following the analysis of the relationship between age and years worked and the four sub-dimensions will be an exploration of the relationship of the four sub-dimensions and intercultural training experiences, conversations with diverse others and conversations about difference. Finally, the last portion of the analysis will describe the relationship

between the four sub-dimensions and both travel as well as continuous months lived outside the US.

*Age and Years Worked in Student Affairs.*

A Pearson correlation coefficient was calculated examining the relationship between participant's age and each of the sub-dimensions of cultural intelligence: meta-cognition, cognition, motivation, and behavior. The results of this analysis are located in Table 37. A weak correlation that was not significant was found for each sub-dimensions: meta-cognition ( $r(437) = .065, p > .05$ ), cognition ( $r(437) = .060, p > .05$ ), motivation ( $r(437) = -.005, p > .05$ ) and behavior ( $r(437) = .060 > .05$ ) and age. Age was not related to participant meta-cognitive development, their intercultural knowledge, their motivation or their ability to respond interculturally in behaviorally appropriate ways.

Table 37

CQS Sub-Dimension Correlation Analysis: Age and Years Worked in Student Affairs

|                                 |                     | Meta-cognition | Cognition | Motivation | Behavior |
|---------------------------------|---------------------|----------------|-----------|------------|----------|
| Age                             | Pearson Correlation | .065           | .060      | -.005      | .060     |
|                                 | N                   | 437            | 437       | 437        | 437      |
| Years worked in student affairs | Pearson Correlation | .118*          | .120*     | .049       | .132**   |
|                                 | N                   | 439            | 439       | 439        | 439      |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

A Pearson correlation coefficient was calculated for the relationship between the number of years worked in student affairs and participants' meta-cognition, cognition, motivation and behavior. The results of this analysis are also located in Table 37. I found

a weak correlation that was not significant ( $r(437) = .049, P > .05$ ) between the number of years worked in student affairs and participant motivation. The number of years participants worked in student affairs was not related to their value of or self-efficacy for learning about and experiencing cultural difference. However, the Pearson correlation coefficient for the relationship between the number of years worked and the other three dimensions: meta-cognition, cognition, and behavior, yielded a weak though significant correlation ( $r(439) = .118, p < .05$ ,  $r(439) = .120, p < .05$  and  $r(437) = .132, p < .01$  respectively). There was a significant linear relationship between number of years worked and participant meta-cognitive, cognitive, and behavioral CQS. Participants who worked in student affairs for more years self-reported stronger meta-cognitive ability, greater intercultural knowledge, and more keenly developed behavioral skills.

*Conversations with Diverse Others and About Difference.*

The next independent variables under investigation related to conversations with co-workers whose identities differed from themselves and conversations with co-workers about issues of difference. I calculated a Pearson correlation to examine the relationship between the number of workplace conversations with individuals whose identities were dissimilar to their own and participant meta-cognitive, cognitive, motivational, and behavioral CQS. The results of the correlation analysis are located in Table 38.

The results of the Pearson correlation coefficient examining the relationship between the CQS sub-dimensions: meta-cognition, cognition, motivation, and behavior and the frequency of workplace conversations participants had with individuals whose identities were dissimilar to their own revealed weak but positive correlations between meta-cognition ( $r(420) = .128, p > .01$ ), cognition ( $r(420) = .102, p < .05$ ), motivation ( $r$

(420) = .116,  $p < .05$ ), and behavior ( $r(420) = .127$ ,  $p < .01$ ). The more frequent the conversations, the stronger the participants' meta-cognitive processes, the greater their

Table 38

CQS Sub-Dimension Correlation Analysis: Conversations About Difference

|  |                     | Meta-cognition | Cognition | Motivation | Behavior |
|--|---------------------|----------------|-----------|------------|----------|
| Numerical frequency of workplace conversation with individuals of a different race, ethnicity, religion, sexual orientation, gender identity or ability status over the course of a two week period. | Pearson Correlation | .128**         | .102*     | .116*      | .127**   |
|  | N                   | 422            | 422       | 422        | 422      |
| Numerical frequency of conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference                                | Pearson Correlation | .196**         | .140**    | .184**     | .141**   |
|  | N                   | 435            | 435       | 435        | 435      |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

intercultural knowledge, the higher their value for and confidence to learn about diversity and the stronger their intercultural skills.

Similarly, a Pearson correlation was calculated to examine the relationship between the frequency of workplace conversations about difference and participant meta-cognitive, cognitive, motivational, and behavioral CQS. The Pearson correlation coefficient yielded weak but positive correlations between participant meta-cognition ( $r(431) = .196$ ,  $p < .01$ ), cognition ( $r(431) = .140$ ,  $p < .01$ ), motivation ( $r(431) = .184$ ,  $p < .01$ ), and behavior ( $r(431) = .141$ ,  $p < .01$ ) and the frequency of workplace conversations about difference. The more frequent the conversations about difference, the higher the

participant meta-cognitive ability, the greater their intercultural knowledge, the higher their value for and confidence to learn about diversity, and the stronger the intercultural skills.

*Intercultural Training, and Travel and Living Outside the US.*

As seen in Table 39, the remaining 3 independent variables: number of workshops or training programs attended, number of trips outside the US, and the number of continuous months living outside the US were all positively and significantly (at the .01 level of significance) related to each of the 4 sub-dimensions of cultural intelligence.

Table 39

CQS Sub-Dimension Correlation Analysis: Training, Travel, and Living

|   |                     | Meta-<br>cogni-<br>tion | Cogni-<br>tion | Motiva-<br>tion | Behavior |
|---|---------------------|-------------------------|----------------|-----------------|----------|
| Number of multicultural workshops or training programs attended over the past two years | Pearson Correlation | .168(**)                | .157(**)       | .185(**)        | .193(**) |
|   | N                   | 447                     | 447            | 447             | 447      |
| Number of times traveled outside the US since the age of 18                             | Pearson Correlation | .238**                  | .303**         | .319**          | .257**   |
|   | N                   | 446                     | 446            | 446             | 446      |
| Number of continuous months lived outside the US  | Pearson Correlation | .175**                  | .341**         | .407**          | .252**   |
|   | N                   | 454                     | 454            | 454             | 454      |

\*\* Correlation is significant at the 0.01 level (2-tailed).

Specifically, a Pearson correlation coefficient was calculated for the relationship between the number of workshops or training programs attended by participants and their meta-cognitive, cognitive, motivation, and behavior. A weak but significant correlation was found between the number of intercultural training programs and workshops

attended and meta-cognitive ( $r(445) = .168, p < .01$ ), cognitive ( $r(445) = .157, p < .01$ ), motivation ( $r(445) = .185, p < .01$ ) and behavior ( $r(445) = .193, p < .01$ ). The greater the number of intercultural workshops or training programs attended, the stronger the participant meta-cognitive ability, the greater their intercultural knowledge, the higher their motivation to engage interculturally and the more developed their intercultural skills.

The strongest correlations were found in the examination of the relationship between the dependant variables and the last two independent variables: number of times traveled outside the US and number of continuous months living outside the US. Specifically, a Pearson correlation coefficient was calculated for the relationship between the number of times participants' traveled outside the US and their CQS meta-cognitive, cognitive, motivation, and behavior scores. A positive though comparatively weak correlation was found between travel outside the US and both meta-cognition ( $r(444) = .238 < .01$ ) and behavior ( $r(444) = .257, p < .01$ ). However, moderate correlations were found between both cognition ( $r(444) = .303, p < .01$ ), and motivation ( $r(444) = .319, p < .01$ ). Thus, there is a significant linear relationship between travel and the four sub-dimensions of cultural intelligence.

Similarly, while significant, a relatively weak correlation was found between both meta-cognition ( $r(452) = .175, p < .01$ ) and behavior ( $r(452) = .252, p < .001$ ) and number of continuous months living outside the US. However, significant and moderate correlations were found between both cognition ( $r(452) = .341, p < .001$ ) and motivation ( $r(452) = .407, p < .001$ ) and the number of continuous months participants lived outside the US. Based upon the data, it appears that the more times participants ventured outside

the US, either to visit or to live, stronger their meta-cognitive ability, the greater their intercultural knowledge, the higher their motivation, and the more developed their intercultural skills.

To summarize, travel outside the US was the variable most strongly associated with the development of meta-cognitive ability ( $r = .238$ ) as well as CQS behavior ( $r = .257$ ). And, the number of continuous months living outside the US was most strongly associated with the development of CQS cognition (knowledge), and motivation. The variable with the weakest relationship to each of the 4 sub-dimensions was number of years worked in student affairs. Finally, the only variable to not be significantly related to any of the sub-dimensions was participant age.

#### ***Multiple Linear Regression Analysis: CQS.***

Beyond exploring the relationships between intercultural competence, as measured by the CQS, and the 13 independent variables, I was also interested in investigating the extent to which the identified independent variables related to intercultural competency and the proportion of the variance in intercultural competence uniquely associated with each of the variables.

Step-wise regression was used to describe the individual and collective relationship of the independent variables to the level of intercultural competence measured by the CQS. I entered 13 variables into individual simple regressions to determine the order in which they would be entered into the step-wise regression analysis. The data is represented in two sets. The first set includes variables that demonstrated weak relationships that did not reach the level of statistical significance ( $p > .05$ ) required to be included in the final regression equation. The data included in the

first phase can be found in Tables 40 and 41. The second set of data includes variables that demonstrated a predictive capacity, were individually statistically significant, and thus were entered into the final step-wise linear regression analysis.

*Set I – Independent Variables not Achieving Significance.*

Six independent variables including religious identity, age, international status, gender identity, ability status, and sexual orientation were each entered into a single regression. None of these independent variables reached the level of significance required for continuation in the final multiple linear regression. The data related to these variables is contained in Tables 40 and 41. Table 40 contains illustrates the model summary, and Table 41 contains the coefficient and significance levels for each of the six variables.

Table 40

**CQS Multiple Linear Regression Model Summary: Variables Not Achieving Significance**

| Predictors  | R       | R Square | Adjusted R Square | Std. Error of the Estimate | Df     | F    |
|---|---------|----------|-------------------|----------------------------|--------|------|
| International status, Age, Sexual orientation, Gender, Ability status, Religious identity | .149(a) | .022     | .008              | .86782                     | 6, 428 | .141 |

Note. Dependent Variable: CQS

A multiple linear regression as calculated predicting participant CQS scores based upon their international status, age, sexual orientation, gender, ability status, and religious identity. The regression equation was not significant ( $F(6,428) = .141, p > .05$ ) with an  $R^2$  of .022. International status, age, sexual orientation, gender, ability status and religious identity cannot be used to predict CQS results.

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Table 41

## CQS Multiple Linear Regression Coefficients: Variables Not Achieving Significance

| Predictor            | B     | Std. Error | Beta  | T      | Sig  | Correlations |         |       |
|----------------------|-------|------------|-------|--------|------|--------------|---------|-------|
|                      |       |            |       |        |      | Zero Order   | Partial | Part  |
| (Constant)           | 4.663 | .219       |       | 21.307 | .000 |              |         |       |
| International Status | .429  | .266       | .077  | 1.614  | .107 | .078         | .078    | .077  |
| Age                  | .005  | .004       | .075  | 1.263  | .207 | .056         | .061    | .060  |
| Sexual Orientation   | .136  | .113       | .061  | 1.209  | .227 | .053         | .058    | .058  |
| Gender               | .149  | .092       | .080  | 1.614  | .107 | .060         | .078    | .077  |
| Ability Status       | -.216 | .238       | -.046 | -.911  | .363 | -.034        | -.044   | -.044 |
| Religious Identity   | -.057 | .086       | -.032 | -.655  | .513 | -.044        | -.032   | -.031 |

Note. Dependent Variable: CQS

*Set II – Independent Variables that Achieved Significance.*

Seven independent variables including number of continuous months lived outside the US, multicultural workshops or training program attendance, frequency of travel outside the US since the age of 18, number of years worked in student affairs, racial and ethnic identity, frequency of workplace conversations with individuals whose identity is different than one's own, and frequency of workplace conversations about difference were each entered into a single regression. All of these variables reached the level of significance required ( $p < .05$ ) for continuation in the final multiple linear regression analysis. The data related to these variables is contained in Tables 42, 43 and 44. Table 42 contains the descriptive statistics for the variables achieving significance. Table 43 illustrates the model summary for each of the variables. Finally, Table 44

cont

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contains the coefficients for each of the models for each of the six variables.

Table 42

**CQS Descriptive Statistics: Variables Achieving Significance**

|   | Mean    | Std.<br>Deviation | N   |
|---|---------|-------------------|-----|
| CQS   | 5.0719  | .86463            | 393 |
| Race  | N/A     | N/A               | 393 |
| Number of months lived outside the US *                               | N/A     | N/A               | 393 |
| Number of times traveled outside the US since age 18                  | 4.1069  | 4.73790           | 393 |
| Intercultural training and workshop attendance over a two-year period | 6.4860  | 5.73393           | 393 |
| Professional work experience in student affairs                       | 7.5267  | 7.64719           | 393 |
| Conversations about cultural difference                               | 10.1069 | 13.36072          | 393 |
| Conversations with diverse others                                     | 32.5191 | 36.04865          | 393 |

\* Categorical Variable where 1= 0; 2 = < 1 month; 3 = 1-6 months; 4 = > 6 months

The independent variables were entered into the regression equation in the following order: 1) race and ethnicity (as control variables), 2) professional work experience in student affairs, 3) number of continuous months lived outside the US, 4) frequency of travel outside the US, 5) intercultural training and workshop attendance, 6) frequency of conversations about cultural difference, 7) frequency of conversations with diverse others. I chose to order these variables based upon the outcome of the individual regression of each. Except for the first 2 variables, each variable was entered in descending order from the one that predicted the largest proportion to the one predicting the smallest proportion of the variance. I chose to enter race and ethnicity and years of work experience before the other variables because I wanted to control for these demographic characteristics.

Table 43

## CQS Multiple Linear Regression – Model Summary: Variables Achieving Significance

| Model | R    | R Square | Adj. R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|------|----------|---------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |      |          |               |                            | R Square Change   | F Change | Df1 | Df2 | Sig. F Change |
| 1     | .065 | .004     | .002          | .86388                     | .004              | 1.681    | 1   | 391 | .196          |
| 2     | .149 | .022*    | .017          | .85713                     | .018              | 7.181    | 1   | 390 | .008          |
| 3     | .388 | .151**   | .144          | .79987                     | .128              | 58.840   | 1   | 389 | .000          |
| 4     | .436 | .190**   | .182          | .78215                     | .039              | 18.827   | 1   | 388 | .000          |
| 5     | .460 | .211**   | .201          | .77275                     | .021              | 10.497   | 1   | 387 | .001          |
| 6     | .475 | .226**   | .214          | .76662                     | .014              | 7.205    | 1   | 386 | .008          |
| 7     | .479 | .230**   | .216          | .76572                     | .004              | 1.908    | 1   | 385 | .168          |

\* P &lt; .05

\*\* p &lt; .001

As evidenced in Tables 43 (model summary) and 44 (coefficients), after controlling for race and years of professional experience, international experience accounted for 17% of the variance ( $F(1, 388) = 18.827, p < .001$ ). Adding training and workshop experience enhanced the predictability of scores, bringing the explainable percentage of variance to 19% ( $F(1, 387) = 10.497, p < .001$ ). The sixth predictor, frequency of conversations about cultural difference added significantly but minimally to the model, explaining another 1% of the variance ( $F(1, 386) = 7.205, p < .01$ ). The final predictor, frequency conversations with individuals whose identities are dissimilar, though a significant predictor, did not significantly enhance the model ( $F(1, 385) =$

1.908,  $p > .05$ ). Thus, it appears that the five experience variables accounted for 20% of the variance in CQS scores.

Table 44

CQS Multiple Linear Regression - Coefficients: Variables Achieving Significance

|  | Un-standardized Coefficients |            | Stand-ardized Coefficients | T      | Sig. | Zero Order | Partial | Part  |
|--|------------------------------|------------|----------------------------|--------|------|------------|---------|-------|
|  | B                            | Std. Error | $\beta$                    |        |      |            |         |       |
| (Constant) – CQS                                 | 4.305                        | .157       |                            | 27.351 | .000 |            |         |       |
| Race   | -.005                        | .027       | -.008                      | -.181  | .857 | .065       | -.009   | -.008 |
| Professional work experience in student affairs  | .002                         | .006       | .022                       | .450   | .653 | .134       | .023    | .020  |
| Number of continuous months lived outside the US | .227                         | .040       | .284                       | 5.712  | .000 | .375       | .279    | .255  |
| Number of times traveled outside the US          | .036                         | .010       | .195                       | 3.636  | .000 | .356       | .182    | .163  |
| Intercultural workshop and training attendance   | .014                         | .007       | .096                       | 1.941  | .053 | .207       | .098    | .087  |
| Conversations about cultural difference          | .007                         | .003       | .103                       | 1.933  | .054 | .203       | .098    | .086  |
| Conversations with diverse others                | .002                         | .001       | .070                       | 1.381  | .168 | .155       | .070    | .062  |

Dependent Variable: CQS

***Multiple Linear Regression Analysis: MCSA-P2.***

Step-wise regression was also used to describe the individual and collective relationship of the independent variables to the level of intercultural competence measured by the MCSA-P2. As with the CQS analysis, I entered each of the 13 variables into individual simple regressions to determine the order in which they would entered

into the MCSA-P2 step-wise regression analysis. The data is represented in two sets. The first set includes variables that demonstrated weak relationships that did not reach the level of statistical significance ( $p < .05$ ) required to be included in the final regression equation. The data sets included in the first phase can be seen in Tables 45 through 47. The second set of data includes variables that demonstrated a predictive capacity, were individually statistically significant, and thus were entered into the step-wise linear regression analysis.

*Set I – Independent Variables not Achieving Significance.*

Five independent variables including religious identity, age, international status, gender identity, and ability status were each entered into a single regression. None of these independent variables reached the level of significance required for continuation in the final multiple linear regression. Dissimilar to the regression analysis conducted with the CQS, the final MCSA-P2 analysis will include both race and ethnicity, and sexual orientation. Both of these variables reached the level of significance ( $p < .05$ ) required to be included in the final regression. The data related to these variables is contained in Tables 45, and 46. Table 45 contains illustrates the model summary and Table 46 contains the coefficient for each of the five variables.

Table 45

**MCSA-P2 Multiple Linear Regression – Model Summary: Variables Not Achieving Significance**

| Predictors   | R    | R Square | Adjusted R Square | Std. Error of the Estimate | Df     | F     |
|--|------|----------|-------------------|----------------------------|--------|-------|
| Internal status, Ability status, Gender, Age, Religious identity | .153 | .023     | .012              | .75166                     | 5, 434 | 2.045 |

Table 46

## MCSA-P2 Multiple Linear Regression - Coefficients: Variables Not Achieving Significance

|                        | B     | Std.<br>Error | $\beta$ | T      | Sig. |
|------------------------|-------|---------------|---------|--------|------|
| (Constant) MCSA-P2     | 5.617 | .185          |         | 30.345 | .000 |
| Religious identity     | -.155 | .073          | -.101   | -2.113 | .035 |
| Ability status         | .125  | .206          | .029    | .607   | .544 |
| International identity | .195  | .230          | .040    | .846   | .398 |
| Gender                 | -.011 | .078          | -.007   | -.141  | .888 |
| Age                    | .007  | .004          | .096    | 1.997  | .046 |

A multiple linear regression as calculated predicting participant CQS scores based upon their international status, age, gender, ability status, and religious identity. The regression equation was not significant ( $F(5,434) = 2.045$ ,  $p > .01$  with an  $R^2$  of .023. International status, age, sexual orientation, gender, ability status and religious identity cannot be used to predict MCSA-P2 results.

*Set II – Independent Variables Reaching Achieved Significance.*

Eight independent variables including race, sexual orientation, number of continuous months lived outside the US, multicultural workshops or training program attendance, frequency of travel outside the US since the age of 18, number of years worked in student affairs, frequency of workplace conversations with individuals whose identity is different than one's own, and frequency of workplace conversations about difference were each entered into a single regression. All of these variables reached the

level of significance required for continuation in the final multiple linear regression analysis. The data related to these variables is contained in Tables 47 and 48. Table 47 contains the descriptive statistics for the variables achieving significance and Table 48, contains the coefficients for each of the models for each of the 8 variables.

**Table 47**

**Descriptive Statistics: Variables Achieving Significance**

|   | Mean    | Std.<br>Deviation | N   |
|---|---------|-------------------|-----|
| MCSA-P2   | 5.8213  | .75170            | 393 |
| Race and Ethnicity  | N/A     | N/A               | 393 |
| Sexual Orientation  | N/A     | N/A               | 393 |
| Work Experience in Student Affairs                                    | 7.5267  | 7.64719           | 393 |
| Intercultural training and workshop attendance over a two-year period | 6.4860  | 5.73393           | 393 |
| Conversations About Intercultural Difference                          | 10.1069 | 13.36072          | 393 |
| Conversations with Diverse Others                                     | 32.5191 | 36.04865          | 393 |
| Number of months lived outside the US *                               | N/A     | N/A               | 393 |
| Number of times traveled outside the US since age 18                  | 4.1069  | 4.73790           | 393 |

\* Categorical variable where 1= 0; 2 = < 1 month; 3 = 1-6 months; 4 = > 6 months

The independent variables were entered into the regression equation in the following order: 1) race and ethnicity (control variables), 2) sexual orientation, 3) years of work experience in student affairs, 4) intercultural training and workshop attendance, 5) conversations about intercultural difference, 6) conversations with diverse others, 7) number of continuous months lived outside the US, 8) frequency of travel outside the US since age 18. I chose to order these variables based upon the outcome of the individual regression of each. Except for the first three variables, each variable was entered in

descending order from the one that predicted the largest proportion to the one predicting the smallest proportion of the variance. I chose to enter race and ethnicity, sexual orientation, and years of work experience before the other variables because I wanted to control for these demographic characteristics.

Table 48

MCSA-P2 Multiple Linear Regression – Model Summary: Variables Achieving Significance

| Model | R    | R <sup>2</sup> | Adj.<br>R <sup>2</sup> | Std.<br>Error | Change Statistics     |             |     |     |                  |
|-------|------|----------------|------------------------|---------------|-----------------------|-------------|-----|-----|------------------|
|       |      |                |                        |               | R<br>Square<br>Change | F<br>Change | df1 | df2 | Sig. F<br>Change |
| 1     | .110 | .012*          | .010                   | .748          | .012                  | 4.779       | 1   | 391 | .029             |
| 2     | .149 | .022*          | .017                   | .745          | .010                  | 4.000       | 1   | 390 | .046             |
| 3     | .217 | .047**         | .040                   | .737          | .025                  | 10.122      | 1   | 389 | .002             |
| 4     | .446 | .199**         | .191                   | .676          | .152                  | 73.875      | 1   | 388 | .000             |
| 5     | .465 | .216**         | .206                   | .670          | .017                  | 8.443       | 1   | 387 | .004             |
| 6     | .469 | .220**         | .208                   | .669          | .004                  | 1.872       | 1   | 386 | .172             |
| 7     | .502 | .252**         | .239                   | .656          | .032                  | 16.510      | 1   | 385 | .000             |
| 8     | .503 | .253**         | .237                   | .657          | .000                  | .240        | 1   | 384 | .625             |

\* p < .05

\*\* p < .01

As evidenced in Table 48, demographic variables accounted for 4.7% of the variance ( $F(1, 389) = 10.122, p < .05$ ). After controlling for these variables, training and workshop experience accounted for 15% of the variance ( $F(1, 388) = 73.875, p < .01$ ). Adding the variable regarding conversations about intercultural difference brings the explainable percentage of the variance to 17%. Though conversation with individuals whose identities were different than that of the participants was a significant predictor,

when added to the regression equation, it did not enhance the model ( $F(1, 386) = 1.872$ ,  $p > .05$ ). Experience living outside the US for extended periods of time added another 3% to the predictable percentage of the variance; however, though significant, travel outside the US contributed only marginally to the final regression equation. The five variables explain approximately 20% of the variance in MCSA-P2 scores ( $F(1, 384) = .240$ ,  $p < .01$ ).

Table 49

MCSA-P2 Multiple Linear Regression - Coefficients: Variables Achieving Significance

|   | Un-standardized Coefficients |            | Standard-ized Coreffi-cients | T      | Sig  | Correlations |         |       |
|---|------------------------------|------------|------------------------------|--------|------|--------------|---------|-------|
|   | B                            | Std. Error | $\beta$                      |        |      | Zero-order   | Partial | Part  |
| (Constant) – MCSA-P2  | 5.407                        | .135       |                              | 40.183 | .000 |              |         |       |
| Race and Ethnicity  | -.064                        | .024       | -.123                        | -2.699 | .007 | -.110        | -.136   | -.119 |
| Sexual Orientation  | .070                         | .087       | .036                         | .798   | .425 | .096         | .041    | .035  |
| Work Experience in Student Affairs                                    | .011                         | .005       | .116                         | 2.421  | .016 | .163         | .123    | .107  |
| Intercultural training and workshop attendance over a two-year period | .041                         | .006       | .311                         | 6.392  | .000 | .399         | .310    | .282  |
| Conversations About Intercultural Difference                          | .007                         | .003       | .118                         | 2.251  | .025 | .299         | .114    | .099  |
| Conversations with Diverse Others                                     | .002                         | .001       | .075                         | 1.509  | .132 | .223         | .077    | .067  |
| Number of months lived outside the US                                 | .121                         | .034       | .175                         | 3.556  | .000 | .203         | .179    | .157  |
| Number of times traveled outside the US since age 18                  | .004                         | .008       | .026                         | .490   | .625 | .192         | .025    | .022  |

### **Question 3: Relationship Between Self and Peer-assessed Cultural Competency.**

The last research question I addresses in this study is whether or not there is a relationship between student affairs practitioner self and peer-assessments of intercultural competence. Never before have observer perceptions been considered in the assessment of intercultural competency. The descriptive statistics for both the participant as well as the observer CQS reports are contained in Table 50. Fifty-one participants each identified five peer observers to assess their intercultural competence using the CQS peer-observer survey. The total observer response rate was 74% (n = 188). The average number of observer surveys completed for each participant was 3.69.

#### ***Participant and Observer Descriptive Statistics.***

As is evidenced in a comparison of the data contained in Table 50 the observer assessed CQS composite score was higher (m = 5.42) than was that participant self-evaluated CQS score (5.0). Observers also rated participants more highly than participants rated themselves on three of the four sub-dimensions: meta-cognition (observer m = 6.16, participant m = 5.86), cognition (observer m = 4.91, participant m = 4.11) and motivation (observer m = 5.76, participant = 5.46). Based upon a cursory review of the data, it appears that observers in this study evaluated participant intercultural knowledge, ability to reason and think about intercultural issues in abstract ways, and motivation to learn about intercultural difference more highly than the participants assessed themselves. Interestingly, the aggregated observer and participant self-assessments of behavioral CQS were nearly identical (observer m = 4.9521, participant m = 4.9543).

Table 50

## Participant and Observer CQS and CQS Sub-dimension Descriptive Statistics

|                           | CQS     | Meta-cognition | Cognition | Behavior | Motivation |
|---------------------------|---------|----------------|-----------|----------|------------|
| Mean                      | 5.0082  | 5.8564         | 4.1090    | 4.9543   | 5.4628     |
| Mean (Observer)           | 5.4258  | 6.1609         | 4.9128    | 4.9521   | 5.7580     |
| Median                    | 4.9500  | 5.7500         | 4.0833    | 5.2000   | 5.3000     |
| Median (Observer)         | 5.4000  | 6.2500         | 5.0000    | 4.8000   | 5.9167     |
| Mode                      | 4.95    | 5.75           | 4.33      | 5.20     | 5.20       |
| Mode (Observer)           | 5.20(a) | 7.00           | 5.00      | 4.00     | 7.00       |
| Std. Deviation            | .81942  | .68744         | 1.14984   | 1.06044  | 1.13274    |
| Std. Deviation (Observer) | .84049  | .90916         | 1.10731   | 1.20340  | .92841     |
| Variance                  | .671    | .473           | 1.322     | 1.125    | 1.283      |
| Variance (Observer)       | .706    | .827           | 1.226     | 1.448    | .862       |
| Range                     | 3.60    | 2.75           | 5.00      | 5.20     | 5.00       |
| Range (Observer)          | 5.15    | 5.25           | 5.20      | 5.40     | 5.17       |
| Minimum                   | 3.25    | 4.25           | 1.50      | 1.80     | 2.00       |
| Minimum (Observer)        | 1.85    | 1.75           | 1.80      | 1.60     | 1.83       |
| Maximum                   | 6.85    | 7.00           | 6.50      | 7.00     | 7.00       |
| Maximum (Observer)        | 7.00    | 7.00           | 7.00      | 7.00     | 7.00       |

Without further analysis, it was impossible to know if the differences in scores were significant. Therefore, I conducted correlation analysis and paired samples t-tests for both CQS composite score as well as each of the four sub-dimensions: meta-cognition, cognition, motivation, and behavior. For each of the analysis, I first conducted a paired samples t-test to determine if the scores were significantly different. I then

conducted a correlation analysis to understand the relationship between the participant and observer ratings.

***Composite CQS Score Differences.***

Table 51 contains the descriptive statistics for the mean CQS observer and participant scores. The mean CQS observer score was 5.43 (sd = .84) and the participant score was 5.01 (sd = .82).

**Table 51**

**CQS Participant and Observer CQS Descriptive Statistics**

|             | Mean   | N   | Std. Deviation | Std. Error Mean |
|-------------|--------|-----|----------------|-----------------|
| Observer CQ | 5.4258 | 188 | .84049         | .06130          |
| CQ          | 5.0082 | 188 | .81942         | .05976          |

Table 52 contains the results of the paired samples t-test of participant and observer CQS composite scores. As illustrated, I found a significant difference between the mean observer and participant CQS scores ( $t(187) = 5.23, p < .001$ ). Observer CQS composite scores were significantly higher than those of the participants.

**Table 52**

**Paired Samples T-Test: Observer and Participant CQS**

|                                | Paired Differences |                   |                       |   |       | T    | Df  |
|--------------------------------|--------------------|-------------------|-----------------------|---|-------|------|-----|
|                                | Mean               | Std.<br>Deviation | Std.<br>Error<br>Mean | 95% Confidence<br>Interval of the<br>Difference |       |      |     |
|                                |                    |                   |                       | Lower   | Upper |      |     |
|                                |                    |                   |                       |   |       |      |     |
| Observer to Participant<br>CQS | .41755***          | 1.10              | .080                  | .260  | .580  | 5.23 | 187 |

\*\*\* Sig.  $p < .001$  (2-tailed)

I calculated a Pearson correlation coefficient to examine the relationship between observer assessments of participant CQS and participant self-assessed CQS. As seen in Table 53, the relationship between participant and observer CQS did not reach a level of significance ( $r(2) = .129, p > .05$ ). How participants self-assessed their own intercultural competency was not related to how peer observers assessed participant intercultural competency.

Table 53

CQS Participant and Observer Paired Samples Correlations

|                              | N   | Correlation | Sig. |
|------------------------------|-----|-------------|------|
| Observer and Participant CQS | 188 | .129        | .078 |

***Meta-cognitive CQS Score Differences.***

Table 54 contains the descriptive statistics for the mean observer and participant meta-cognitive scores. The mean CQS observer meta-cognitive score was 6.16 (sd = .91) and the mean participant meta-cognitive score was 5.86 (sd = .69).

Table 54

Participant and Observer Meta-cognitive CQS Descriptive Statistics

|                               | Mean   | N   | Std. Deviation | Std. Error Mean |
|-------------------------------|--------|-----|----------------|-----------------|
| Observer Meta-cognitive CQ    | 6.1609 | 188 | .90916         | .06631          |
| Participant Meta-cognitive CQ | 5.8564 | 188 | .68744         | .05014          |

Table 55 illustrates that the mean observer and participant CQS meta-cognitive scores are significantly different ( $t(187) = 3.669, p < .001$ ). Observer assessments of participant meta-cognitive ability are significantly higher than participant self-assessments of their own meta-cognitive ability.

Table 55

## Paired Samples T - Test: Participant and Observer Meta-cognitive CQS Scores

|                                | Paired Differences |                   |                       |   |       | T     | Df  |
|--------------------------------|--------------------|-------------------|-----------------------|---|-------|-------|-----|
|                                | Mean               | Std.<br>Deviation | Std.<br>Error<br>Mean | 95% Confidence<br>Interval of the<br>Difference |       |       |     |
|                                |                    |                   |                       | Lower   | Upper |       |     |
|                                |                    |                   |                       |   |       |       |     |
| Observer to Participant<br>CQS | .305***            | 1.138             | .083                  | .141  | .468  | 3.669 | 187 |

\*\*\* Sig. p &lt; .001 (2-tailed)

I calculated a Pearson correlation coefficient examining the relationship between participant and observer CQS meta-cognitive assessments. As seen in Table 56, there was virtually no relationship between observer and participant assessments of meta-cognitive ability ( $r(2) = .003$ ,  $p > .05$ ).

Table 56

## Participant and Observer Meta-cognitive CQS Paired Samples Correlations

|   | N   | Correlation | Sig. |
|---|-----|-------------|------|
| Observer & Participant Meta-cognitive CQS | 188 | .003        | .962 |

***Cognitive CQS Score Differences.***

Table 57 contains the participant and observer cognitive CQS descriptive statistics. As illustrated, the mean CQS observer cognitive score was 4.91 (sd = 1.11) and the participant score was 4.11 (sd = 1.15).

Table 57

## Participant and Observer Cognitive CQS Descriptive Statistics

|                           | Mean   | N   | Std. Deviation | Std. Error Mean |
|---------------------------|--------|-----|----------------|-----------------|
| Observer Cognitive CQS    | 4.9128 | 188 | 1.10731        | .08076          |
| Participant Cognitive CQS | 4.1090 | 188 | 1.14984        | .08386          |

Table 58 illustrates the results of the paired samples t-test of participant and observer cognitive CQS scores. As indicated in Table 58, I found a significant difference between the mean observer and participant cognitive CQS scores ( $t(187) = 7.492$ ,  $p < .001$ ). Observers assessed participant knowledge to be significantly higher than participants assessed their own knowledge.

Table 58

## Paired Samples T - Test: Participant and Observer Cognitive CQS

|  | Paired Differences |                   |                       |   |       | T     | Df  |
|--|--------------------|-------------------|-----------------------|---|-------|-------|-----|
|  | Mean               | Std.<br>Deviation | Std.<br>Error<br>Mean | 95% Confidence<br>Interval of the<br>Difference |       |       |     |
|  |                    |                   |                       | Lower   | Upper |       |     |
|  |                    |                   |                       |   |       |       |     |
| Observer to Participant<br>Cognitive CQS | .80372***          | 1.47096           | .10728                | .559  | 1.015 | 7.492 | 187 |

\*\*\* Sig.  $p < .001$  (2-tailed)

I calculated a Pearson correlation coefficient examining the relationship between participant and observer Cognitive CQS scores. As seen in Table 59, there was a weak but significant relationship between observer and participant cognitive CQS assessments ( $r(2) = .151$ ,  $p < .05$ ). There is a significant positive relationship between participant and observer assessments of participant intercultural knowledge.

Table 59

Participant and Observer Cognitive CQS Paired Samples Correlations

|                                      | N   | Correlation | Sig. |
|--------------------------------------|-----|-------------|------|
| Observer & Participant Cognitive CQS | 188 | .151        | .039 |

***Motivational CQS Score Differences.***

Table 60 contains the participant and observer motivational CQS descriptive. As seen in Table 60, the mean Motivational CQS observer assessed score was 5.76 (sd = .93) and the participant score was 5.46 (sd = 1.13).

Table 60

Participant and Observer Motivational CQS Descriptive Statistics

|                              | Mean   | N   | Std. Deviation | Std. Error Mean |
|------------------------------|--------|-----|----------------|-----------------|
| Observer Motivational CQS    | 5.7580 | 188 | .92841         | .06771          |
| Participant Motivational CQS | 5.4628 | 188 | 1.13274        | .08261          |

Table 61 illustrates the outcomes of the paired samples t-test comparing participant and observer motivational CQS scores. As seen in Table 61, I found a significant difference between the mean observer and participant motivational CQS scores ( $t(187) = 3.017, p < .01$ ). Observers assessed participant's value for and confidence to learn about intercultural difference more highly than participants assessed themselves.

Table 61

## Paired Samples T-test: Participant and Observer Motivational CQS

|                                | Paired Differences |                   |                       |   |        | T     | Df  |
|--------------------------------|--------------------|-------------------|-----------------------|---|--------|-------|-----|
|                                | Mean               | Std.<br>Deviation | Std.<br>Error<br>Mean | 95% Confidence<br>Interval of the<br>Difference |        |       |     |
|                                |                    |                   |                       | Lower   | Upper  |       |     |
|                                |                    |                   |                       |   |        |       |     |
| Observer to Participant<br>CQS | .295**             | 1.342             | .09784                | .10220  | .48823 | 3.017 | 187 |

\*\* Sig.  $p < .01$  (2-tailed)

I calculated a Pearson correlation coefficient examining the relationship between participant and observer motivational CQS. As seen in Table 62, a significant, though weak correlation was found ( $r(2) = .164, p < .05$ ). There is a significant positive relationship between participant and observer assessments of participant value for and self-confidence to learn about cultural difference.

Table 62

## Participant and Observer Motivational CQS Paired Samples Correlations

|   | N   | Correlation | Sig. |
|---|-----|-------------|------|
| Observer & Participant Motivational CQS | 188 | .140        | .055 |

***Behavioral CQS Score Differences.***

Table 63 contains the participant and observer behavioral CQS descriptive statistics. As seen in Table 63, the mean observer assessed behavioral CQS score ( $m = 4.95; sd = 1.2$ ) and the participant self-assessed behavioral CQS score ( $m = 4.95, sd = 1.06$ ) differed by just .002.

Table 63

## Participant and Observer Behavioral CQS Descriptive Statistics

|                            | Mean   | N   | Std. Deviation | Std. Error Mean |
|----------------------------|--------|-----|----------------|-----------------|
| Observer Behavioral CQS    | 4.9521 | 188 | 1.20340        | .08777          |
| Participant Behavioral CQS | 4.9543 | 188 | 1.06044        | .07734          |

As illustrated in Table 64, I found no difference between the mean observer and participant Behavioral CQS scores. ( $t(187) = 5.23, p > .05$ ). Observer Behavioral CQS composite assessments of participants were not significantly different than self-assessed participant scores.

Table 64

## Paired Samples T - Test: Observer and Participant Behavioral CQS

|   | Paired Differences |                |                 |   |        | t     | Df  |
|---|--------------------|----------------|-----------------|---|--------|-------|-----|
|   | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |        |       |     |
|   |                    |                |                 | Lower                                     | Upper  |       |     |
| Observer and Participant Behavioral CQS | -.00213            | 1.52834        | .11147          | -.22202                                   | .21776 | -.019 | 187 |

\*  $p < .05$

I calculated a Pearson correlation coefficient examining the relationship between participant and observer Behavioral CQS. As seen in Table 65, a very weak to non-existent correlation that was not significant was found ( $r(2) = .093, p > .05$ ). There is no relationship between participant and observer assessments of participant ability to respond behaviorally in culturally appropriate ways.

Table 65

Participant and Observer Behavioral CQS Paired Samples Correlations

|                                       | N   | Correlation | Sig. |
|---------------------------------------|-----|-------------|------|
| Observer & Participant Behavioral CQS | 188 | .093        | .205 |

**Summary of the Relationship Between Participant and Observer Assessed CQS Scores.**

To summarize, a sample of 51 participants agreed to provide contact information for peer observers whom they believed could accurately assess their intercultural competency as measured by the CQS. I sent 255 invitations to participate. A total of 188 observers responded. The average number of observer assessments returned was 3.69. Observer assessments of participant intercultural competency as assessed by the CQS were significantly higher than participant self-assessments. However, there was no significant relationship between observer assessed and participant self-assessed CQS results.

The CQS is comprised of four sub-factors. To learn more about which factors contributed to the CQS participant and observer assessment differences, I conducted analysis of each of the sub-dimensions. Though observers assessed participant meta-cognitive abilities to be significantly higher than participant self-assessments, there was virtually no relationship between the scores. With this sample group, there is no congruence between perceptions of observers and participant self-perceptions with regard to participant higher order thought processes including abstract reasoning, perspective-taking, and problem-solving. Similarly, observer assessments of participant knowledge (CQS cognition) were also significantly higher than participant self-assessments. However, while there does not appear to be a relationship between observer and

participant over all CQS and meta-cognitive CQS, there is a significant and positive relationship ( $r = .151$ ) between observer and self-perceptions with regard to participant intercultural knowledge. Likewise, observer assessments of participant motivation to learn about intercultural issues are not only significantly higher and also positively correlated with participant self-assessments ( $r = .164$ ).

Finally, observer assessments of participant abilities to use appropriate intercultural behavior mirrored participant self-assessments of appropriate use of intercultural behavior. Interestingly, though the observer assessments and participant assessment were statistically and perceptually the same, the two assessments were not related to one another. Though there are some related aspects between observer and participant intercultural abilities, specifically with regard to participant knowledge and motivation; overall, it appears that how study participants perceive their own intercultural abilities is not linearly related to how others perceive them.

### **Chapter Summary**

In this chapter, I have presented the results of analysis of the three research questions I identified. Using the data I collected from 465 student affairs practitioners representing a variety of years in the field, position levels, areas of specialization, and personal identities, I conducted several types of analysis to determine: 1) the relationship between demographic variables and intercultural competency of student affairs administrators, 2) the relationship between and predictive power of two maturation and five behavioral variables to intercultural competency, and 3) the relationship between peer and observer assessments of intercultural competency. I began chapter four by highlighting the results of the preliminary analysis of the CQS, the primary instrument

used to conduct this research. Once I determined that the CQS demonstrated adequate reliability and validity, I began to address the primary research questions.

The independent samples t-tests and ANOVAs contained in the first section of the primary analysis yielded several findings of interest. With the exception of race and ethnicity, there were no significant differences in participant CQS scores based upon various identity statuses including: gender identity, sexual orientation, religious identity, ability status, and international status. The MCSA-P2 yielded significant differences based upon both race and ethnicity and sexual orientation of participants. While the findings regarding significant differences in race and ethnicity were similar between the CQS and the MCSA-P2, they were not the same. Participants who identified as either White or African American or Black had scores that were statistically the same but significantly lower than those identifying as Asian or Pacific Islander, Latin American or Hispanic, Native American or Alaska Native, or individuals identifying with two or more of these categories. Alternatively, [only] White participants had MCSA-P2 scores significantly lower than the other racial and ethnic groups under investigation. A discussion of why this difference in the outcomes of the investigation regarding race and ethnicity and sexual orientation will be discussed in chapter five.

The data contained in section two were extensive. The first level of analysis compared the relationship between CQS and the MCSA-P2 scores to a number of independent variables. Here, the variables most strongly associated with higher CQS scores were related primarily to international travel and living experience followed by intercultural training and workshop attendance. Alternatively, the variables most strongly associated with higher MCSA-P2 scores included experience variables related to

intercultural training and workshop attendance, frequency of conversations about racial, ethnic, religious, sexual orientation, gender identity or ability status differences, and frequency of conversations with individuals whose identities differed from those of the participants.

The second level of analysis was an exploration of the relationship of maturational and behavioral variables to the four sub-dimensions of cultural competency as assessed by the CQS. Travel outside the US was the variable most strongly associated with the development of meta-cognitive ability and behavior. The number of continuous months living outside the US was most strongly associated with enhanced intercultural knowledge and motivation. Maturational variables including age and number of years worked in student affairs did not bare a strong relationship to the development of any of the sub-dimensions; in fact, age bore no statistical relationship at all.

The variables identified to have the strongest relationships to the CQS as well as the MCSA-P2, were the ones that also demonstrated the strongest predictive capabilities. Taken together, international experience (both living abroad and travel abroad) and intercultural training experience accounted for 20% of the variance in CQS scores. Eight variables, including race and ethnicity, sexual orientation, year of years of work experience in student affairs, intercultural training and workshop attendance, conversations about intercultural difference, conversations with diverse others, number of continuous months lived outside the US, and frequency of travel outside the US since age 18 collectively accounted for 25% of the variance in MCSA-P2 scores.

In the third section, I detailed the outcomes of both independent samples t-tests and correlation analysis conducted to determine the relationship between self and peer

assessed intercultural competence as assessed by the CQS. There were significant and positive relationships between observer and self-assessment of participant CQS knowledge and motivation. However, though the assessments appear to be the same, observer and self-assessment of participant intercultural behavior were not related. On the whole, observer assessments of participant intercultural competence as measured by the CQS, though significantly higher, were not related to participant self-assessments of their own intercultural competence.

Chapter five concludes my dissertation and provides a discussion of the results of this study on intercultural competence of student affairs administrators as assessed by the CQS and the MCSA-P2. I include in this section the implications of the findings within the student affairs profession. I also detail limitations of this study and outline recommendations for future research.

## **Chapter 5: Discussion, Implications, and Recommendations**

According to scholars, in just six years, as many as 39% of the students enrolled at U.S. colleges and universities will be racially and ethnically different from the White majority (Hussar & Bailey, 2007). The educational benefits of a diverse student body, including enhanced intellectual and social development (Chang, 2000; Gurin, Dey, Hurtado, & Gurin, 2002; Pike & Kuh, 2006), as well as openness and commitment to racial understanding (Astin, 1993; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996) are clear. However, in order to reap the benefits associated with a diverse student body, campus leaders must endeavor to create a campus environment that is welcoming and affirming, and fosters cross-cultural interactions.

Student affairs professionals are uniquely positioned within the university to be instrumental to this process (Castellanos, Gloria, Mayorga, & Salas, 2007; Gordon & Bonner, 1998; Harper & Antonio, 2008; Gordon & Bronner, 1998; Manning & Coleman-Boatwright, 1991; Pope, 1993). To be effective however, practitioners must be capable of understanding and interacting competently with diverse groups of students (Castellanos, et al., 2007; Howard-Hamilton, et al., 1998; Jenkins, & Walton, 2008; King & Howard Hamilton, 2003; Talbot, 1998). The recognition that student affairs practitioners must be capable of effectively working with diverse groups of students has led to the identification of a problem. While the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to define what it means to be interculturally competent (Castellanos, et al., 2007; Deardorff, 2006; King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004) and fewer have developed methods for assessing efforts toward its development among professionals

(Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003).

Accordingly, the purpose of this dissertation was two-fold. To begin, I sought to introduce a new theoretical construct and assessment instrument designed to assess intercultural competency. Second, I endeavored to utilize this newer construct and instrumentation to address a series of research questions designed to better understand the intercultural competency of a sample of student affairs administrators.

The questions I addressed through this study were:

- 1) Are there relationships between demographic characteristics (including gender identification, age, race, and ethnicity) and intercultural competency of student affairs practitioners?
- 2) Which and to what degree do variables including: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US, and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners?
- 3) Are student affairs practitioner self and peer-assessments of intercultural competency related?

The purpose of this final chapter is to discuss and contextualize the study findings. I will begin by describing the sample, the variables under investigation, and the preliminary analysis. I will then situate and interpret the findings in light of current research. Once the findings have been clearly described and framed within the larger body of scholarship, I will detail the implications for the field of student affairs. Finally, I will conclude this chapter by identifying the limitations of this study and suggesting

directions for future research on intercultural competence among student affairs practitioners.

### **Overview of Study**

A total of 465 student affairs practitioners participated in this study. Of these practitioners, 29% identified as male, 69% as female, and .2% as transgender. Seventy-seven percent of the participants identified as White, 9% as African American or Black, 4.2% as Asian, Native Hawaiian or other Pacific Islander, 3.1% as Latino or Hispanic, .7% as American Indian or Alaska Native, and 6.2% of the participants ascribe two or more racial and or ethnic groups to themselves. The majority of the participants, 56.1%, identified themselves as Christian while 43.9% are either non-Christian or do not identify with any religion. The percent of individuals identifying as gay, lesbian, or bisexual was 17.8%. The percentage of participants identifying as having a disability was 3.2%. Finally, though no participants identified themselves as non-resident aliens, 2.6% did identify themselves as international.

There were three types of variables associated with this study: two dependant variables, each representing intercultural competence from a different theoretical perspective, and two categories of independent variables, those relating to participant demographics and those relating to participant experiences. The demographic variables utilized in this study were participant age, race and ethnicity, gender identity, religious identity, sexual orientation, disability status, and international status. The experience variables were years of professional service in student affairs, frequency of on-going training regarding intercultural issues, amount of time spent outside the US through travel or living circumstance, frequency of conversations about intercultural difference and

direct experience with culturally different individuals. At the most basic level, I used correlation analysis to understand the relationship between each of the independent variables and the two dependant variables, the Cultural Intelligence Survey (CQS) (Earley & Ang, 2003), and the Multicultural Competence in Student Affairs - Preliminary 2 (MCSA-P2) (Pope & Mueller, 2000). In addition, I used step-wise multiple-linear regression analysis to determine the predictive power of a number of the independent variables on participant intercultural competence as assessed by the CQS and the MCSA-P2. Finally, I again used correlation analysis to determine the relationship between self and peer assessments of intercultural competence using the CQS instrument.

I completed a preliminary analysis of the CQS because of its relative newness to the student affairs profession. Inter-item correlation analysis and Cronbach's Alpha were used to establish the reliability of the CQS as well as each of its four sub-dimensions: meta-cognition, cognition, motivation, and behavior. Validity of the CQS was conducted using Pearson's Product Moment correlation to assess the relationship between the CQS and the MCSA-P2. The inter-item correlation analysis reviewed that the four CQS factors had moderate inter-correlations and item-total correlations that were both positive and greater than .7, indicating internal consistency. Item-to-total correlations for each subscale also demonstrated strong relationships between items and item-total correlations that were both positive and greater than .7, again, indicating internal consistency. The composite as well as individual reliabilities of the CQS are as follows: composite CQS ( $\alpha = .936$ ), meta-cognitive ( $\alpha = .835$ ), cognitive ( $\alpha = .910$ ), motivation ( $\alpha = .868$ ), and behavior ( $\alpha = .891$ ). Prior research conducted using the MSCA-P2 indicated that the scale best fit a one-factor model for measurement of multicultural competency (Mueller,

1999, Pope & Mueller, 2000). I therefore elected to conduct only Cronbach's Alpha. As with prior research, the reliability ( $\alpha = .961$ ) was impressive.

Finally, I calculated the Pearson Product Moment Correlation to determine the relationship between the CQS and the MCSA-P2. I found a moderate correlation ( $r = .643$ ), indicating a significant linear relationship between the two measures. I then calculated a simple linear regression to predict participant CQS based upon their MCSA-P2. A significant regression equation was also found ( $R^2 = .413$ ,  $p < .001$ ). Upon completion of the preliminary analysis, I began to systematically address each of the three research questions. I will continue this discussion by highlighting and interpreting the findings from each question in the order in which they were studied.

### **Discussion of Question 1 - Facets of Identity**

The first research question I addressed related to possible relationships between demographic characteristics including and intercultural competence of student affairs administrator as assessed using the CQS and the MCSA-P2. The demographics examined included: gender identification, age, race and ethnicity, sexual orientation, religion, ability status, and international status. The findings (detailed in chapter four) and interpretations related to this research question are contained in subsequent paragraphs.

#### **Gender.**

Past research regarding gender differences in competency of student affairs graduate students, practitioners, and faculty using the traditional tripartite model of multicultural competence has been mixed, some indicating that there is a relationship between competence and gender (Blanshan, 2007; Castellanos, et al., 2007; King &

Howard Hamilton, 2003; Martin, 2005; Pope & Mueller, 2005), but most indicating there is not (Howlett, 2006; Mastrodicasa, 2004; Miklitsch, 2005; Mueller, 1999; Pope & Mueller, 2001). The results of this study are consistent with the latter as well as current CQS research indicating no relationship between gender and intercultural competence (Ang, et al., 2007; Ang, Van Dyne, & Koh, 2006; Shannon & Begley, 2008; Tarique & Takeuchi, 2008; Tay, Westman, & Chia, 2008; Templer, Tay, & Chandrasekar, 2006).

Though the instrument has not yet been the subject of exhaustive study, based upon current and past research, it appears that gender is not related to intercultural competence if competence is defined and assessed using the theoretical construct of cultural intelligence. However, results assessed using the MCSA-P2 as the primary measure may yield inconsistent findings with regard to the relationship between gender identity and intercultural competence.

#### **Race and Ethnicity.**

With rare exception (Blanshan, 2007; Castellanos, et al., 2007; Howlett, 2006), past research regarding multicultural competence of student affairs practitioners, faculty, and graduate students indicates that members of socially marginalized racial and ethnic groups report higher levels of cultural competence than their White counter-parts (King & Howard-Hamilton, 2003; Marina, 2003; Martin, 2005; Mastrodicasa, 2004; Miklitsch, 2005; Mueller, 1999; Pope & Mueller, 2005; Weigand, 2005). It was therefore not surprising that the results of the present study also demonstrated White practitioners to have lower MCSA-P2 self-report scores than practitioners of color. However, the fact that participants who identified as African American or Black had CQS scores that were

not only statistically lower than other participants of color but also statistically the same as White participants is not only intriguing but begs further discussion.

There are several possible interpretations for this difference. Perhaps marginalization based upon one's race or ethnicity does not necessarily translate into higher intercultural competence. As Ang, et al., (2007) pointed out, knowledge of the history, life experiences, and culture of one group, even one that has been historically marginalized, does not translate into knowledge of all groups. This is not to say that there is no relationship between racial or ethnic status and intercultural competency. If this were the case, there would be no significant difference between any of the groups in this study.

A second interpretation of the differences between the CQS and MCSA-P2 outcomes with regard to ethnicity and race relates to the focus of the two instruments. The CQS asks participants to report behaviorally on their intercultural awareness, non-verbal and verbal communication, and general cultural knowledge from a culturally etic perspective. None of the questions query participants' culture-specific knowledge, attitude, or belief systems about interculturalism or social justice. Alternatively, the MCSA-P2 asks questions that address culturally specific knowledge (culturally emic perspective), and targets attitudes and knowledge of the dynamics of power and privilege. For example, questions contained in the MCSA-P2 include: "I believe White people have certain privileges in society," "Past societal injustices still have a negative effect on college students of color," and "I can cite examples of how racism operates at the individual level, cultural level, and or institutional level." Thus, where the CQS focuses on behavioral manifestations of intercultural competence, asking no questions about and

assigning no value to the attitudes one may have; the MCSA-P2 focuses more specifically on attitudes. Therefore, one could argue, as King and Baxter-Magolda (2005) did, that the MCSA-2 is in fact an assessment of attitude as a proxy for competence.

Within U.S. society, groups identified as privileged include: White, male, straight, able-bodied, and Christian. Members of these “agent groups” arguably have the ability to opt out of learning about others or how their social status has provided them with un-earned advantages not exercised by individuals in the marginalized communities (Adams, Bell, & Griffin, 2007). Because the MCSA-P2 focuses on knowledge and attitudes regarding issues of social justice, and because White practitioners arguably occupy a privileged status wherein they have not had to learn about issues contained in the MCSA-P2, it follows that their self-report scores might be lower than those of marginalized practitioners. This explanation addresses why Black and African American participants fared better on the MCSA-P2; however, it does not address the outcomes of this group with regard to the CQS.

A third interpretation for the CQS score differences between African American or Black and White participants and the other racial and ethnic groups may relate to the degree to which practitioners in each of these identity groups interact socially and professionally with individuals whose identities are similar or dissimilar to their own. Specifically, Allport’s (1954) contact theory posits that racial and ethnic prejudice is lessened and more favorable attitudes and willingness to interact are increased by intergroup contact. Indeed, personal interaction has been identified as one of the most significant factors contributing to intercultural growth (Alimo, Kelly, & Clark, 2002;

Blanshan, 2007; Echolos, Hwang, & Nobles, 2002; Howard-Hamilton, Richardson, & Shufford, 1998; Talbot, 1996; Quaye & Baxter Magolda, 2007; Reason, Roosa Millar, & Scales, 2005) and comfort with interpersonal difference (Alimo, Kelly, & Clark, 2002; Reason, Roosa Millar, & Scales, 2005). If a critical mass of individuals with similar identities exists, there may be less interaction with others whose identities are dissimilar to their own. It follows then that less inter-cultural interaction may result in diminished meta-cognitive development, diminished acquisition of cultural knowledge and skill, and lessened value for and confidence in interacting with individuals whose identities are perceived to be different.

In chapter 3, I reported that 15% of the ACPA membership identified as African American or Black, and 73% as White. I also reported that other racial and ethnic groups comprised a much smaller proportion of the membership: Asian = 3%, Latino or Hispanic = 5%, Native American/Alaska Native = less than 1%, and those identifying with two or more racial or ethnic groups = 2%. Thus, CQS scores may be impacted by the fact that that both Black or African American as well as White practitioners have a greater ability to interact mostly or exclusively within their own identity group than do other racial or ethnic groups.

#### **Sexual Orientation.**

The outcome of the independent t-test comparing the CQS scores of individuals identifying as gay, lesbian, or bisexual and those identifying as heterosexual is consistent with the research of Mastrodicasa (2004) who found no statistically significant difference in multicultural competence based upon sexual orientation. However, when the same test was run using the MCSA-P2, the results were different, with those identifying as gay,

lesbian, or bisexual having significantly higher self report scores than those identifying as heterosexual. These results were consistent with the findings of Miklitsch (2005), Muller (1999), Mueller and Pope (2001), and Weigands (2005), who found a statistically significant difference in competency scores among individuals who identified as socially marginalized. Qualitatively, Marin (2005) also found that individuals identifying as lesbian, gay, or bisexual also reported higher levels of multicultural competence.

Similar to the differences between the CQS and MCSA-P2 outcomes with regard to ethnicity and race, the differences between the outcomes of the CQS and the MCSA-P2 based upon sexual orientation may relate to the focus of the two instruments. Whereas the CQS focuses on one's self-reported intercultural behaviors and knowledge, the MCSA-P2 focuses on one's attitudes and self-perceived knowledge. Because of the focus of the instrument, it is possible that practitioners taking the MCSA-P2 have over-estimated their actual abilities. Alternatively, because heterosexual practitioners occupy a privileged status wherein they have not had to learn about issues contained in the MCSA-P2, it follows that their self-report scores might be lower than those of marginalized practitioners.

### **Religious Identity.**

The results of the t-tests for differences in outcomes based upon religious identity yielded no significant differences on either the CQS or the MCSA-P2. Interestingly, 44% (N = 204) participants identified as non-Christian (N = 204) and 56% (N = 261) identified as Christian. In retrospect, providing participants with a wider array of religious identities from which to select would have been prudent and far less marginalizing than the two groups utilized. However, the study of religious difference

and intercultural competency is confounded and thus, beyond the scope of this dissertation. Specifically, the current as well as historical socio-political climate and the impact of discrimination depend upon the group is in a continual state of flux (Clark, 2003). Accordingly, a complete study would require a sufficiently large enough sample size of individuals comprising both the Christian as well as each of the “non-Christian” identities to tease out potential differences in experiences and world-views that may be associated with intercultural competency. In addition, religious identity is often entangled with and inseparable from ethnic and cultural identity (Clark, 2003; MacDonald-Dennis, 2006). Developing a mechanism to help participants understand how to accurately self-identify their religious identity poses a significant design challenge.

#### **Ability and International Status.**

The results of the t-tests for differences in outcomes based upon ability status and international status yielded no significant differences on either the CQS or the MCSA-P2. The number of individuals identifying as having a disability ( $N = 15$ ) and the number of individuals identifying as international ( $N = 12$ ) are small. This may have impacted the degree to which differences were accurately assessed. Research involving larger numbers of participants from both of these identity groups is warranted.

In summary, the purpose of the first question was to explore the relationship between various facets of identity and intercultural competence. Past scholarship arguably has lead to the conclusion that socially marginalized individuals are, perhaps by virtue of their identity, more likely to be interculturally competent (King & Howard-Hamilton, 2003; Marina, 2003; Martin, 2005; Mastrodicasa, 2004; Miklitsch, 2005; Muller, 1999; Mueller & Pope 2001; Pope & Mueller, 2005; and Weigands, 2005).

Current research findings using the CQS challenge this assumption. Intercultural competence may be less about whom one is and more about what one does with who one is.

## **Discussion of Question 2 - Experience Variables**

The second research question explored which and to what degree variables including: (a) years of professional service in student affairs, (b) frequency of on-going training regarding intercultural issues, (c) amount of time spent outside the US, and (d) direct experience with diverse others impact the outcome of assessment of intercultural cultural competency among student affairs practitioners. The results are discussed in the subsequent section.

### **Overview of Experience Variables.**

The variables most strongly associated with higher CQS scores were number of continuous months living outside the US ( $r = .382$ ), frequency of travel outside the US ( $r = .354$ ), and intercultural training and workshop attendance ( $r = .217$ ). The variables most strongly associated with higher MCSA-P2 scores included training and workshop attendance ( $r = .406$ ), frequency of conversations about racial, ethnic, religious, sexual orientation, gender identity, or ability status differences ( $r = .297$ ), and frequency of conversations with individuals whose identities differed from those of the participants ( $r = .219$ ).

The differences in the relative strength of the relationships of the experience variables between the two instruments warrant explanation. Arguably, one plausible explanation rests with the design of the two instruments. Both the cultural intelligence construct and instrumentation were developed in response to the unprecedented

globalization of business and industry (Ang & Van Dyne, 2008). The construct and measure, written from a culturally non-specific (etic) perspective, were originally targeted at understanding performance in situations involving cross-cultural interactions arising from differences in nationality, ethnicity, and race. A critical review of the CQS prompts reveals that the statements may, if read with a narrow definition of culture, elicit cognitions related to international exposure or travel. Specifically, CQS example prompts include: Meta-cognition - I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds; Cognition - I know the values and religious beliefs of other cultures; Motivation - I enjoy interacting with people from different cultures; Behavior - I change my non-verbal behavior when a cross-cultural situation requires it. It may be the case that individuals do not think about US culture as comprised of a number of sub-cultures, be they regional, racial or ethnic, or based in other facets of one's identity.

The variables most strongly related to CQS outcomes were those related to travel and living abroad. If participants taking the CQS thought only in terms of a global context, and if they had not traveled outside US, or had done so minimally, their responses to CQS prompts would have been at the lower end of the likert scale. Alternatively, those with extensive international experience would be at the upper end of the likert scale. Thus, an unintended consequence of wording of the prompter statement wording may have been a parochial view of culture.

The variables most strongly related to MCSA-P2 outcomes were those related to training followed by interactions those whose identities are dissimilar to one's own and conversations about identity difference. The strong positive relationship between training

and the MCSA-P2 outcomes is wholly explainable. Just over a quarter, or nine of the 34 MCSA-P2 prompter statements, include words such as knowledge, learning, research, literature, theory, reading, or studied. Example prompters include: I set goals for myself to increase my knowledge and awareness of multicultural issues, and I synthesize multicultural research to guide my practice. Ninety-eight percent of survey participants were, at minimum, pursuing a master's degree. Of these participants, 88% majored in Student Affairs/Higher education or closely related fields of study. Scholars have noted that the majority of student affairs programs require at least one diversity course (Flowers, 2003; Gayles & Kelly, 2007), and large numbers of student affairs professionals report regular participation in diversity training (Mueller & Pope, 2001). It is logical that an instrument that dedicates a quarter of its questions to training and learning experiences, taken by individuals who regularly participate in on-going learning experiences, would yield at least moderate, positive, and significant correlations between training and intercultural competence.

Similarly, nearly one-third, or 11 of the 34 MCSA-P2 prompter statements include words or phrases that relate to interaction across identity groups or conversation about race or identity. Example prompters include: I am aware of my limitations in *working with* students who are racially different from me and can readily specify these limitations; I believe that I must constantly evaluate my world-view and how it may affect my *interactions with* other racial and/or ethnic groups; I attempt to learn about races different from my own through reading, attending lectures, and/or *conversing* with others. One could persuasively argue that the MCSA-P2 has a strong emphasis on intercultural interactions and discourse. Thus, one would expect at least moderate, positive, and

significant relationship between the MCSA-P2 and frequency of interactions with individuals who are different from oneself as well as between the MCSA-P2 and conversations about intercultural difference.

While the differences in strength of variable relationships between the two instruments are undeniable, the variables most strongly associated with intercultural competence are not exclusive to either instrument. First hand experience and training seem to be the threads uniting the strongest correlates associated with each instrument. In light of current scholarship regarding intercultural competence, discussed subsequently, these results are not surprising.

### ***Travel and Living Abroad.***

Cultural exposure, including travel, living, and other immersive experiences in environments dissimilar to one's own, minimally results in the acquisition of procedural knowledge. However, it also has the potential to trigger reflection on cultural assumptions and analysis of cultural norms (Shannon & Begley, 2008). This, in turn, leads to some degree of disequilibrium followed by adjustment of mental models and the adoption new cognitive schemata, arguably resulting more highly developed meta-cognitive abilities (Ford & Dillard, 1996; Kasl & Elias, 2000; Kegan, 1982). In addition, as new cultural schemata are developed, one's capacity to display appropriate and generally expected behaviors is enhanced (Tarique & Takeuchi, 2008). Finally, learning about new cultures, expanding one's cognitive repertoire to include multiple frames of reference, and developing the ability to interact in culturally appropriate ways combine to positively influence one's confidence in and self-efficacy for successfully navigating unfamiliar circumstances (Earley & Ang, 2003; Shannon & Begley, 2008).

Following this line of reasoning, the current findings that frequency of travel and duration of living abroad was significantly and positively related to both CQS and MCSA-P2 self reported scores are fitting. Recent research using the CQS instrument yielded similar results. Specifically, significant exposure to other cultures, through employment (Crowne, 2006; Shannon & Begley, 2008, Tay, Westman, & Chia, 2008), education abroad (Crowne, 2006), and or travel abroad experience (Tarique & Takeuchi, 2008) was related to higher CQS outcomes.

### ***Training.***

The finding that there is a significant and positive relationship between training and intercultural competence suggests that student affairs staff are well served to continue to develop and implement training programs aimed at enhancing intercultural competency (Gayles & Kelly, 2007; Martin, 2005; Mueller, 1999; Pope, Reynolds, & Mueller, 2004; Pope & Mueller, 2005; Pope & Reynolds, 1997; Talbot, 1996). The infusion of intercultural learning into training and the curriculum is an important facet of the development of future practitioners. However, because intercultural development is a process, it is equally important to emphasize on-going training activities aimed at continued development (Mueller, 1999; Mueller & Pope, 2001, 2003; Talbot, 1996, Gayles & Kelly, 2007).

### ***Interactions With Culturally Diverse Individuals and Conversations About Cultural Difference.***

Beyond teaching and training activities designed to develop intercultural competency in practitioners, study findings also highlight the positive relationship between ongoing conversations about intercultural difference as well as conversations with individuals culturally dissimilar to one's self in the development of intercultural

competence. Miklitsch (2005) found that intercultural experience accounted for 31% of the variance in MCSA-P2 scores. Within this construct, and supported by other research, frequency of formal and informal discussion about difference have been found to be positively and significantly related to increased levels of intercultural competence (Ang, Van Dyne, & Koh, 2006; Miklitsch, 2005; Martin, 2005; Mueller, 1999; and Mueller & Pope, 2001, 2003).

Similarly, findings from this study mirrored most past research regarding the positive and significant relationship between frequency of interactions with diverse others and increased intercultural competence (Ang, Van Dyne, & Koh, 2006; Martin, 2005; Miklitsch, 2005; Mueller & Pope, 2001, 2003). Research conducted by Shannon and Begley (2008), though in opposition to the previously outlined findings, is nonetheless of interest. These researchers found that diversity of one's social network was not related to self-reported CQ. However, the diversity of one's social network was both positively and significantly related to peer-rated CQ. The relationships expressed in the Shannon and Begley (2008) study make logical sense. A diversity of social contacts may lead to the development of behavioral flexibility that, in turn, affords individuals the ability to put others at ease, thus resulting in higher peer-reported CQ. However, having a diverse set of social contacts may be perceived to be inconsequential or may even cause individuals to question their own cultural competencies. The result in either instance may be weak or insignificant relationships between self-reported CQS and interaction with others whose identities are dissimilar to one's own. These findings lend support to the argument that the CQS demonstrates strong construct validity (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008; Shannon & Begley, 2008).

### ***Work Experience.***

There were weak but significant correlations found between both the CQS ( $r = .128$ ) and the MCSA-P2 ( $R = .156$ ) and the number of years worked in student affairs. Few studies have focused on the number of years worked in student affairs and intercultural competence. Of those who have, results have been mixed. Researchers including Mastrodicasa (2004) and Hoover (1994) found positive and significant relationships between intercultural competence and number of years of professional experience in student affairs. However, other researchers, including Blanshan (2007), Castellanos, Alberta, Mayorga, and Salas (2007), and Howlett (2007) found no relationship between these variables. Given that the majority of the researchers have found no relationship between these variables and given that there was no relationship between age (an expected covariant with years of professional service) and the CQS and only a slight relationship between age and the MCSA-P2, the positive and significant relationship between years of professional service and intercultural competence is perplexing.

Because the intercultural scholarship yielded no substantive explanation, I conducted additional statistical tests aimed at explaining this finding. Thinking that international travel might co-vary with career longevity, I tested and subsequently found a significant relationship between years of professional service and frequency of international travel since the age of 18 ( $r = .342$ ,  $p < .001$ ). However, I found no relationship between the number of years of professional service and number of continuous months living outside the US ( $r = .083$ ,  $p > .05$ ). These relationships are plausible. One might assume as individuals become more well established in their

careers, they have the financial means and ability to travel. However, living for a substantial period outside the US is likely a decision not entirely related to financial means. Rather, it may relate to personal circumstance and ability make such a dramatic choice in living circumstance.

I also found a significant relationship between years of professional work experience and numerical frequency of workplace conversations about difference ( $r = .158, p < .05$ ). However, I found no relationship between years of professional work experience and frequency of conversations with individuals whose identities were dissimilar to that of the participants ( $r = .074, p > .05$ ) or training and workshop attendance ( $r = -.018, p > .05$ ). These relationships can also be explained.

This study and the literature cited within is predicated upon the fact that significant intercultural difference in higher education exists and must be successfully managed. For this to occur, it is logical that intercultural difference would be the subject of conversation at various levels within institutions. It follows then that the longer one has worked in student affairs, the more likely he or she is to have had greater numbers of conversations about intercultural difference.

While one might expect to see a positive relationship between conversations about intercultural difference and longevity in student affairs, it does not follow that longevity relates to conversations with individuals whose identities are dissimilar to one's own or to frequency of participation in intercultural training. According to Jackson (2000), white males have traditionally been overrepresented at the highest administrative levels in higher education while individuals of color and women have been overrepresented at lower administrative levels. While the demographic profile of the student affairs

profession is changing, resulting in greater numbers of women and individuals of color at higher administrative ranks (McEwen, 1990), it is reasonable to assume that at this point in history, individuals with the greatest longevity also find themselves interacting with colleagues who are arguably more similar than dissimilar to themselves. Further, as one assumes higher levels of authority and responsibility within student affairs, there is arguably more collegial and less student contact. Thus, it is likely that the longer a practitioner is employed in student affairs, the higher his or her organizational status is likely to be and the less student interaction he or she is likely to have. If one is not interacting with a diverse set of colleagues and if one is not interacting with students, diverse or otherwise, it is likely that intercultural conversations with individuals whose identities are dissimilar to one's own are limited. Blanshan's (2007) study comparing the attitudes of Resident Hall Directors to Chief Housing Officers' attitudes and beliefs about interculturalism lends tangential support to this argument. She found that while both resident hall directors and chief housing officers indicated disagreement with the statement "Being multiculturally aware is not directly relevant to the job I perform," resident hall directors indicated a significantly higher level of disagreement than did chief housing officers.

Blanshan's (2007) research also provides some insight into the lack of significance in the relationship between intercultural training and number of years worked in student affairs. In her study, resident hall directors (fewer years of experience) indicated significantly higher levels of disagreement than did chief housing officers (more years of student affairs experience) with the statement indicating that multicultural training is not necessary for staff in positions similar to their own, and with the statement indicating that

there is too much emphasis on multicultural training for staff. Though only one study, using one sub-group of student affairs professionals, this evidence does shed some light on the attitudes that might lead to the finding that there is no relationship between number of years as a practitioner and frequency of intercultural training.

### **Sub-Dimensions of CQS.**

One of the advantages offered by the CQS assessment is that practitioners and faculty members alike can identify and target for development any one or all of the four sub-dimensions related to intercultural competence at a(n) individual, curricular or programmatic level (Earley & Ang, 2003). Thus, it is helpful to explore the relationship between each of the variables explored in this study and the four CQS sub-dimensions. The following paragraphs highlight these relationships.

Though the relationship was relatively weak, the number of years practitioners have worked in student affairs was positively and significantly related to CQS meta-cognition ( $r = .118$ ), cognition ( $r = .120$ ), and behavior ( $r = .132$ ). Similarly, the frequency of workplace conversations participants had with individuals dissimilar to themselves and the frequency of conversations with co-workers or supervisors about difference were significantly related to each of the four domains: meta-cognition ( $r = .128$ ,  $r = .196$  respectively), cognition ( $r = .102$ ,  $r = .140$  respectively), motivation ( $r = .116$ ,  $r = .184$  respectively), and behavior ( $r = .127$ ,  $r = .141$ ) respectively. Taken together, these three findings paint a picture of the nature of student affairs work and its relationship to CQS. To begin, it appears that the nature of the work necessarily relates, albeit in a limited way, to how practitioners think (meta-cognition), what they know (cognition) and how they conduct themselves during intercultural encounters (behavior).

However, the nature of the work itself is not necessarily related to practitioner self-confidence or desire to work interculturally. Constructive developmental theory can be used to provide one explanation for this outcome.

From a constructive developmental perspective, the development of higher order thinking (meta-cognition) results from a recursive process of equilibrium, cognitive dissonance, and reframing. Cognitive dissonance is created through the individual's interaction with the environment and occurs when an individual cannot assimilate new information into existing frames of reference. As a result of dissonance, knowledge is continuously constructed and reconstructed, shaped and reshaped, culminating in increasingly more complex systems of thought (Kegan, 1982).

Dissonance, by definition is discomforting. As Dirkx (2006) points out, as practitioners make explicit and reflect on cultural related assumptions, emotions such as guilt, fear, shame, and a sense of loss or general anxiety surface. Individuals confronted with difficult feelings such as these are faced with two opposing choices. They may either discover new levels of awareness of the self-in-relation-to-others or become ambivalent to the learning process. Both of these reactions relate specifically to motivational CQ. The latter response relates to diminished levels of motivational CQS. Alternatively, the finding regarding the relationship between frequency of conversations with co-workers and supervisors about intercultural difference lends support to the former proposition. In this scenario, one might argue that the disequilibrium created during reflective conversations about intercultural issues with supervisors and or coworkers relates to more complex cognitive structures (higher meta-cognitive CQ), greater intercultural knowledge (higher cognitive CQ), more appropriate interpersonal

behaviors (behavioral CQ), and higher degrees of self-confidence in and willingness to learn about intercultural difference (motivational CQ). The same argument could be made for the relationship between frequencies of conversation with individuals whose identities are dissimilar to that of the practitioner and each of the four sub-dimensions of the CQS.

Ang, Van Dyne, and Koh (2006) also studied the relationship between interactions with individuals from diverse cultures and the four CQS dimensions. Interestingly, and in support of construct validity, their findings mirrored almost exactly both the correlation coefficient and significance level for all but the motivational CQS finding: meta-cognition ( $r = .12, p < .01$ ), cognition ( $r = .10, p < .05$ ), motivation ( $r = .25, p < .01$ ), and behavior ( $r = .12, p < .01$ ).

The relationship between the number of workshops and training programs attended and each of the sub-dimensions of CQS yielded relatively weak but positive and significant results. Of the four domains, the one demonstrating the weakest relationship to training and workshop participation was cognitive ( $r = .157$ ). This makes sense as the cognitive CQ prompter statements cause participants to ponder their knowledge of other cultures including but not limited to legal, marital and economic systems, values and religious beliefs, arts and crafts, and linguistic rules. Arguably, many US practitioners, as citizens of a privileged nation, have not taken the time to learn about the almost endless array of world cultures (Adams, Bell, & Griffin, 2007). In fact, within student affairs, an often-levied criticism of traditional forms of multicultural education and assessment has been its primary focus on discrete racial or ethnic groups (Mastrodicasa, 2004; Martin 2005). The other three domains focus on internal thought processes, confidence and enjoyment gained from intercultural interactions, and externalized verbal and non-verbal

behaviors. Study participants could more readily respond affirmatively to these prompts, despite even limited intercultural experience.

The relationship between the frequency of international travel since the age of 18 and each dimension of the CQS was positive, moderate in strength, and significant. Consistent with Crowne (2008), the dimension most strongly associated with international travel was motivation. Other researchers have yielded similar findings (Crowne, 2006; Tarique & Takeuchi, 2008).

The outcomes of the present study, as well as those by Tarique and Takeuchi (2008), and Crowne (2006, 2008) can be explained using Bandura's (1997) social learning theory (Tarique & Takeuchi, 2008). Briefly, through international travel, individuals learn, through experience and observation the behaviors, customs, and norms of other cultures (cognition). In addition, the more frequent the number of international non-work experiences, more likely the development of comprehensive cultural schemata (meta-cognition). Further, as individuals gain international experience, the amount of effort required to successfully interact lessens thus maximizing the benefits of the interactions while minimizing interpersonal apprehension (motivation). Finally, the development of cognitive structures generated from experiences affect individuals' ability to attend to, encode, and make inferences about new information and respond accordingly (behavior).

### **Regression Analysis.**

After controlling for demographic variables and number of years work in student affairs, the variables entered into both the CQS and the MCSA-P2 regression equations, accounted for 20% of the variance in scores. However, the percentage of variance each

variable accounted for was predictably different. International travel experience accounted for the lion's share of the difference in CQS results, accounting for 17% of the variance. In contrast, the largest variance in MCSA-P2 scores, 15%, was predicted by training and workshop attendance.

The variance in MCSA-P2 scores predicted by the demographic and experience variables of this sample of student affairs professionals was considerably different than what has been reported in prior research. Specifically, where demographic variables accounted for just 2% of variance in MCSA-P2 scores in this sample, the amount of variance of MCSA-P2 scores accounted for in studies completed by Martin (2005), Miklitsch (2005), Mueller, (1999), and Weigand (2005) ranged from 8% to 15%. In addition, where experience variables accounted for 20% of the variance in MCSA-P2 scores in the present study, they accounted for between 5% and 36.8% of the variance in the other studies. At least some of disparities in these results may be due in part what demographic and as experience variables were included in each study. Specifically, where I entered only race, ethnicity, and sexual orientation into the regression equation, Martin (2005), Mueller (1999), and Weigand (2005) included gender and Miklitsch (2005) included both gender and socioeconomic status. Further, all but Martin defined experience considerably more liberally to include considerably a wider variety of activities than were identified in the present study.

In summary, it appears that the very nature of student affairs work may be related to who enters and subsequently stays in the field, how they think, what they know, and how they conduct themselves during intercultural encounters. However, it also appears that the work itself is not necessarily related to practitioner self-confidence or desire to

work interculturally. It is important that practitioners both value and possess some level of efficacy if they are to be motivated to initiate or continue to develop their intercultural abilities. Institutional and departmental messages that reinforce the value of intercultural learning are critical. Also of paramount importance are training and development programs designed to not only extol the value of intercultural skill development, but also to build skills and abilities in a manner that allows practitioners the ability to engage in reflection and application of knowledge. Because of the nature of the experience, immersive and dialogic experiences in and with cultures dissimilar to one's own constitute valuable intercultural learning opportunities.

### **Question 3: Relationship between Self and Observer CQS Scores**

The final question I sought to address was one that to date has not yet been addressed in the literature regarding intercultural competence of student affairs administrators. Specifically, using the CQS, I explored if student affairs practitioner self and peer-assessments of intercultural competency were related.

With this group of practitioners, the relationship between self and peer CQS assessments of intercultural competency, though approaching, was not significant ( $r = .129$ ,  $p = .078$ ). A closer look at each of the sub-dimensions reveals that in this sample there were no apparent relationships between self and observer assessments of participant meta-cognitive or behavioral abilities. However, there were significant and positive relationships between self and observer assessed intercultural knowledge ( $r = .151$ ,  $p < .05$ ) and motivation ( $r = .164$ ,  $p < .06$ ).

In light of prior research, the results of the present study were somewhat surprising. Specifically, in 2008, Kim, Kirkman, and Chen ( $r = .43$ ,  $p < .001$ ) and

Shannon and Begley CQS ( $r = .16, p < .05$ ) found significant and positive relationships between self and peer assessed CQS. Both of these studies reported only composite CQS self and peer-report relationships. Neither differentiated differences along the four sub-dimensions of CQ. This difference in research design between these studies and the current one impedes analysis. However, I speculate that the results of this study may have been impacted by the research design.

To be included in this portion of the research, participants were required to forego anonymity by providing not only their names and contact information but also the names and contact information for peers, students, and or colleagues they believed could assess their intercultural abilities. It is reasonable to assume that in order to feel comfortable with the lack of anonymity regarding not only self but also peer assessments, participants likely had strong self-concepts as interculturally competent practitioners.

Scholars argue that it is self-concept that drives and motivates our adaption to and learning about cultural difference (Earley & Ang, 2003; Templer, Tay, & Chandrasekar, 2006). As argued by Brophy (2004), a natural instinct among people is to avoid learning opportunities that are seen as antithetical to their internal sense of self. Alternatively, people are drawn to learning opportunities that support their internal sense of who they are or want to be. Further, their motivations are strengthened if the learning opportunities strike at the inner core of self-concepts that constitute identity.

If it is true that these individuals have a core sense of self as interculturally competent, it follows that professional colleagues and students would have the ability to more readily observe intercultural knowledge and to infer from their actions their intercultural motivation. However, the internal processes one uses to make meaning of

intercultural experiences are not readily observable. Therefore, professional colleagues and students may not have been able to accurately assess the meta-cognitive ability of participants. Further, while intercultural behaviors are readily observable, it appears that the observers in this study had very different individual perceptions of external manifestations of participant intercultural knowledge. Though these participants may know the verbal and nonverbal expressions required to be effective during intercultural situations, it does not necessarily follow that they have the cognitive structures required for decoding and acting upon interpersonal cues (Earley & Ang, 2003; Shannon & Begley, 2008).

In summary, though the exact reasons are not known, it is clear that the practitioners participating in this study had a different self-assessment of their level of intercultural competency than the observers who assessed them. Practitioners, particularly those who believe themselves to be highly competent interculturally, would be well served to take this finding under advisement. Future research addressing participant and observer perceptions of competency would be of great value. This research could be designed to validate or refute these findings. Alternatively, it could be designed to better understand why perceptions may differ.

### **Limitations**

As with any study, there are limitations associated with this research that are important to address. The first set of limitations relate to the sampling of the participants and consequent generalizability of the data. To begin, this sample of student affairs practitioners was solicited using blanket e-mail invitations. As a result of this solicitation methodology, I cannot claim that the sample was randomly selected. The data represents

only those individuals who were, for unknown reasons, interested and willing to participate. I also have no way of knowing who received invitations, let alone responded to my request for participation. As a result, I cannot determine response rate. Finally, while the sample group of student affairs practitioners was highly representative of the composition of the membership of ACPA, generalizing findings beyond the membership of ACPA is not possible. Each of these factors limit generalizability of the findings.

Another limitation relates to the generation of the participant sample of practitioners willing to partake in the peer assessment portion of the study. I relied upon the willingness of practitioners to volunteer for this portion of the research. As a result, there may be a response bias associated with these participants. Similarly, response bias may also be an issue resulting from personal selection of the observers by the participants. Finally, for unknown reasons, few practitioners responded to the request for participation in the peer and observer portion of the study. Thus, the depth analysis is limited. Identifying an alternative design for sampling participants would be advisable.

I mentioned early on in this chapter that in retrospect, I regret not querying practitioners more specifically about their religious identities. Because of the intersection of religion and ethnicity, developing a solid research design is challenging at best. However, at minimum, my oversight had the unintended consequence of marginalizing participants.

The last study limitation upon which I will focus relates to study instrumentation, specifically, the MCSA-P2. Similar to past research using this instrument, the MCSA-P2 demonstrated strong internal consistency, alpha coefficients equaling .961 (King & Howard-Hamilton, 2004; Mastrodicasa, 2004; Miklitsch, 2005; Mueller, 1999, Mueller &

Pope 2001; Weigand, 2005). However, there are concerns with this instrument as an assessment of intercultural competence. To begin, this instrument exclusively a self-report instrument and thus, subject to response bias (Miller, 1998). Further, as pointed out by Mastrodicasa (2004), Miklitsch (2005), while the creators of the MCSA-P2 claim it to be an assessment of multicultural competence, in reality, it focuses only on race and ethnicity, to the exclusion of all other facets of cultural difference. Further, Martin (2005) questioned the ability of the MCSA-P2 to distinguish multiculturally astute individuals and those who actually possess the requisite skills and knowledge. Related, King and Baxter-Magolda (2005) also questioned the validity of the instrument, arguing that the MCSA-P2 assesses attitude as a proxy for competence. Finally, as indicated by Mueller (1999) and Mueller and Pope (2000), though the MCSA-P2 is theoretically based upon the tripartite model of multicultural competence including skills, knowledge, and awareness, it is best represented by a one-factor model of competence.

Despite the limitations I have outlined, this study does have several substantive implications for the field of student affairs. These relate to: (a) how intercultural competence is understood within the field of student affairs; (b) how assessment of intercultural competence is conducted; and (c) how intercultural competence is developed and enhanced. Each of these are detailed in subsequent sections.

### **Implications Related to the CQ Construct and CQS.**

I began this dissertation by outlining a significant problem within the field of student affairs. Explicitly stated, while the importance of intercultural competence among student affairs professionals is well documented, few scholars have endeavored to define what it means to be interculturally competent (Castellanos, et al., 2007; Deardorff, 2006;

King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004) and fewer have designated methods for assessing efforts toward its development among professionals (Deardorff, 2006; King & Baxter-Magolda, 2005; King & Howard-Hamilton, 2003). This research has informed this problem in conceptually and theoretically grounded, practical, and useful ways.

The tripartite model, including knowledge, skills, and awareness, originally conceived in the field of counseling psychology, has long served as the standard for how competence has been defined (Pope & Reynolds, 1997; Pope, Mueller, & Reynolds, 2004). Using this model, a number of self-report instruments have been developed. There are two fundamental problems though. First, though the instruments developed to date share the commonly agreed upon tripartite model, there is divergence regarding what the instruments actually measure (Ang, & Van Dyne, 2008; Goh, Koch, & Sanger, 2008). Second and arguably more concerning, the tripartite model lacks a theoretical base and concomitantly, there has been little consensus about the nature of the construct (Goh, Koch, & Sanger; King & Baxter Magolda, 2005; King & Howard-Hamilton, 2003; Pope, Reynolds, & Mueller, 2004; Ridley, Baker, & Hill, 2001).

The first contribution made by this research is the provision a clear, concise and theoretically grounded definition of intercultural competence. Briefly, intercultural competence is a four-factor construct (please see pages 16-17 for a more complete definition). The factors include motivation to learn, declarative knowledge, behavior, and meta-cognitive ability. More specifically, **intercultural motivation** is defined as awareness of, openness to, and value for learning about cultural difference and ability to not only tolerate ambiguity but also withhold judgment about cultural differences.

Specific knowledge about diverse cultures including socio-linguistic differences constitutes **declarative knowledge**. **Intercultural behavior** is defined as ability to listen, observe, interpret, analyze, evaluate, and then effectively apply knowledge to communication with diverse others. Finally, cultural awareness and deep understanding and knowledge about diverse cultures and oppressed groups, including contexts, roles, and impact of culture on world-views constitute **meta-cognitive ability**.

The second contribution of this research to student affairs is the introduction of the Cultural Intelligence Survey (CQS), a 20-item measure based upon the theoretically and conceptually grounded theory of cultural intelligence (Earley & Ang, 2003). This measure has demonstrated both construct as well as discriminate validity (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008; Shannon & Begley, 2008) and offers a demonstrated ability to reliably assess four factors that have been demonstrated to be related to the development of intercultural competence (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008).

The construct of cultural intelligence and the CQS instrument fall short of assessment of knowledge of and attitudes about social justice. None of the CQS prompts ask respondents about their knowledge or attitudes about, or skills to mitigate societal injustices. Scholars might argue that this is a significant shortcoming of the CQ construct and instrumentation (Gayles & Kelly, 2003; Pope, Reynolds, & Mueller, 2004; Pope & Reynolds, 1997). However, I respond with three arguments: 1) current conceptions of intercultural competence and assessment are narrow and culturally bound (King & Baxter Magolda, 2005; Mastrodicasa, 2004; Miklitsch, 2005); 2) there is a false dichotomy between historical conceptions of multiculturalism and interculturalism

(Olson, Evans, & Schoenberg, 2007), and 3) an assessment, any assessment is just that. It is necessary but insufficient in addressing structures that systematically privilege some while oppressing others.

I will frame my first argument by briefly describing the findings of a study conducted by Pike (2002). His research, conducted with 120 leading educators from Canada, the United States, and the United Kingdom, yielded distinct differences between US perceptions of intercultural education and those of Britain and Canada (Pike, 2000). Specifically, when British and Canadian practitioners discuss intercultural education, they do so from an etic perspective, speaking in terms of interconnections between people and global systems. Practitioners socialized in US society, on the other hand, are more likely to speak from an emic perspective, characterizing intercultural education as learning about constellations of discrete cultures and identity groups. Practically demonstrated, an often-levied criticism of historical conceptions of multicultural education and assessment within student affairs has been its primary focus on discrete racial or ethnic groups from a US perspective (Mastrodicasa, 2004; Martin 2005). Given the growing cultural heterogeneity within the US, the growing interconnectedness of world cultures, and the fact that an individual's identity is now considered to be comprised of multiple identities that both intersect and ebb and flow in salience, the utility of assessment instrumentation that is an etic perspective is growing (Abes, Jones, & McEwen, 2007; Pike 2000).

Sorrells and Nakagawa (2008), noted intercultural researchers and social justice practitioners, persuasively make the link between intercultural communication and social justice theory,

The study and practice of intercultural communication inevitably challenges our assumptions and views of the world. In fact, one of the main benefits of intercultural communication is the way in which it broadens and deepens our understanding of the world in which we live by challenging our taken-for-granted beliefs and views. To the extent that our interactions with those who are most different from ourselves requires careful and thoughtful reflection upon our own positionality and standpoint, the most profound learning and insights become possible, providing alternative ways to live fully and respectfully as human beings. (p. 26)

One of the most significant contributions made by this study has been to highlight the importance of defining what constitutes intercultural competence in inclusive terms that can be assessed behaviorally so as not to lose sight of the interconnection between cultural understanding and social equity. Within higher education, there has been a long-standing and false dichotomy between social justice theorists and interculturalists. The result of the tensions between these two world-views has been fractured and incomplete program development and curricular design (Olson, Evans, & Shoenberg, 2007). It is essential that this epistemological gap be closed. Attempting to do just that, Sorrells and Nakagawa (2008) coined the term “intercultural praxis” to define the process of critical, reflective, and engaged thinking and acting that enables the navigation of complex and often paradoxical intercultural experiences. Praxis denotes practice and as such offers great utility, informing the way in which practitioners interact through supervision or collegial relationships, develop curriculum, and train staff. Sorrells and Nakagawa (2008) offer six inter-related points of entry into this process.

According to Sorrells and Nakagawa (2008), the first point of entry is **inquiry**. Opposed but complementary to the western tradition of advancing statements as truths, inquiry is the desire to know, to ask, and to learn. Interactions within the supervisory relationship, between colleagues, and with students should be characterized by more

questions than assertions. The second point of entry, **framing**, connotes internalized social constraint of perspectives and views of others and the world. Current cultural frames of reference should be challenged and unpacked so as to better understand not only self but also self in relation to other. **Positioning** is the third point of entry into intercultural praxis. This involves unpacking the geographic and spatial location related to historical, social, and political circumstance. The fourth entry point, **dialogue**, is the conveyed stream of meaning behind experiences that occurs among, through, and between individuals. **Reflection**, the fifth point of entry into intercultural praxis, speaks to the capacity to learn from introspection. Critical reflection on experiences, both one's own as well as those of others, enhances cognitive development. The final entry point for intercultural praxis is action. Beyond deepening understanding of self in relationship to other, **action** connotes emancipatory efforts to create a more socially just and equitable world.

As illustrated by the aforementioned arguments, a very specific contribution of this research has been the broadening of the conversation regarding what constitutes intercultural competence. This conversation should be continued within the field. Gone are the days when multiculturalism amounted to understanding of racial differences. In today's rapidly diversifying world, creating a shared understanding of how communication occurs across cultures, be they domestic or international, is of paramount importance.

Broadening the conversation about what constitutes intercultural competence is an important step in creating a more inclusive campus environment. However, while the interpersonal dimension of intercultural competence is of paramount importance, it is

insufficient to create the necessary changes in the structure of the university that afford all voices to be heard, valued, and included. This requires institutional leaders to examine the systems that undergird university structures, systematically privileging some voices while marginalizing others. As specifically stated by Sorrells and Nakagawa (2008), action is a necessary component of intercultural praxis. Therefore it is incumbent upon institutional leaders to create a multi-dimensional plan for systemic change that extends well beyond assessment of competence (Pope, 1993).

Though not a panacea, as a construct, cultural intelligence (CQ), offers great utility for use, not only for assessment, program planning, as well as curricular, training, and professional development in student affairs. For example, practitioners may employ the instrument to establish a baseline assessment about the pre-training intercultural motivation, knowledge, and behaviors of a staff. Once the sub-dimensions are explained, staff members would be equipped to use the self-report data to guide the creation of their own developmental plan for increasing intercultural competence. Alternatively, student affairs leaders could aggregate the assessment data across a unit to guide the creation of a training program targeted at enhancing any one or all of the sub-dimensions. Finally, practitioners could employ a pre-post assessment strategy to better evaluate program effectiveness. A word of caution however, intercultural development is a process; therefore, I suggest using a pre and post assessment strategy to assess a comprehensive training program, not a one-time training event.

Similarly, the CQS can also be used to assess student preparedness and create developmental activities for students working within student affairs. The factor structure of the cultural intelligence construct and CQS instrument, lend themselves well to

deconstructing the perceptually daunting task of intercultural development. Educated in the construct, students and supervisors alike are equipped with the knowledge to identify and capitalize on learning opportunities.

Further, because the CQS offers both a self as well as a peer assessment of intercultural competency, a holistic evaluation of skills and abilities is possible. As evidenced in this study, there are disconnects between self and peer assessments of practitioner abilities. Administering the instrument to practitioners and requesting that they enlist assessment by colleagues and students offers a unique ability to supervisors and trainers to discuss with practitioners how and why self and observer observations are (or are not) related.

Finally, because the CQS is theoretically grounded (Ang, et al, 2006; Earley & Ang, 2003), has demonstrated both construct as well as discriminate validity (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008) as well as construct validity (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008; Shannon & Begley, 2008), and offers a demonstrated ability to reliably assess four factors that have been demonstrated to be correlated to the development of intercultural competence (Ang, Van Dyne, & Koh, 2006; Kim, Kirkman, & Chen, 2008), it shows great promise not only for intercultural assessment but also program and curricular development. Specifically, institutions interested in understanding how well students are being prepared to enter a global workforce might opt to use the CQS in conjunction with an intercultural portfolio. This combination offers university leaders and faculty members (at a macro level) and students (at a micro level) a mechanism to assess and communicate intercultural development over time.

## **Implications Related to the Research Data**

The outcomes of this research point to the value of learning about cultural difference from an insider's perspective. CQ research has concentrated primarily on the role of international experience in the development of intercultural competence (Crowne, 2008; Kim, Kirkman, & Chen, 2008; Shannon & Begley, 2008; Tarique & Takeuchi, 2008; Tay, Westman, & Chia, 2008). A cursory review of these findings might lead one to believe that travel or living abroad are the quintessential mechanisms for development of intercultural competence. Though these types of experiences do appear to be valuable, they are also cost prohibitive and impractical for many student affairs practitioners. It is important to remember that the value in this type of experience does not necessarily rest with the international experience itself; rather, it rests with being immersed in a culturally different situation. Immersive experiences are not always easily developed and enacted. Therefore, other mechanisms aimed at the development of the four dimensions of intercultural competence are necessary.

Training and development is cited in the literature as essential to the development of intercultural competence. Scholars have highlighted the importance of: 1) assessment of and then tailoring training to the developmental needs of practitioners (McGreevey, 2009; Miklitsch, 2005; Pope, Reynolds, & Mueller, 2004); 2) building a comprehensive training and development program that highlights development as a life-long process (Miklitsch, 2005; Pope, Reynolds, & Mueller, 2004); 3) developing and enhancing active listening communication skills (St. Clair, 2007); 4) building a community of learners that capitalizes on the wealth of experience of its members and encourages members to share deeply their personal intercultural experiences, perspectives, and insights (Blanshanan,

2007; Martin, 2005; St. Clair 2007); and 5) nurturing intercultural professional development through mentoring, funding, and support (Pope, Reynolds Mueller, 2004; St. Clair 2007; Stock-Ward & Javorek, 2003). Each of these points is valuable. However, in light of current research findings, I use subsequent paragraphs to draw attention to a concern often levied about programs aimed at intercultural development. Once defined, I will highlight a response informed by this study.

There has been little published research on the quantity or quality of diversity education and training that has taken place in student affairs programs (Talbot, 1996). However, of that which has been published, there seems to be some agreement that traditional programs are missing the mark in terms of enhancing intercultural understanding and competence among student affairs professionals (Chizhik & Chizhik, 2002; Echolos, Hwang, & Nobles, 2002; Martin, 2005; Reason, Roosa Millar, & Scales 2005; Sokol & Cranton, 1998).

Training and professional development have tended to concentrate on instrumental learning despite the fact that our understanding of adult learning has moved well beyond what Freire (1968) termed the banking model of education through which experts make “deposits” of knowledge into formerly empty vessels, the learners (Sokol & Cranton, 1998). Speaking specifically about multicultural professional development programs, Echolos, Hwang and Nobles (2002) state that professional development and curricular programs should allow individuals to build on the personal knowledge, formulate communities of learners, enlarge global epistemologies, and explore linguistic diversity.

The meta-cognitive aspect of cultural intelligence necessarily implies the development of training programs that yield deeper levels of learning resulting in more

complex cognitive processes. Accordingly, scholars have argued that the development of intercultural competence is an iterative process that requires thinking, feeling, perceiving, and behavior (Ford & Dillard, 1996; Kolb, 1984; Komivès & Woodward, 1996; Ng, Van Dyne, & Ang, 2008; Triandis, 2006). Cultural knowledge can be enhanced through the use of exercises designed to enhance one's ability to ask questions, integrate information, reflect on experience, and critically analyze cultural difference (Triandis, 2006).

Affective learning can be enhanced through experiences including dialogue, experiential, and immersive experiences. Each of these types of experiences requires individuals to see the world through the eyes of another (Triandis, 2006).

Arguably, examples of affective learning include those expressly discussed in this research. These include interaction with individuals whose identities are dissimilar to one's own, conversations about intercultural difference with colleagues or supervisors, and travel abroad. The value in these types of learning experiences is that they form the basis for descriptive processing and subsequent assimilation of more complex frames of reference, which then become the basis for active experimentation. Thus, the power and importance of these types of experience in the development of intercultural competence should not be underestimated (Blanshan, 2007; Ford & Dillard, 1996; Gayles & Kelly, 2007; King & Baxter Magolda, 2005; Kolb, 1984; Martin, 2005; Ng, Van Dyne, & Ang, 2008).

In summary, as a result of this research, I would recommend the following to both student affairs scholars and practitioners:

- Embrace the conceptual and theoretical framework of cultural intelligence as a starting point to reformulation of the current definition of multicultural

competence used in the field of student affairs.

- Actively employ the CQS to assess the level of intercultural competence of not only graduate students and professionals but also undergraduate students. Use this data to direct program plans, curricular development, and personal development of individuals.
- Continue to use the types of curricular, training, and programmatic experiences that most effectively enhance intercultural development. These include activities that (a) actively engage learners in exploration and sharing of personal experiences; (b) immerse learners in cultures different from their own; (b) encourage the development of a community of learners who explore and, of equally importance, interrogate personal as well as global epistemologies; and (d) meet learners' at their current developmental level in order to enhance their feelings of self-efficacy. This will require segmenting learning opportunities so as to challenge current levels but not go beyond that which is reasonable in terms of stretching comfort as learning occurs.
- Continue to look for additional opportunities to incorporate intercultural dialogue into conversation. This may include incorporation in (a) individual supervisory conversation; (b) team development activities; and (c) staff meetings, to name a few.
- Encourage practitioners to self-evaluate their intercultural competence using the four factors and develop plans for the development of those factors where practitioners believe further development is needed.
- Be wary of the abandonment of intercultural development among upper levels

student affairs administrators.

- Promote active inquiry and interrogation about why it is that practitioners in this study scored lowest in intercultural knowledge and behavior. It is important to query what it is about our current systems of education and learning that affords us intimate knowledge of US economic, political, educational, social, and legal systems and rules for interpersonal communication yet allow us to be ignorant of (at best) or loutish about (at worst) these aspects of other cultures. To be effective in creating systemic change, this question needs to emanate from the senior most levels of the division if not the institution. Further, this question must be followed by a directive to critically examine and change divisional and institutional systems that perpetuate this practice. With humility, I conclude this recommendation by saying that while the construct of cultural intelligence and the cultural intelligence survey present great value and utility, if used in isolation of a comprehensive divisional or institutional development plan, it too will serve as a bridge leading to nowhere.

### **Recommendations for Future Research**

Because this study is the first introduction of the cultural intelligence construct as a means for understanding and assessing intercultural competence in student affairs, future research possibilities are plentiful. The CQS is currently the only known instrument to afford researchers the ability to gather self as well as peer assessments of intercultural competence. The results of this research did not demonstrate, as other research has, a significant relationship between self and peer assessments of intercultural competence. This finding suggests two possible avenues for future research. One thread of research

could be to conduct additional confirmatory studies to see if this finding is patterned. If there continues to be a finding indicating no relationship between practitioner and observer CQS results, a second thread of research would be to explore this phenomenon.

Additional confirmatory research regarding the relationship between race and ethnicity and intercultural competence, as assessed using the CQS would be advisable. This type of research could be extended by drawing upon the work of Mueller (1999), exploring the relationship between identity development and intercultural competence. Also extending current research, it would be helpful to begin to identify the types of training, curricular and or development activities that are effective in bringing about change in any one or all four of the dimensions of cultural intelligence, particularly the motivational dimension. Scholars have identified that motivation to learn can be understood as the product of one's value for the learning experience and expectation of ability to learn (Brophy, 2004). As with any multiplication problem, if the factor on either side of the multiplier is zero, so too will be the product. Thus, research regarding both value for and expectation for success regarding intercultural learning would be exceedingly valuable to the field of student affairs.

Continuing with the theme of research on training, curricular, and development, because cultural intelligence can be enhanced over time, short and long-term longitudinal studies would be interesting. A short-term study might assess, for example, levels of CQ prior to the start and at the conclusion of an immersive experience such as a semester-long dialogue class or study abroad. Alternatively, a more extensive longitudinal study might track first year students at various points throughout their collegiate career or graduate students through their master's programs.

Quantitative research methods lack the rich description characteristic of qualitative research. It is still possible, within a mixed methods design, to incorporate the use of the CQS, perhaps for the purpose of sorting individuals for continued investigation. Interviews with participants who self report very high or very low cultural intelligence, either aggregated or with any one of the four sub-dimensions could yield valuable insights into why the scores were at the levels assessed by the participants.

Other possibilities for future research are drawn from the CQ literature. For example, Rockstuhl and Kok-Yee (2008) conducted a study to examine how differences in race and ethnicity, salient and often visible attributes that result in social categorization, affects team member's trust in one another. They found that in culturally diverse dyads, focal members with higher meta-cognitive, cognitive, and behavioral CQ reported greater trust in their partners than those with lower meta-cognitive, cognitive, and behavioral CQ, while in homogeneous dyads, levels of CQ had no effect on trust ratings. This is fascinating and opens the door for using CQ to understand interpersonal dynamics of staff teams within student affairs units.

Another example relates to the research by Ang, Van Dyne, and Koh (2006) and Oolders, Chernyshenko, and Stark (2008) who explored the relationship between the "Big Five" personality traits (conscientiousness, openness, agreeableness, extraversion, and emotional stability) and cultural intelligence. Within student affairs, much is made of personality attributes. A running joke in the field of student affairs is "Hi, my name is Amy, and I am an INTJ" (referring to Myers/Briggs type indicator assessment, a popular measure of personality traits). Exploring the relationship between personality traits and cultural intelligence may help curtail perceived bias regarding intercultural ability

associated with personality types. It may also yield additional discriminate validity for the CQS instrument.

Finally, research conducted by Ang, et al. (2007) explored the relationship between cultural intelligence, as assessed using the CQS, and cultural judgment, decision-making, and adjustment. Extrapolating this to the field of student affairs, one could utilize the CQS to explore the adjustment of under-represented populations in majority situations. Alternatively, exploring the relationship between cultural judgment and decision-making of majority staff members working inter-personally with marginalized communities would be extremely informative to the understanding of how practitioners create or inhibit the creation of welcoming and affirming campus environments.

### **Summary and Conclusions**

The contributions of this research have been detailed throughout the dissertation. Pragmatically, this study has provided a theoretically grounded and empirically tested construct and assessment instrument designed to measure intercultural competence. In addition, this research has examined the relationship between intercultural competence and a variety of both demographic and experience variables. This nation-wide study asked 465 student affairs practitioners to complete a demographic profile as well as two instruments, the CQS and the MCSA-P2, designed to assess intercultural competence. Likely as a result of differences in focus and orientation, these instruments yielded distinct yet related findings. After controlling for demographic characteristics, experiential variables including international exposure, frequency of training and workshop attendance, workplace interaction with individuals whose identities are dissimilar to one's own and workplace conversations about intercultural difference were

found to account for 20% of the variance in intercultural competence.

The results of this study are useful in research and practice for not only student affairs practitioners but also faculty members. The CQ construct widens the conversations regarding how intercultural competence is understood. Further, the CQ instrument provides a practical, theoretically based and empirically supported measure of intercultural competence. This construct and instrument have demonstrated great promise and utility for the assessment and development of intercultural competence at the individual, group, program, or curricular level. Finally, the results of this research have laid the groundwork for future exploration of this topic.

## **Appendix A**

### **Personal Data Form**

Please indicate your age \_\_\_\_\_

What is the gender to which you identify?

- ☐ Male
- ☐ Female
- ☐ Transgender

What is your race or ethnicity (check all that apply)?

- ☐ African American or Black
- ☐ American Indian/Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White
- ☐ Latino/Hispanic
- ☐ Non-Resident Alien

What is your highest degree held?

- ☐ Bachelors
- ☐ Masters (in process)
- ☐ Masters
- ☐ Educational Specialist
- ☐ Doctorate
- ☐ Other

What is your current position title/status in student affairs?

- |  |                                      |
|--|--------------------------------------|
| <input type="radio"/> Graduate student             | <input type="radio"/> Director       |
| <input type="radio"/> Advisor/counselor            | <input type="radio"/> Dean           |
| <input type="radio"/> Residence Hall/Area Director | <input type="radio"/> Vice-President |
| <input type="radio"/> Assistant Dean/Director      | <input type="radio"/> Other          |
| <input type="radio"/> Associate Dean/Director      |                                      |

Which functional area is most descriptive of your primary responsibilities?

- |   |  |
|---|--|
| <input type="radio"/> Academic advising           | <input type="radio"/> Judicial affairs               |
| <input type="radio"/> Admissions                  | <input type="radio"/> Leadership development         |
| <input type="radio"/> Adult learning              | <input type="radio"/> Multicultural affairs          |
| <input type="radio"/> Assessment/research         | <input type="radio"/> Academic affairs               |
| <input type="radio"/> Career planning/placement   | <input type="radio"/> Orientation                    |
| <input type="radio"/> Commuter services           | <input type="radio"/> Religious programs             |
| <input type="radio"/> Counseling                  | <input type="radio"/> Residence life/Housing         |
| <input type="radio"/> Disabled student services   | <input type="radio"/> Recruitment/retention          |
| <input type="radio"/> Financial aide              | <input type="radio"/> Service learning               |
| <input type="radio"/> Food services               | <input type="radio"/> Student affairs administration |
| <input type="radio"/> GLBT awareness              | <input type="radio"/> Student union/activities       |
| <input type="radio"/> Fraternity/Sorority affairs | <input type="radio"/> Women's resources              |
| <input type="radio"/> Health/drug education       | <input type="radio"/> Other                          |
| <input type="radio"/> International students      | <input type="radio"/> Multiple responses             |
| <input type="radio"/> Intramural education        |  |

How many years have you worked in student affairs? \_\_\_\_\_

Please indicate your institutional type

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| <input type="radio"/> 4 year public  | <input type="radio"/> 2 year public  |
| <input type="radio"/> 4 year private | <input type="radio"/> 2 year private |

Please indicate the size of your current institution

- |                                     |  |
|-------------------------------------|--|
| <input type="radio"/> 30,000        | <input type="radio"/> 2,000- 9,999     |
| <input type="radio"/> 20,000-29,999 | <input type="radio"/> Fewer than 1,999 |
| <input type="radio"/> 10,000-19,999 |  |

Please indicate your graduate degree/major

- |   |  |
|---|--|
| <input type="radio"/> Student Personnel     | <input type="radio"/> Educational Psychology     |
| <input type="radio"/> Higher education      | <input type="radio"/> Educational Administration |
| <input type="radio"/> Counselor education   | <input type="radio"/> Social work                |
| <input type="radio"/> Counseling Psychology | <input type="radio"/> Other                      |

Please indicate the numerical frequency of workplace conversation you typically have with individuals of a different race, ethnicity, religion, sexual orientation, gender identity or ability status over the course of a two week period \_\_\_\_\_

Please indicate the numerical frequency of conversations with co-workers or supervisors about racial, ethnic, religious, sexual orientation, gender identity or ability status difference \_\_\_\_\_

Please indicate the number of multicultural workshops or training programs you have attended over the past two years \_\_\_\_\_

Since your 18<sup>th</sup> birthday, how many times have you traveled outside the US?

\_\_\_\_\_

Please indicate the number of continuous months you have lived outside the US

- ☐ I have never lived outside the US.
- ☐ I lived abroad less than one month
- ☐ I lived abroad between one and six months
- ☐ I lived abroad more than six months (please specify)

Please check all of the identities that apply to you

- ☐ Gay, Lesbian, Bisexual
- ☐ Transgender
- ☐ Christian
- ☐ Disabled
- ☐ International

Please indicate the location of your current or most recent institution of employment

- ☐ **Pacific Northwest** (Alaska, Idaho, Oregon, Washington)
- ☐ **West** (Colorado, Montana, North Dakota, Oklahoma, South Dakota; Utah, Wyoming)
- ☐ **Midwest** (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Nebraska, Ohio, Wisconsin)
- ☐ **South West** (Arizona, California, Hawaii, New Mexico, Nevada, Oklahoma, Texas)
- ☐ **North Eastern** (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)
- ☐ **Mid-Atlantic** (Delaware, the District of Columbia Maryland, New Jersey, New York, Pennsylvania, West Virginia,)
- ☐ **South** (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia)

## **Appendix B**

### **Cultural Intelligence Survey and Observer Survey**

#### **Questionnaire Items**

##### **CQ-Strategy:**

1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
2. I am conscious of the cultural knowledge I apply to cross-cultural interactions.
3. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.

##### **CQ-Knowledge:**

5. I know the legal and economic systems of other cultures.
6. I know the values and religious beliefs of other cultures.
7. I know the marriage systems of other cultures.
8. I know the arts and crafts of other cultures.
9. I know the rules (e.g., grammar) of other languages.
10. I know the rules for expressing non-verbal behaviors in other cultures.

##### **CQ-Motivation:**

11. I enjoy interacting with people from different cultures.
12. I enjoy living in cultures that are unfamiliar to me.
13. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
14. I am confident that I can get accustomed to the shopping conditions in a different culture.
15. I am sure I can deal with the stresses of adjusting to a culture that is new to me.

##### **CQ-Behavior:**

16. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
17. I change my non-verbal behavior when a cross-cultural situation requires it.
18. I use pause and silence differently to suit different cross-cultural situations.
19. I vary the rate of my speaking when a cross-cultural situation requires it.
20. I alter my facial expressions when a cross-cultural interaction requires it.

© Cultural Intelligence Center, 2004. Used by permission of Cultural Intelligence Center.

Note. Use of this scale granted to academic researchers for research purposes only.

For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to [cquery@culturalq.com](mailto:cquery@culturalq.com)

## **Cultural Intelligence Scale (CQS) – Observer Report**

Read each statement and select the response that best describes this person's capabilities.

Select the answer that BEST describes this person as he/she REALLY IS (1=strongly disagree; 7=strongly agree).

1. This person is conscious of the cultural knowledge he/she uses when interacting with people with different cultural backgrounds.
2. This person adjusts his/her cultural knowledge as he/she interacts with people from a culture that is unfamiliar.
3. This person is conscious of the cultural knowledge he/she applies to cross-cultural interactions.
4. This person checks the accuracy of his/her cultural knowledge as he/she interacts with people from different cultures.
5. This person knows the legal and economic systems of other cultures.
6. This person knows the arts and crafts of other cultures.
7. This person knows the rules for expressing non-verbal behaviors in other cultures.
8. This person enjoys interacting with people from different cultures.
9. This person is confident that he/she can socialize with locals in a culture that is unfamiliar.
10. This person enjoys living in cultures that are unfamiliar.
11. This person is confident that he/she can get accustomed to the shopping conditions in a different culture.
12. This person changes his/her verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
13. This person uses pause and silence differently to suit different cross-cultural situations.
14. This person varies the rate of his/her speaking when a cross-cultural situation requires it.
15. This person changes his/her non-verbal behavior when a cross-cultural situation requires it.
16. This person alters his/her facial expressions when a cross-cultural interaction requires it.

© Cultural Intelligence Center 2005. Used by permission of Cultural Intelligence Center. Note. Use of this scale granted to academic researchers for research purposes Only. For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to [cquery@culturalq.com](mailto:cquery@culturalq.com).

## **Appendix C**

### **Multicultural Competence in Student Affairs Preliminary – 2**

Multicultural Competence in Student Affairs Preliminary – 2 (MCSA-P2): To obtain permission to use this instrument, contact the principle researcher, Dr. Raechele L. Pope, University of Buffalo.

## Appendix D

### INTERCULTURAL COMPETENCE OF STUDENT AFFAIRS ADMINISTRATORS PARTICIPANT CONSENT FORM

(Version 1 - Confidential)

This assessment is one part of a research project assessing the intercultural skills, knowledge and awareness of student affairs professionals. The diversity of students attending our colleges and universities has continued to increase the importance of self-awareness of intercultural capabilities. This assessment has two parts. First, you will need to complete this "self" questionnaire. Second, you will need to provide five names of people in your life (peers, students supervisors, or colleagues) who will log in to a separate observer website and complete an "observer" questionnaire assessing your intercultural capabilities.

The purpose of completing the self-assessment and encouraging your peers/students to complete the observer questionnaire is to enrich the scholarship regarding the intercultural competencies of student affairs administrators. This is not a test and there are no "right" or "wrong" answers.

The value of this research to the field of student affairs will be a function of the honesty and clarity you and others use in answering the questions. The most useful research is based on accurate descriptions (rather than on answers that reflect how you think you "should" respond). Sometimes people try to answer in ways that make themselves "look good." At other times, people are "overly modest" and don't describe themselves accurately. Since the research is designed to enhance the scholarship regarding cultural competence, I urge you to answer each question as **openly and honestly** as you can. Your responses are confidential. They will not be made public.

Please note, it typically requires approximately **30 minutes** to complete this web-based "self" survey. Accordingly, if you do not have 30 minutes at this time, please return to this web page later and complete the survey. This is important because **the survey must be completed in one session**.

If you have any questions or concerns, please contact Amy Franklin-Craft, Michigan State University, at (517) 432-2496 or at [frankl96@msu.edu](mailto:frankl96@msu.edu). If you have questions or concerns about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu) <<mailto:irb@msu.edu>> or regular mail at 202 Olds Hall, MSU, East Lansing, MI 48824.

These questionnaires are designed to contribute to the scholarship related to diversity and multiculturalism. As a result, you are asked to release your responses for research purposes. If you so choose, you can refuse to release your data to the researcher. Your participation in this research is completely voluntary. You are free to decline to

answer any questions or to terminate your participation at any time without penalty. Your privacy will be protected to the maximum extent allowable by law. In addition, we will protect the confidentiality of your responses. Only members of the research team will have access to the data, which will be stored in password protected computer files. Questionnaire responses will be destroyed after two years. All information will be used only for research purposes and reports will include aggregate data only. Your name will never appear in any report, and reports will not include any information that would allow anyone to identify you or your responses. In other words, no one will ever see your responses, and we will never reveal them or discuss them with anyone.

Do you fully consent to participate in the study described above?

Yes

No

## **Appendix E**

### **INTERCULTURAL COMPETENCE OF STUDENT AFFAIRS ADMINISTRATORS OBSERVER CONSENT FORM**

You have recently received an email indicating that one of your colleagues agreed to participate in a research study on intercultural competence. As a part of that study, the participant has given us your name as a source of multi-rater feedback.

Please note, it typically requires approximately 15 minutes to complete this web-based survey. Accordingly, if you do not have 15 minutes at this time, please return to this web page later and complete the survey. This is important because **the survey must be completed in one session.**

We are contacting five individuals for each research participant – thus program participants will NOT know who specifically has provided feedback. Your identity and your individual responses will remain confidential. Your colleague will not have access to any of your responses to this questionnaire and will not know who completed the survey. Finally, none of your responses will be shared with anyone. I thank you in advance for helping with this research. Your colleague also thanks you for completing this survey.

You are free to decline to answer any questions or terminate your participation at any time. Your privacy will be protected to the maximum extent allowable by law. In addition, we will protect the confidentiality of your responses. Your name will not be associated with your responses. Only I will have access to the data, which will be stored in password protected computer files. The questionnaire responses will be destroyed after two years.

All information will be used only for creating a general feedback report based on the overall pattern of responses from this set of students, peers, or colleagues. In addition, research reports will only include aggregate data. Your name will never appear in any report, and reports will not include any information that would allow anyone to identify you or your responses. No one will ever see your responses, and we will never reveal them or discuss them with anyone.

If you have any questions or concerns, please contact Amy Franklin-Craft, Michigan State University, at (517) 432-2496 or at [frankl96@msu.edu](mailto:frankl96@msu.edu). If you have questions or concerns about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu) <<mailto:irb@msu.edu>> or regular mail at 202 Olds Hall, MSU, East Lansing, MI 48824.

Do you fully consent to participate in the study described above?    Yes    No

## **Appendix F**

### **INTERCULTURAL COMPETENCE OF STUDENT AFFAIRS ADMINISTRATORS PARTICIPANT CONSENT FORM**

(Version 2 - anonymous)

This assessment is one part of a research project assessing the intercultural skills, knowledge and awareness of student affairs professionals. The diversity of students attending our colleges and universities has continued to increase the importance of self-awareness of intercultural capabilities. This assessment involves one simple step. All you are asked to do is complete this anonymous questionnaire.

The purpose of completing the self-assessment is to enrich the scholarship regarding the intercultural competencies of student affairs administrators. This is not a test and there are no "right" or "wrong" answers. The value of this research to the field of student affairs will be a function of the honesty and clarity you use in answering the questions. The most useful research is based on accurate descriptions (rather than on answers that reflect how you think you "should" respond). Sometimes people try to answer in ways that make themselves "look good." At other times, people are "overly modest" and don't describe themselves accurately. Since the research is designed to enhance the scholarship regarding cultural competence, I urge you to answer each question openly and honestly. Your responses are anonymous.

Please note: it typically requires approximately 30 minutes to complete this web-based "self" survey. Accordingly, if you do not have 30 minutes at this time, please return to this web page later and complete the survey. This is important because the survey must be completed in one session.

If you have any questions or concerns, please contact Amy Franklin-Craft, Michigan State University, at (517) 432-2496 or at [frankl96@msu.edu](mailto:frankl96@msu.edu). If you have questions or concerns about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu) or regular mail at 202 Olds Hall, MSU, East Lansing, MI 48824.

This research is designed to contribute to the scholarship related to diversity and multiculturalism. As a result, you are asked to release your responses for research purposes. Your participation in this research is completely voluntary. You are free to decline to answer any questions or to terminate your participation at any time without penalty. Your privacy will be protected to the maximum extent allowable by law. In addition, we will protect the anonymity of your responses. Only members of the research team will have access to the data, which will be stored in password protected computer files. Questionnaire responses will be destroyed after two years. All information will be used only for research purposes and reports will include aggregate data only. No one, including members of the research team, will be able to identify you or your responses.

## Appendix G

### **E-mail Request for Participation Sent Through ACPA**

The purpose of this e-mail is to request your assistance in a research study designed to better understand the intercultural competencies of student affairs administrators.

By 2016, projections indicate that enrollment of students of color will increase by an average of 35%, nearly four times that of White undergraduate students (Hussar & Bailey, 2007). In addition, the number of international students studying in the United States is projected to grow from 3% to 15% by 2016 (Hussar & Bailey, 2007). The educational gains associated with a diverse student body have long been recognized. Yet, our ability to realize these gains for all of our students is largely dependent upon our ability to effectively work with students. This research is designed to assess these competencies.

Unlike prior research, that assessed competence based only on self-report measures, this research study is designed to assess both self as well as observer feedback of competency. **Accordingly, my hope is that you will e-mail me (frankl96@msu.edu), indicating your willingness to participate and providing the names, and e-mail addresses of at least five individuals (preferably a diverse array of students and or colleagues) who would be willing to spend 15 minutes to complete a questionnaire regarding their assessment of your abilities.**

The research study has two parts. Once I receive your e-mail, containing the names and e-mail address of your colleagues and/or students, I will send you a web survey that you complete about yourself (time required is approximately 20 minutes).

The second part of this research is the observer feedback portion. Using the contact information you provide, I will send each of the five people you have nominated information about the research and a different web-link to the observer questionnaire.

Please note that all names and personal identifying information will be destroyed once I have matched the self and observer files. Further, all research will be based on aggregate analyses. Your individual responses and identity will not be revealed to anyone.

I am hopeful you will agree to participate in this unique and exciting research opportunity. Please let me know if you have any questions (frankl96@msu.edu).  
Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

Hussar, W.J., Bailey, T.M. (2007). Projections of Education Statistics to 2016. National Center for Education Statistics, U.S. Department of Education, NCES 2008-060.

## **Appendix H**

### **E-mail Directing Participants to Website – Version 1 (anonymous)**

April 14, 2009

Given the increasing diversity of the student body as well as our own work groups, it is imperative that we continuously assess our own skills and competencies. I truly appreciate your willingness to take part in this research program.

The program has two parts:

First, you need to complete a self-reflection web survey. Simply click on the following link or copy and paste it into your browser. Then complete the self-reflection questionnaire (time required is approximately 20-30 minutes). Please complete the self-assessment by noon on **April 30, 2009**.

[http://broad.qualtrics.com/SE?SID=SV\\_5igeg1toMleNC5e&SVID=Prod](http://broad.qualtrics.com/SE?SID=SV_5igeg1toMleNC5e&SVID=Prod)

Second, is an observer feedback survey that is completed by five people you have nominated who know you and your abilities. You have already provided us with the names and contact information on these people. I am sending each of them information on the program and providing them with a different web link that they can use to complete the observer questionnaire.

All research will be based on aggregate analyses. Your individual responses and identity will not be revealed to anyone. All names and personal identifying information will be destroyed once self and observer files have been matched.

Participation in this program is not part of your job responsibilities. Thus, completion of the survey is not required of you. However, you have an opportunity to participate in research that will inform not only student affairs scholarship but also preparatory programs and practice.

Please let me know if you have any questions.

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult, and Lifelong Education  
Michigan State University  
[Frankl96@msu.edu](mailto:Frankl96@msu.edu)

## **Appendix I**

### **E-mail Sent to Observers Directing Them to Website**

February 2009

A colleague of yours, (insert name from database), is participating in a research study on Intercultural Competence in student affairs. This study involves observer feedback from students, peers, and colleagues. Accordingly, your colleague has given us your name as a source of "observer" multi-rater feedback.

We are contacting five individuals for each research participant. The responses from all five observers will be averaged. Your colleague will not have access to any of your individual responses to this questionnaire and will not know who completed the survey. To protect your identity, program participants will receive multi-rater feedback **ONLY** if at least three observers respond.

Please note, it requires approximately 15 minutes to complete this web-based survey and it must be completed in one session. So please start the survey when you have 15 minutes of time.

I thank you in advance for helping with this research.

#### **WHAT YOU NEED TO DO TO HELP YOUR COLLEAGUE**

By noon on **Insert date**, schedule approximately 15 minutes when you can complete the web-based survey. Since the survey must be completed in one session, you need to start and finish it all at one time.

You can click on the following link or copy and past it into your browser.

<http://mgt.bus.msu.edu/surveys/vandyne/residencehall/reslifeobs.htm>

If you have any questions about this research, please contact Amy Franklin-Craft at Michigan State University, ([frankl96@msu.edu](mailto:frankl96@msu.edu)).

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult, and Lifelong Education  
Michigan State University

## **Appendix J**

### **List of ACPA Commissions and Committees**

Standing Committee on Disability

Standing Committee for Graduate Students and New Professionals

Standing Committee for Lesbian, Gay, Bisexual, and Transgender Awareness

Standing Committee for Men

Standing Committee for Multicultural Affairs

Standing Committee for Women

Commission for Academic Affairs Administrators

Commission for Academic Support in Higher Education

Commission for Administrative Leadership

Commission for Admissions, Orientation and First Year Experience

Commission for Alcohol and Other Drug Issues ☐

Commission for Assessment and Evaluation

Commission for Career Development

Commission for Commuter Students and Adult Learners

Commission for Counseling and Psychological Services

Commission for Global Dimensions of Student Development

Commission for Graduate and Professional Student Affairs

Commission for Housing and Residence Life

Commission for Professional Preparation

Commission for Social Justice Educators

Commission for Social Conduct & Legal Issues

**Commission for Student Development in the Two-Year College**

**Commission for Student Involvement**

**Commission for Wellness**

## **Appendix K**

### **E-mail Sent to Committee and Commission Chairs**

Dear Standing Committee and Commission Chairs,

Attached you will find a letter inviting student affairs practitioners to participate in PhD research project designed to learn more about the intercultural competencies of student affairs administrators. Some of you may remember receiving a similar e-mail before the annual conference in Washington, D.C. Regrettably, I was unable to secure the requisite number of participants and thus, am back to the drawing board. I need at least 250 participants to complete my research. The mountain ahead of me is tall.

I very much hope you will help me with my research by: 1) following the link in the letter and completing the survey yourself, and 2) cutting and pasting the text of the letter into an e-mail and sending it to as many student affairs colleagues as you can (both your committee or commission as well as work and other professional colleagues).

I truly appreciate your assistance.

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

Attachment

## **Appendix L**

### **Letter Attached to E-mail (Sent commission and committee list serves by chairs)**

To Student Affairs Practitioners and Graduate Students,

As you are aware, the role of the student affairs practitioner is to attend to the out-of-class needs, promote meaningful interactions among, and help students develop to their fullest potential. However, these goals are not fully attainable unless practitioners are capable of understanding, and can interact competently with diverse groups of students.

**The purpose for sending this e-mail is to request your assistance in a research study designed to better understand the intercultural skills, knowledge and awareness of student affairs administrators.** This research will contribute to the scholarship regarding intercultural competence among practitioners so that we, as practitioners, are in a better position to serve students and by extension, enhance learning.

**To participate, all you need to do is cut and paste the link below into your web-browser and complete the survey by June 5, 2009.**

[http://broad.qualtrics.com/SE?SID=SV\\_6MbXoAL0eoZmZBq&SVID=Prod](http://broad.qualtrics.com/SE?SID=SV_6MbXoAL0eoZmZBq&SVID=Prod)

Your participation in this research is anonymous. The data you provide cannot be tracked back to you.

I am hopeful that not only will you agree to participate in this unique and exciting research opportunity, but that you will also share this opportunity with others in your department. Feel free to forward this e-mail to graduate and professional staff. Do not hesitate to contact me if you have questions or concerns ([frankl96@msu.edu](mailto:frankl96@msu.edu)).

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

## **Appendix M**

### **E-mail Text Sent to Master's Programs Coordinators and Chairs**

Good Afternoon,

The purpose of this e-mail is to request your assistance with my dissertation research project. Specifically, I endeavor to contribute to the scholarship regarding the intercultural knowledge, skills and awareness of student affairs practitioners and graduate students. You are receiving this e-mail because you are currently listed as the departmental contact for the master's program in student affairs/higher education at your institution. I am hoping that you will be able and willing to assist me by sending the text of this e-mail (see below) to students in your program and, if you have access, program alumni. The Michigan State IRB approval number is 08-828, Category: Expedited 2-7.

Thank you so much for your help!

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

Attachment

## **Appendix N**

### **Letter Attached to E-mail (Sent by Academic Program Chairs and State Delegation Presidents)**

To Student Affairs Practitioners and Graduate Students,

As you are aware, the role of the student affairs practitioner is to attend to the out-of-class needs, promote meaningful interactions among, and help students develop to their fullest potential. However, these goals are not fully attainable unless practitioners are capable of understanding, and can interact competently with diverse groups of students.

**The purpose for sending this e-mail is to request your assistance in a research study designed to better understand the intercultural skills, knowledge and awareness of student affairs administrators.** This research will contribute to the scholarship regarding intercultural competence among practitioners so that we, as practitioners, are in a better position to serve students and by extension, enhance learning.

**To participate, all you need to do is cut and paste the link below into your web-browser and complete the survey by June 5, 2009.**

[http://broad.qualtrics.com/SE?SID=SV\\_6MbXoAL0eoZmZBq&SVID=Prod](http://broad.qualtrics.com/SE?SID=SV_6MbXoAL0eoZmZBq&SVID=Prod)

Your participation in this research is anonymous. The data you provide cannot be tracked back to you.

I am hopeful that not only will you agree to participate in this unique and exciting research opportunity, but that you will also share this opportunity with others in your department. Feel free to forward this e-mail to graduate and professional staff. Do not hesitate to contact me if you have questions or concerns ([frankl96@msu.edu](mailto:frankl96@msu.edu)).

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

## **Appendix O**

### **E-mail Text Sent to ACPA State Division Presidents**

Good Afternoon,

The purpose of this e-mail is to request your assistance with my dissertation research project. Specifically, I endeavor to contribute to the scholarship regarding the intercultural knowledge, skills and awareness of student affairs practitioners and graduate students. You are receiving this e-mail because you are currently listed as the president of your state's delegation to ACPA. I am hoping that you will be able and willing to assist me by sending the text of this e-mail (see attached) to members of your state's delegation to ACPA. The Michigan State IRB approval number is 08-828, Category: Expedited 2-7.

Thank you so much for your help!

Sincerely,

Amy Franklin-Craft, Ph.D. Candidate  
Higher, Adult and Lifelong Education  
Michigan State University

Attachment

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