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**Intercultural Communicative Competence:
Assessing Outcomes of an Undergraduate German Language Program**

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**Intercultural Communicative Competence:
Assessing Outcomes of an Undergraduate German Language Program**

by

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Dissertation

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Dedication

For Mom and Dad

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**Intercultural Communicative Competence:
Assessing Outcomes of an Undergraduate German Language Program**

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This study investigates possible contributing factors to the development of Intercultural Communicative Competence (ICC) in undergraduate language learners. Moreover, the study tests the viability of a survey instrument which can help language programs describe the ICC of their students. ICC has been determined to be a valuable—if not central—component of the future of language teaching and learning (Aguilar, 2007) because of the focus the construct places on “appropriate and effective” interaction between the learner and interlocutors from the target culture.

A total of 108 lower-division German language students were surveyed as part of this study. They represented a cross section of all lower-division German language courses offered at the University of Texas at Austin in the spring semester of 2010. The Assessment of Undergraduate Intercultural Competence was used to collect student responses. The survey, an extensive adaptation of Fantini’s Assessment of Intercultural Competence (2006) for the undergraduate language learning context, gathered

demographic data, such as nationality, foreign travel experience and nature of a participant's intercultural relationships. Students were also asked to rank the applicability to themselves of an array of personality traits. Finally, students responded to 54 questions which addressed the core domains of ICC: Knowledge, Attitude, Skills and Awareness. These items, as well as the personality traits were rated on a 7-point Likert-type scale. The data collected were analyzed by quantitative methods

The findings of this analysis determined that there was no connection between students progressing through the language program and the development of ICC. Additionally, though, a number of other factors, including the presence of intercultural relationships and a student's willingness to adjust to new ways of living, were found to contribute positively to one's ICC. The results of the study suggest that language programs consider ways to incorporate these factors into curricula. The findings also provide benchmark data for future studies of language learner ICC in the context of the American undergraduate experience.

Table of Contents

List of Tables	xiv
List of Figures	xvi
List of Figures	xvi
Chapter 1: Introduction	1
Introduction to the problem	1
Brief Overview of Intercultural Communicative Competence	1
ICC in the classroom	4
Assessing ICC	6
Need for the study	9
Purpose of the study	10
Research questions	11
Conclusion	12
Chapter 2: Review of Literature	13
Intercultural Communicative Competence	13
Introduction	13
Definitions of ICC	13
Five Conceptualizations	13
Componential	14
Developmental	15
Adaptational	15
Causal Path	16
Co-orientational	16
Theoretical Frameworks	18
Byram	18
Fantini	21
Deardorff	23
Summary	25

ICC in FL Instruction.....	26
Current Climate and MLA Priorities	27
New Competencies	29
Intercultural Language Learning.....	31
Assessing ICC	33
Formative Assessment	34
Summative Assessments.....	37
Summary	40
Conclusion	41
Chapter 3: Methodology	42
Setting	42
Curriculum	43
First-year German	43
Second-year German.....	44
Participants.....	45
First-Semester German	47
Second-Semester German.....	48
Third-semester German	49
Fourth-Semester German	50
Measures	52
Validity and Reliability.....	53
Primary Components Analysis (PCA)	55
Summary	63
Secondary PCA.....	63
Reliability Testing.....	74
The Survey Instrument.....	76
Data Collection Procedure	82
Data Analysis	83
Conclusion	86

Chapter 4: <i>Results</i>	87
Introduction.....	87
Demographic Information.....	87
Major Courses of Study	88
Nationality and Native Language	88
Time Abroad	89
Research Question 1: An Effect for Time in the Language Program ..	90
Is there an increase in intercultural competence (ICC) seen in the cross-section of participants?	90
Summary of Research Question 1.....	95
Research question 2: ICC development in students.....	95
To what demographic or experiential factor or factors can ICC be attributed?	95
Gender.....	96
Nationality.....	97
Intercultural Relationships	99
Time Spent Abroad.....	100
Where Intercultural Relationships Were Formed	102
Knowledge:	104
Attitude	104
Skills	104
Awareness	105
Summary of Research Question 2.....	107
Research question 3: The Role of the ICC Subdomains in the Course Groups.....	108
Which, if any, of the four subdomains of Intercultural Communicative Competence (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level? ..	108
Summary of Research Question 3.....	112
Research Question 4: Other Predictors of ICC scores	113
Are there other factors, which might affect a student’s intercultural competence? If such factors exist, what are they?	113

Step 1: Demographic Binary Data	114
Step 2: Personality Traits (Continuous Values)	117
Step 3: Perceptions about Hypothetical Travel (Continuous Data) ...	118
Step 4: Predictors of Intercultural Communicative Competence in Beginning and Intermediate German Language Learners (Composite Regression Model)	120
Interaction 1: Year by Perception	122
Interaction 2: ICR by Abroad	123
Summary of Research Question 4.....	126
Chapter 5: Discussion and Conclusions.....	128
Introduction.....	128
Summary of study and major findings.....	128
Research Question 1: ICC in Lower-Division Language Learning...129	
Is an increase in Intercultural Communicative Competence (ICC) observed in the cross-section of participants?	129
Research Question 2: Other Factors Contributing to ICC	129
To what demographic or experiential factor or factors can ICC be attributed?	129
Research Question 3: Prominent Subdomains	130
Which, if any, of the four subdomains of Intercultural Communicative Competence (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level? ..	130
Research Question 4: Predicting ICC	131
What are the best predictors of Intercultural Communicative Competence?.....	131
Implications.....	132
Theoretical Implications	132
Curricular Implications and Recommendations.....	135
Future Research	142
Conclusions.....	144
Appendices.....	147
Appendix A: Assessment of Undergraduate Intercultural Competence	147

Appendix B: LSD Analysis for IRCPlace on ICC score and all subdomains	166
Appendix C: LSD Analysis for IRCPlace and Abroad on ICC score.....	169
Appendix D: Complete Principle Component Analysis	170
References.....	175

List of Tables

Table 3.1: Recoding of Response Values	52
Table 3.2: PCA Factor Loading for Awareness Items	57
Table 3.3: PCA Factor Loading for Attitude Items	59
Table 3.4: PCA Factor Loading for Skills Items	61
Table 3.5: PCA Factor Loading for Knowledge Items	62
Table 3.6: Summary of Cross-Loadings by Subdomain	63
Table 3.7: Secondary PCA for Attitude	65
Table 3.8: Secondary PCA for Awareness	67
Table 3.9: Secondary PCA for Knowledge	70
Table 3.10: Secondary PCA for Skills	72
Table 3.11: Cronbach’s Alpha Reliability Values	75
Table 3.12: Distribution of ICC and Subdomain Scores	76
Table 3.13: Comparison of Survey Structures	77
Table 3.14: Textual modifications of mood	78
Table 3.15: Modifications to Part VI	79
Table 3.16: Modifications in Current Instrument to Prompts in Original AIC	81
Table 3.17: Categorical variables used in analyses	84
Table 3.18: Methods of analysis by Research Question	86
Table 4.1: Skills Developed During Sojourn Abroad	90
Table 4.2: ANOVA Comparing score of course groups	91
Table 4.3: ANOVA comparing scores of male participants to female	96

Table 4.4: ANOVA comparing scores of U.S. citizens to citizen of other countries.....	98
Table 4.5: ANOVA results comparing students with intercultural relationships to students with no intercultural relationships	100
Table 4.6: ANOVA comparing participant who have lived abroad with those who have not.....	101
Table 4.7: ANOVA for ICRPlace on ICC and subdomain scores	103
Table 4.8: Significant Mean Differences Among Levels of ICRPlace*	106
Table 4.9 Descriptive statistics showing higher means for attitude among all courses.....	109
Table 4.10: Pairwise Comparisons of Attitude to Other Subdomains.....	110
Table 4.11: ANOVA showing effect for Abroad on Attitude scores (Whole group).....	111
Table 4.12: Comparison of Course groups and Abroad: 2nd Semester is Significant.....	111
Table 4.13: Original Variables Entered into Regression	115
Table 4.14: Variables removed from successive regressions	116
Table 4.15: Minimally adequate model for dichotomous demographic predictors^a.....	117
Table 4.16: Most characteristic traits^a	118
Table 4.17: Minimally adequate model for perceptions about travelling to Germany^a	119
Table 4.18: Final Multiple Linear Regression Model Coefficients.....	121
Table 4.19: Pairwise Comparisons of Abroad and ICR.....	124
Table 4.20: Pairwise Comparisons of ICRPlace and Abroad.....	125

List of Figures

Figure 3.1: Distribution of Participants into Course Groups	46
Figure 4.1: Mean scores by Course	92

Chapter 1: Introduction

INTRODUCTION TO THE PROBLEM

The impetus behind this study comes from several current forces at play in higher education and in the field of foreign language pedagogy and acquisition. At the institutional level the current budgetary climate at many colleges and universities has driven the search for methods to make deep expenditure cuts. In addition to commonplace hiring freezes and discontinued tenure lines, foreign language (FL) curricular reform has emerged as another “option on the table.” In some instances this has taken the form of proposals to reduce or eliminate FL requirements (Aujla, 2009). Such proposals—and the real likelihood of their implementation—can lead to existential reevaluation of FL departments and their curricular goals. In many ways the discussions occurring on campuses involve foreign languages’ relevance to and integration in the school’s educational mission, a mission which often makes mention of “expanding the horizons and experiences” of the school’s students within a larger global context (Rifkin, 2010). In other words, an explicitly stated objective at many institutions, including at the University of Texas at Austin, is for students to become successful global citizens; in short, they need to develop intercultural communicative competence.

Brief Overview of Intercultural Communicative Competence

Contemporaneously, scholarship on the construct of Intercultural Communicative Competence (ICC) (Byram, 1997) has increased dramatically in the first decade of this century (Belz, 2005; Byram, 2003; Furstenberg, Levet, English, & Maillet, 2001; Lange & R. M. Paige, 2003; O’Dowd, 2007; Vogt, 2007). In broad terms, ICC refers to the

capacity of a speaker to understand an interlocutor of a different culture on his or her own terms and to relativize one's own subject position vis-à-vis this speaker. An intercultural competent speaker can step outside of him- or herself and critically engage both the "foreign" and the native cultures. This generally translates into a foreign language curriculum which emphasizes the development of analytical, inquiry and communication skills to better equip students to reflect on their personal responses to new behaviors and phenomena and to understand why such artifacts or practices are important to a given culture.

This model of ICC delineates an array of cognitive (knowing, understanding, interpreting) and affective (relativizing, de-centering the self) aspects, all of which develop and reside within the "intercultural speaker" (Byram, 1997). Yet there is another component to ICC, the relational component (Imahori & Lanigan, 1989; Rathje, 2007), which implies that something new is produced when competent communication occurs among intercultural speakers. Rathje goes so far as to call it a new culture: "The outcome of intercultural competence is itself culture" (Ibid. p. 263). By this she means that a mutually understood "normalcy" emerges from interaction, this normalcy or sense of familiarity (what makes interlocutors different from as well as similar to each other) creates cohesion that allows communication.

As recently as 2007 the Modern Languages Association (MLA) advocated that language departments in the U.S. reconceive the foreign language major and restructure university language departments to accommodate better the goals of teaching for ICC (Geisler, 2007). Two challenges for departments considering a potential role for ICC are the question of working and operational definitions of ICC as well as best practice for its curricular implementation.

Scholars of foreign language education (FLE) as well as the commercial and service sectors have endorsed benefits of developing interculturally competent speakers. However, an agreement on specific characteristics of such speakers as well as a definition of ICC still eludes the profession. Spitzberg and Changnon (2009) identify no fewer than 5 *types* of models¹ of ICC. At their core, the various constructs and names for ICC all stress *appropriate and effective performance* in intercultural communication (Byram, 1997; Deardorff, 2006a; Fantini, 2000; MLA Ad Hoc Committee on Foreign Languages, 2007; Rathje, 2007). In spite of the apparent complexity of ICC, there is some agreement on general characteristics, based on the above research, and it is commonly accepted that ICC involves:

Knowledge—of self, of the target culture, of communication styles

Awareness—of interpersonal dynamics, of self as a culturally constructed being,
of cultural manifestations of difference

Skills—of interpretation, of inquiry, of relating

Attitudes—toward other people and cultures, toward learning, toward difference.

The current study takes a similar quadripartite view of ICC. Knowledge, Skills, Attitude and Awareness determine the conceptual organization of the survey administered to participants. Underlying this admittedly “performative” construction of ICC is an understanding of ICC as being firmly rooted in the context of foreign language learning. This connection is fundamental to Byram’s original framework, in which ICC is framed as a competence, which complements existing notions of communicative competence (Canale & Swain, 1980; van Ek, 1986). The study of language and

¹ These models will be described at length in Chapter 2

communication is the means by which we as foreign language teachers help our student to explore other ways to make meaning and to see the world. Accordingly, in this dissertation project, a basic premise is that the study of language cannot be separated from the study of culture, both the “native” culture (C1) and the target culture (C2). The next section delves into this premise in further detail.

ICC in the classroom

Numerous studies have attested to the value of ICC in the foreign language (FL) classroom (Belz, 2007; Belz & Müller-Hartmann, 2003; Byram & Feng, 2005; Furstenberg et al., 2001; Ware, 2005; Ware & Kramsch, 2005). One of the best-documented areas of FL education in which the ideas of teaching for ICC have been implemented has been in telecollaborative exchanges (TEs). In these exchanges technology supports interaction and exploration of “cultural rich points” (Agar, 1994), or those points where presumed commonality of reference is instead met with difference and perhaps tension among interlocutors. Explorations of these intercultural ambiguities and miscommunications have been shown to demonstrate evidence of development of ICC (Belz, 2007). Curricular projects such as *Cultura* (Furstenberg et al., 2001) bring FL students in contact with other students from the target culture (TC) by means of interactive media (email, chat, electronic forums, IM and VoIP services, etc.) Such Internet-mediated student interaction, has, in other words, supported the development of inquiry and communication skills which aid students in pursuing successful relationships with peers of the TC.

Beyond such specific interventions as those described above, the need for a more theoretical integration of ICC and FL learning has been identified. Under the name

Intercultural Language Learning (ILL), work has been done on describing intercultural oriented language instruction (Aguilar, 2007; Crozet & Liddicoat, 1999; Liddicoat, 2008; Lo Bianco, Liddicoat, & Crozet, 1999; Scarino, 2008, 2009). ILL understands language as more than code and message-communication. Language is inextricably contextualized by and contingent on culture. Language in use is a social action which takes place within and between communities of practice. As such, language is also cultural practice and it affords the possibility of cultural construction (Lo Bianco et al., 1999). This recursive relationship between language and culture calls for the embeddedness of ICC in language instruction. The possibility that ICC should, or could exist independent of language instruction is antithetical to the goals of ICC and ILL, both of which include the ability to communicate with someone of a different cultural background on his or her own terms, both culturally and linguistically.

To this end, ILL seeks to articulate an intercultural orientation to language learning. In this and in following discussions I seek to deliberately avoid the term “approach” for its associations with specific, long-recognized pedagogical approaches such as “communicative” or “proficiency.” Interculturally oriented language learning and teaching understands the fact that, especially for adult learners, L2 communication skills are but one piece of the puzzle of second or foreign language learning. The language learning project also includes the development of interpretive and analytical skills for a number of purposes: for independent learning; for application to other disciplines; or for better understanding the nature of ourselves as “cultural” people, for example.

The challenges for implementing an ILL orientation in FL classrooms and/or curricula are myriad and this dissertation does not purport to solve all of them. In spite of such central questions as those surrounding instructor development, instructional

practices and appropriate assessment, I will argue in Chapter 5 that on-going research on FL programs with an intercultural orientation could provide more in-depth understanding of several results of this study.

Assessing ICC

These concurrent dynamics, the pressure to articulate language programs' relevance to higher education and the study of teaching ICC in the language classroom, offer rich opportunities for innovation at both the instructional and curricular level. Much of the recent research cited above has focused on instructional interventions. Along with the techniques to teach ICC to students, other research has focused on how to assess individual students' intercultural competence (Scarino, 2008; Schulz, Lalande, Dykstra-Pruim, Zimmer-Loew, & James, 2005; Sercu, 2004; Vogt, 2006). This research has tended to value criterion-referenced, performance-oriented assessment methods which are, appropriately, tied to individual student learning.

These studies represent a range of perspectives on student-centered assessment of ICC, though they all emerge from Byram's (1997) construct of ICC. Scarino (2008) advocates for an assessment regime, which evaluates both student performance of ICC and metacognitive aspects of ICC development. That is, she suggests that teachers should consider whether and how their students can talk about the concept of ICC and about how they use their awareness and knowledge for increasingly effective intercultural interaction. Schulz et al. (2005) explore the option available in portfolios in order to track development of students over time. Sercu (2004) proposes a framework for evaluating ICC assessment tools, where "assessment tool" refers here to materials to assess student learning and performance. Finally, Vogt (2006) asks whether the Attitude component of

ICC can be measured by methods suggested by Byram (1997). These methods include student-to-student email, critical incident analysis, interaction journals and interviews. She ultimately concludes that *measurement* is not a viable use of these techniques, but that they can *describe* evidence for student attitudes as it emerges from interaction.

And yet for departmental language program directors responsible for reporting on what entire cohorts of students should—or can—do and what they learn after completing certain courses of study, few researched options exist. Effective student assessment using methods such as those described above is suitable for criterion referenced, instructionally-oriented evaluation. It can provide rich description of students' abilities and learning vis-à-vis course goals and objectives. These methods, I am convinced, are the most appropriate ways of providing students with the necessary feedback about their achievement.

To provide more *comparative* information about groups of students, which this study explicitly does, we have to turn to more norm-referenced means of assessment. Standardized methods are often less tied to specific curricula or courses and more concerned with making generalizable observations. For purposes of assessing ICC, these more quantitative tools are difficult to find for a number of reasons. First, some ICC assessment instruments such as the Intercultural Development Inventory (IDI) (Hammer, M. J. Bennett, & Wiseman, 2003) are geared more towards assessing an individual's *sensitivity* to intercultural matters (i.e. not necessarily concerned with performance or potential for intercultural action). They can also be prohibitively expensive to administer (and to get trained for). Other instruments such as the Cross-Cultural Adaptability Inventory (CCAI) (Kelley & Meyers, 1993) pose demonstrated validity concerns (Davis & Finney, 2006). Finally, assessment tools that are created and analyzed explicitly for the instructional context of university learners are practically non-existent.

In addition to this dearth of well-researched assessment methods, we know very little about student ICC in programs which have not yet taken on the MLA's charge to fully incorporate intercultural/transcultural language learning into their courses of study. Research does exist for study abroad students on pre-and post-sojourn ICC development (Berg, 2003; Byram & Feng, 2006; Elola & Oskoz, 2008). Yet, these studies focus more on whether or how intercultural learning occurs or intercultural competence develops during study abroad experiences. This research is also focused on describing individual students and their responses to their experiences or instructional techniques. However, as a profession, few benchmarks exist to ascertain how ICC learning develops in a student population as a result of instruction.

The current study uses norm-referenced, summative assessment for the express purpose of testing hypotheses concerning self-reported student ICC. The quantitative methods employed for these purposes were chosen because the goal was to compare the level of intercultural competence of four student groups (semesters 1, 2, 3 and 4) and to derive over-arching statements about the relationships of these groups to each other as well as to other factors associated with ICC such as personality traits and demographic variables. This study generates baseline data which provide researchers with an overview of the dynamics at play in ICC in the current sample of participants. However, because these methods focus on *groups* of participants, they are not equipped to provide rich description of any individual participant and his or her ICC. Such research lies in the domain of qualitative methods and would provide fertile ground for ongoing future research on the topic. The results of the analyses clearly illustrate the nature of quantitative analyses, which enable hypothesis testing and generalizable comparisons of groups of population samples versus qualitative methodologies which allow for detailed, individualized and rich description of particular cases.

NEED FOR THE STUDY

In 2007 the MLA's Ad Hoc Committee on Foreign Languages authored a report with the purpose of charging language departments to adapt to the new contingencies of a highly interconnected world. It noted that students need to learn how to interact as "informed and capable interlocutors" with educated people of other cultural backgrounds (p. 237). If we as language professionals are going to seriously consider and answer the MLA's call (2007) to provide curricula which educate students to have the "ability to operate between languages" (Ibid., p. 237) we should have data-driven ways to tell us whether our efforts are finding success. As discussed in the previous section, there is no shortage of instructional activities which produce student work providing instructors and researchers insight into students' ICC. Furthermore, language departments do not exist in a vacuum. They are an integral part of the broader institutional community and mission. As universities tend to speak of these missions in terms of educating students to be productive members of a broader, global society, it becomes valuable for departments if they can demonstrate how they contribute to that mission (Rifkin, 2010). The slogan for the University of Texas at Austin is "What starts here changes the world" and describes the university's "major impact around the world in all walks of life" ("What Starts Here Changes the World," 2011). One of the ways departments can do this is to provide regular, accurate descriptions of student progress and achievement, especially with respect to the institutional goals (Bernhardt, 2010).

It is my hope that this study provides useful information which can inform future decisions regarding the integration of intercultural language learning approaches into the participating curriculum. The data and findings of this study can serve as a baseline against which data from future studies can be compared. Further, the study suggests a method of collecting data which can supplement qualitative methods of evaluating

students work and progress. No single type of data is enough to adequately describe a construct as complex as ICC (Deardorff, 2006a). A variety of different but complementary data will allow researchers to arrive at well-formed conclusions about how departments and programs are serving the academic needs of their students.

PURPOSE OF THE STUDY

The purpose of this study is two-fold. First, the present project seeks to demonstrate the feasibility of a survey instrument, the Assessment of Undergraduate Intercultural Competence (AUIC), to assess the emergence of Intercultural Communicative Competence in undergraduate foreign language students. The development of such a tool provides language departments with a way of knowing to what extent (if at all) students' ICC develops during a typical language learning program. In so doing, the study also details a model for the collection and analysis of data to describe how various factors contribute to ICC in a particular population of language students. The AUIC is derived from the Assessment of Intercultural Competence (AIC) (Fantini, 2005a). Where the AIC was written for a specific intercultural living and working context, the AUIC was extensively developed and adapted for the American university context. Both instruments are based on a framework of ICC which is informed to a great extent by Byram's (1997) theoretical framework and is comprised by four subdomains: Knowledge, Attitude, Skills and Awareness. This study establishes the AUIC as a valid method of surveying undergraduate students. Principal components analyses (PCA) show that the AUIC supports the four-part construct of ICC.

Second, the resulting cross-sectional analysis of 108 undergraduate students enrolled in a four-semester German language program at a large, public university, is the

first attempt to assess ICC in students in this program. As such, the study aims to provide a benchmark regarding ICC development within the conventional two-tiered language major targeted for reform in the Modern Language Association (MLA) report (2007). The analysis contributes to the fuller description of the current situation and highlight areas to target as departments begin to consider implementing the recommendations of the ad hoc committee. The benchmark data is particularly valuable to the specific department's context with data that was collected in the final semester (spring, 2010) of a *four-semester* language program. Beginning in the fall of 2010, the Department of Germanic Studies began to offer only a *three-semester* program in which the two semesters of the second year are compressed into an intensive single six-hour course. Should the desire arise to study ICC in students coming out of this new course configuration the data collected for this study will be able to provide a point of comparison.

RESEARCH QUESTIONS

This study will describe the relationship of student ICC to progress through a four-semester German language course of study. It will also present data regarding other factors as it seeks to determine which of these also contribute to the intercultural competence of undergraduate language students. In order to accomplish these goals, the study will be guided by the following research questions:

1. Is an increase in Intercultural Communicative Competence (ICC) observed in the cross-section of participants?
2. To what demographic or experiential factor or factors can ICC be attributed?

3. Which, if any, of the four subdomains of Intercultural Communicative Competence (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level?
4. Based on the demographic and experiential data collected, what are the best predictors of Intercultural Communicative Competence?

CONCLUSION

As foreign language professionals adapt to help their students succeed in an increasingly global and interconnected world, many of them have found promise in the concept of Intercultural Communicative Competence. As it focuses on developing the capacity for appropriate and effective interaction in intercultural contexts, ICC lends itself well to repurposing foreign language instruction for new demands and contexts. As much as students need feedback about their learning in order to progress, language programs need to gather information about their students in order to make necessary adjustments to their instructional goals or practices. While research has demonstrated the viability of several instructional techniques, very little research has shed light on assessment instruments suitable to compare students across a language program with respect to ICC learning. This study seeks to contribute to exactly that need by developing a survey instrument which can be used to compare course groups of students and describe the relationships of student characteristics and ICC. In the following chapter the literature on ICC will be presented. First the relevant theoretical constructs will be described and then the applicability of several extant assessment tools will be reviewed.

Chapter 2: Review of Literature

INTERCULTURAL COMMUNICATIVE COMPETENCE

Introduction

In order to establish the relevant research background for this study, this chapter defines and contextualizes ICC as used in this study, followed by a discussion of the literature on the assessment of ICC. Next, the chapter also reviews a preponderance of research on formative, student-centered assessment methods and will contrast the relative dearth of studies on methods for summative assessment at the program-level, a lacuna this study attempts to fill.

DEFINITIONS OF ICC

This section describes the broad landscape of notions of ICC as characterized by a typology offered by Spitzberg and Chagnon (2009). The discussion serves to locate the three definitions of ICC relevant to my study within this larger context. The definitional frameworks by Byram (1997), Fantini (2005b) and Deardorff (2004, 2006c) will subsequently be reviewed and related to one another as they specifically inform this study's working definition of ICC. The section will conclude with a working hypothesis of ICC as it relates to this study.

Five Conceptualizations

Before addressing ICC within the context of foreign language learning, it is helpful to situate the relevant frameworks in the broader discourse on ICC. In a synthesis of definitions (J. M. Bennett, M. J. Bennett, & Allen, 2003; Byram, 1997; Cress,

Reitenauer, & J. Bennett, 2005; Deardorff, 2006b; Fantini, 2000; Liaw, 2006; Spitzberg & Chagnon, 2009), ICC refers to the capacity of a speaker to understand an interlocutor of a different culture on his or her own terms and to relativize one's own subject position vis-à-vis this speaker. An intercultural competent speaker can step outside of him- or herself and critically engage both the "foreign" culture as well as his or her native culture. When applied to foreign language curricula, such an orientation emphasizes the development of analytical, inquiry and communications skills to better equip students to reflect on their personal responses to new behaviors and phenomena and to understand why such artifacts or practices are important to a given culture. Of these several definitions, the current study follows the framework established by Byram (1997) and supplements this structure with observations from Fantini (2000, 2005b) and Deardorff (2006).

This theoretical orientation is but one dimension of a larger body of scholarship on ICC. Spitzberg and Chagnon (2009) have provided an informative analysis of 20 studies and developed five general categories of models of ICC. These five categories are described below in order to situate my concept of ICC within a larger discourse on ICC.

Componential

These models serve to identify and describe what researchers hypothesize are core elements of characteristics of ICC. In so doing, the goal is classificatory and descriptive, not necessarily relational or pragmatic. That is, research that produces componential models is not as concerned with analyzing the relationship among components or among intercultural speakers. Spitzberg and Chagnon (2009) cite the resultant analytical schemes of Hamilton, Richardson

and Shuford (1998) and of Ting-Toomey and Kurogi (1998) as examples of what componential research in ICC tends to produce. Hamilton et al. identified attitude, knowledge and skills as core elements of the construct whereas Ting-Toomey et al. described mindfulness, openness to novelty, knowledge and primary skills as central categories.

Developmental

These models are concerned with the role that time plays in the emergence and development of ICC in individuals. These models often produce sequence- or process-oriented descriptions of characteristics or general behaviors. Perhaps the most well-known of the developmental models is Bennett's (1986) Developmental Model of Intercultural Sensitivity (DMIS). The DMIS describes the stages through which an individual passes as they move from an "ethnocentric" orientation a more "ethnorelative" way of interacting with others from different cultural backgrounds. What are the stages? List them here. At the ethnocentric level, individuals move from the Denial stage, through Defense and then to Minimization. The ethnorelative level begins with an Acceptance stage, followed by Adaptation and finally, at the high level, Integration.

Adaptational

These models consider multiple interactants, their mutual dependence and describe how they adjust to each other in interaction. Where in previous models ICC is described as a complex of abilities any given individual might have at

his or her disposal, adaptational models regard ICC as a construct with relevance as it is deployed in communication (i.e., in interaction with others). Additionally, the mutual adaptation of speakers to each other is a constituent and necessary outcome of ICC.

Causal Path

Causal path models discuss the interrelationships of various components of intercultural communication and how they produce an end effect: competence. Such models can often be conceptualized by flow charts similar to path models. Deardorff's (2006c) process model of ICC is classified as such a conceptualization. In this model, competence originates in certain attitudes and motivations, which then interact with knowledge and skills (both cognitive and interpersonal). This interaction gives rise to internal outcomes (shifted frame of reference affecting adaptability, flexibility, ethnorelativity, etc.) Such internal results can give rise to effective and appropriate communication and behavior, which is Deardorff's own definition of ICC (2004).

Co-orientational

The co-orientational model is focused on the interaction of interlocutors and how they orient themselves to each other in order to communicate successfully. Research within this model focuses on aspects of the speaker and/or of communication itself, which aid in constructing "agreement in meaning systems" (Spitzberg & Changnon, 2009, p. 18). Three of the most salient definitions of ICC to the current study (and to foreign language learning in

general) are classified by Spitzberg and Chagnon as co-orientational models. Byram (1997) places emphasis on the skills and knowledge used to construct mutually acceptable communication; Fantini (1995) argues that as one's experience with interlocutors of different linguacultures increases, formerly separate and mutually foreign worldviews develop to show increasingly areas of understanding and overlap. This overlap forms the basis of a way for intercultural interlocutors to understand and relate to each other. Finally, Rathje (2007) expands on this idea of a new core of common understandings between interlocutors, which can connect them to her Coherence-Cohesion model of ICC. For Rathje, culture serves to connect its members because of established and recognized commonalities *and* because of an accepted range of difference within the (lingua)culture. Competent intercultural communication thus, results in the co-construction of a new set of commonly held differences and similarities.

Summary

In their description of these five models, Spitzberg and Chagnon make no claims to the mutual exclusivity of these models and freely admit that any given ICC construct may be interpreted as having elements or characteristics of more than one model type. For example, a co-orientational model may seem at first glance like a componential model because of the prominence the descriptions of various elements of the model. Yet, in this case, one must consider *how* these elements are related within the model. This is

the case with Byram's (1997) model. It is important to note that underlying the discussion of individual components (the five *savoirs* described in the following section) is how these components relate and how they enable intercultural speakers to orient to each other to generate mutual understanding.

The following discussion expands on three specific models of ICC by Byram (1997), Fantini (2000, 2005b) and Deardorff (2006). It addresses the structure of the individual models and will consider how they relate to the current study. Where all three are grounded in a pedagogical context, Byram's framework emerges as most specifically articulated for the foreign language context. As described by Fantini (2000, 2006), ICC takes on language used by a number of scholars to focus on external and internal effects of interculturally competent communication. Deardorff (2006) turns to scholars and practitioners to develop a contextualized concept of ICC. These three models inform the notion of ICC that undergirds this study.

THEORETICAL FRAMEWORKS

Byram

While ICC has been addressed in professional realms outside of education and language pedagogy (Beamer, 1992; Gibson & Zhong, 2005; Rosenberg, Richard, Lussier, & Abdool, 2006), this study is concerned with ICC in the context of foreign language (FL) learning. Within this field, Byram (Byram, 1997) provides the seminal model of ICC. Byram arguably goes further than any scholar in identifying the construct for foreign language instruction (Bredella in (Belz, 2007)). Expanding on notions of communicative competence and communicative language learning, specifically Van Ek (1986) and Canale and Swain (1980), Byram proposed a solution to the idea that

communication cannot be taken out of its cultural context. Specifically, he argued that language in use is always a manifestation of culture (cf. (Kramersch, 1993, 1995; Thorne & Lantolf, 2007). Byram's (1997) model of ICC is centered on specific ways of "knowing," or *savoirs*: Knowledge, Attitude, Skills of interpreting and relating, Skills of discovery and interaction and Critical cultural engagement/political education. These *savoirs* as described by Byram do not function nor do they develop in a sequential or linear manner. They serve mainly to describe aspects or facets of ICC which, it is hypothesized, speakers engage in at different times and stress at variable rates, neither of which is specified by the model. Each *savoir* is described below:

Savoir être (Attitudes): The intercultural speaker is open to newness and curious; can relativize one's own perceptions and cultural position; values difference; and can "decenter" the self (p. 34). This ability to understand one's self as one acculturated being is seen by Byram to be a prerequisite to "interpreting and relating" others' experiences with as little prejudice as possible (p. 34).

Savoirs (Knowledge): Knowledge about social groups, cultures and the conventions of interaction among individuals and groups. This knowledge about these categories applies to both the "home" culture of the student and that of the target culture. This *savoir* describes the necessity of "knowing thyself" in addition to the "other." Thus the process of developing ICC is also a journey of self-discovery: of coming to understand the constructedness of one's own culture; of seeing what was invisible before.

Savoir comprendre (Skills of interpreting and relating): The ability to interpret cultural "products, practices and perspectives" (ACTFL, 1996) and interpersonal

interactions for various audiences (including the self). Such interpretation and relation implies the identification of difference as well as similarity.

Savoir apprendre/faire (Skills of discovery and interaction): Where *savoir comprendre* utilizes background knowledge, *savoir apprendre/faire* is focused on the acquisition of new knowledge. This skill refers to the ability to ask the right questions, to recognize “cultural rich points” (Agar, 1994)— significant “phenomena in a foreign environment” (Byram, 1997, p. 38)—and elicit from others or on one’s own their meanings reasons for their significance.

Savoir s’engager (Critical cultural awareness): The use of words such as “decenter,” “relativize” or “suspend judgment” as in the foregoing definitions of ICC and the *savoirs* could easily create the impression that ICC embodies the worst extremes of a chaotic, uncritical relativism. This is naturally not the intent, nor a necessary outcome of ICC education. The presence of this final *savoir* seeks to reinforce that the intercultural speaker expected to fill the role of critical intermediary *between* cultures. As described by Byram, critical cultural awareness is “an ability to evaluate critically and on the basis of explicit criteria perspectives, practices and products in one’s own and other cultures and countries” (p. 53). The development of this awareness presupposes deep understanding of the self as a culturally constructed being as well as the ability to mediate that identity in interaction with others of different cultures. This is the ultimate goal of ICC, “to ensure a shared understanding by people of different social identities...” (Byram, Gribkova, & Starkey, 2002).

Byram identifies more than 20 specific objectives for the language/culture classroom, nearly all of which are performance-based. That is, these objectives specify what students should be able to do and/or know as they become increasingly interculturally competent. Three factors make Byram's model of ICC a leading candidate for further study and application to forward-thinking FL curricula: First, it is an objectives-oriented approach to elaborating the concept. Second, it is a student-centered grounding of the concept. Finally, it emerges deliberately from earlier concepts of language mastery and learning .

The *savoirs* are presented as to how they enable speakers to co-orient themselves to establish common understandings with others. As such, Byram's description of the *savoirs*, summarized above, allows for the model to be classified by Spitzberg and Chagnon (2009) as a co-orientational model.

Fantini

Similarly to Byram et al. (2002), ICC for Fantini ideally produces something shared among interlocutors: "[it] is more than a collection of abilities that allow one to function in one and another system (CC₁ and CC₂); ICC also results in producing unique perspectives that arise from interaction of two (or more) systems" (2006, p. 11). Any description of the concept is incomplete without addressing the result of competent interaction between speaker-bearers² of a languaculture (Agar, 1994). These "unique

² The term "speaker-bearer" is my own term and is an attempt to accommodate Agar's (1994) "languaculture" and Kramsch's (Kramsch, 1993) "linguaculture." Both concepts are attempts to describe the inherent connection between language and culture. While scholarship on this relationship is extensive and the terminology more or less settle on these two terms, I have found no satisfying way of describing a individual as simultaneously a language-speaker and a culture-bearer without participating in the fallacious division of language from culture. Thus, the term, "speaker-bearer" is the agent of a languaculture.

perspectives” that can result from intercultural interaction have facets in common with Kramsch’s (1993) “Third Place” and with Rathje’s (2007) co-constructed new culture. According to these views on the outcomes of competent interaction, intercultural contact can result in interlocutors able to understand their world from a new subject position. This new understanding is a result of negotiation, inquiry, valuing the other, attitudes of openness, knowledge of the self and awareness.

Fantini (2000, 2005b) organizes ICC first by 3 domains or communicative purposes by which the concept operates. ICC helps the speaker-bearer:

- 1) establish and maintain relationships;
- 2) communicate with minimal loss of distortion (of meaning);
- 3) collaborate in order to accomplish something of mutual interest or need.

In order to accomplish these goals, the speaker-bearer relies on 4 dimensions of content to effect competent communication. These dimensions are Knowledge (of the home and target cultures), Attitude/Affect, Skills and Awareness (of the self, of the other and of the self’s relation to the other). Note the similarity of these domains to Byram’s (1997) *savoirs*. Conversely, it is important to note that Fantini does *not* write for a specifically FL learning/teaching context.

Fantini’s formulation of ICC includes one final element, that of developmental stage. As such, he acknowledges that the acquisition of ICC is a long-term, developmental process, likely spanning an individual’s lifetime. Significantly, the stages of development may vary according to a particular institution’s context and mission. For the School for International Training (SIT), for which Fantini (2000, p. 30) writes, the developmental stages are as follows:

- Level I: Educational Traveler — e.g., participants in short-term exchange programs/4-6 weeks

- Level II: Sojourner — longer cultural immersion, e.g., interns and participants in college semester abroad programs and intercultural internships of long duration, 4-8 months
- Level III: Professional — staff who work in an intercultural or multicultural context
- Level IV: Intercultural/Multicultural Specialist — individuals involved in training, educating, consulting, and advising international students, overseas directors, and cross-cultural trainers.

In the above description of developmental levels, Fantini does not specify the nature of interaction or of competence which would differentiate an “educational traveler” from a “sojourner.” One is left to ask what actions or skills are characteristic of any given level or how a program designer is to determine these factors when designing one’s own program. As such these “developmental levels” are more a description of various categories of learner who participate in the SIT’s various programs. As was discussed above, Byram’s (1997) model addressed language learners more specifically, though the two constructs are not dissimilar. A formulation, designed by Deardorff (2004), gathers input from practitioners and scholars about the nature of ICC and how it can be manifested by an individual.

Deardorff

While scholars have developed and adapted definitions and models of ICC over the years, attempts to create consensus among and across experts and practitioners have been nearly non-existent. In the first of its kind, Deardorff (2006a) conducted a study in

order to generate exactly that: agreement on exactly what ICC is and what it entails. A survey of 24 administrator respondents (Deardorff, 2006b) found a general consensus in favor of Byram's (1997) definition identifying the 5 *savoirs* as described above: "Knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others' values, beliefs, and behaviors; and relativizing one's self. Linguistic competence plays a key role" (p. 34)

The same study sought commentary from more than 20 ICC experts on the same questions posed to the university administrators. A Delphi method was used in order to seek consensus from participants not geographically close to one another. Among these scholars a more general definition as articulated by Deardorff (2004) was preferred: "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes" (Ibid. p. 194). This preference for general descriptions over more granular iterations was identified as a trend among respondents. Deardorff maintains that this is consistent with the literature on ICC. In spite of this tendency towards generality participants were able to come to consensus on 22 constituent elements of the construct (Ibid, p. 187). These components are concerned with interactional and cognitive dispositions toward such domains as openness, curiosity, judgment-free engagement, etc. By way of illustration, the following list shows the five components on which 19 of the 20 participating experts agreed.

1. understanding other's world views
2. cultural self awareness and capacity for self-assessment
3. adaptability-adjustment to new cultural environment
4. skills to listen and observe
5. general openness toward intercultural learning and to people from other cultures

Where Byram's definition of ICC garnered overwhelming support from administrators, the methods employed in Deardorff's study were not able to elicit agreement on what role of language played in the performance or acquisition of ICC. Nor were participants able to agree on a specific term for the construct. The study found more than 6 different terms were in use including cross-cultural competence, global competence and intercultural competence. Where the study does not find consensus, it indeed confirms several salient points to this discussion. First, it confirms professional approval of Byram's framework. Significantly, the fact that administrators of U. S. institutes of higher education endorsed this conceptualization of ICC implies its applicability to FL educational settings. The study also supports a definition of ICC that focuses on "appropriate and effective" interaction. This focus in Deardorff's 2004 definition is remarkable for its similarity to Fantini's (2006, p. 12) summary definition: "a complex of abilities needed to perform *effectively* and *appropriately* when interacting with others who are linguistically and culturally different from oneself" (p. 12). Thus, for intercultural scholars ICC has simultaneously an inward and an outward dynamic.

Summary

The foregoing discussion has addressed the current literature on intercultural communicative competence. It has contextualized the theoretical frameworks salient to the current study within a broader discourse on the construct. The models particularly relevant to FL learning have been shown to have a specific conceptual outlook in common, that of co-orientation. ICC involves a certain array of knowledge, skills, attitudes and awareness, which allows speakers to find and construct common

understandings. This formulation has been confirmed by both administrators and scholars committed to the study and application intercultural endeavors in education.

ICC IN FL INSTRUCTION

The preceding discussion contextualized ICC within the broader professional literature and operationalized it as a construct within FL learning scholarship. The following addresses this instructional context further by elaborating on a key component of any instructional planning, assessment. First, however, it will begin with professional perspectives on the place of intercultural competence in the FL curriculum. At two significant junctures in the past 15 years, professional organizations have promulgated documents with significant impact on the orientation of foreign language professionals to culture's place in the curriculum. Once culture is integrated in the FL curriculum (at least from a policy perspective), the discussion will attend to the question of how instructors and administrators can know to what extent students are developing ICC during their studies. The following analysis will reveal an imbalance in the literature, which favors in-course performance assessment and at the cost of broader programmatic evaluation.

Since their implementation in the mid-1990s the *Standards for Foreign Language Learning* (ACTFL, 1996) have had broad impact on FL curricula at both the secondary and tertiary levels of education in the U.S. For culture learning the *Standards* placed culture on (theoretically) equal footing with the four "main" skills of reading, writing, speaking and listening. Moreover, the focus was shifted from these communicative skills to a socio-culturally situated understanding of (foreign) language learning. Beyond the goal of learning a linguistic code, the *Standards* require learners and teachers to pay attention to the intellectual and interpersonal contexts of language in use. Learners are to

understand communication as embedded in cultural practices, products and perspectives; that communication occurs within specific culturally constructed communities; and that as language learners they will need to make comparisons and connections across and within these communities and their individual members. Language learning is thus not only embedded in use, it is embedded in a social, interpersonal and intercultural context.

Current Climate and MLA Priorities

Where ACTFL and the *Standards* project has maintained the structure of the “Five C’s” (Communication, Connections, Comparisons, Cultures and Communities), The Modern Language Association (MLA) has turned its attention to the discourse of intercultural competence in its most recent recommendations to the FL teaching profession: “The language major should be structured to produce a specific outcome: educated speakers who have deep translingual and transcultural competence.” Such is a fundamental finding of the MLA Ad Hoc Committee on Foreign Languages in 2007 (2007). The committee was charged with defining the role that foreign language education should play in the education of America’s undergraduates. Its assignment emerged from the changed cultural and political environment after 9/11 and the realization that America was gravely ill-prepared for the intercultural contact that the new millennium was going to demand. In its two years of work another insight that became clear was that as a nation America needed to learn how to understand other cultures and the MLA stated its mission in accordance with this view: “the MLA supports a broad, intellectually driven approach to teaching language and culture in higher education” (MLA Ad Hoc Committee on Foreign Languages, 2007, p. 234). This focus on

“languages and cultures” with no explicit mention of literature studies indicates a fundamental shift in priorities for the profession.

The committee proceeds to advocate for a wholesale restructuring of foreign languages and literature departments that dissolves the conventional two-tiered division of lower-level language courses and upper-division literary and cultural studies (i.e., “content”) courses. The goal of such a radical reorganization is to better integrate language and culture learning from a student’s first course to her last course on campus. This reorganization should also make room for foreign language majors who do not enter the major for literary studies. Interdisciplinary collaboration should allow for attracting more students with diverse backgrounds and reasons for pursuing the study of another language and culture. Yet, if departments are to keep these new students, course offerings and curricular goals are going to have to successfully integrate these content interests with language learning. The committee’s advocacy for “translingual and transcultural competence” understands such an objective as the proper vehicle for such linguistic and content integration.

According to the committee’s report the goal of education for translingual and transcultural competence is intended to help students develop the skills for interacting appropriately with members of other cultures; for understanding them on their own terms; and for critically understanding themselves as members of one culture among many. Students develop skills to “read” cultural products and phenomena from the standpoint of members of that culture and to interact with others on their own terms. Such a perspective understands culture more as a coherent system of signification, constructed by member-participants of a specific discourse community (Kramsch, 1998)—a much broader notion of culture than more traditional understandings based on aesthetic concerns and the elevation of certain material products over others. Culture, thus, becomes much more a

process of co-constructed meaning than a collection of knowledge and artifacts. It is important to note that the skills, knowledge, understandings and attitudes reflected in the the MLA's characterization of "translingual and transcultural competence" lie at the heart of ICC as described in the preceding section.

New Competencies

Translingual and transcultural competence has many names: Intercultural Competence (IC), Intercultural Communicative Competence (ICC), Cross-Cultural Competence (CC), and Intercultural Sensitivity, to name a few. At their core, all of these concepts attempt to quantify *appropriate and effective performance* in intercultural communication (J. M. Bennett et al., 2003; Byram, 1997; Deardorff, 2006a; Fantini, 2006; MLA Ad Hoc Committee on Foreign Languages, 2007; Spitzberg & Changnon, 2009). Each identifies a specific set of affective and cognitive dimensions or skills required to engage competently with interlocutors of another culture and language. Significantly, no definition identifies replication of the behavior or linguistic skill of the native speaker as the ultimate outcome of foreign language learning. This is consistent with Deardorff's (2006) finding that scholars of ICC and university administrators committed to internationalization initiatives have not yet arrived at a consensus on the specific role that language proficiency plays in the acquisition and practice of ICC. That said, the two key models of ICC (Byram, 1997; (Fantini, 2005b)) for the current study understand language as embedded in culture. In fact, Fantini (2005) and Byram (2008) have both acknowledged a characterization of the "languaculture" (Agar, 1994; Risager, 2007) or "linguaculture" (Fantini, 1995, 2005b). Consequently language learners who are successful intercultural speakers (i.e. interculturally competent speakers) understand the

internal relationship of culture and language in their own languaculture, in the target languaculture as well as the relationship between the two languacultures.

This emphasis on understanding languacultures as well as activity based on that understanding represents a fundamental change in the goals of foreign language education (FLE) and an acknowledgment of the unrealistic nature of that expectation for adult learners. For decades the archetype of the native speaker dominated the discourse surrounding FLE. With the emergence of ICC the learner is “permitted” to speak as himself, here as an American speaking in Germany with a German, not as an American posing as a German.

This shift toward new competencies and new program goals is manifested, in part by the MLA report’s recommendations for curricular goals. Concomitant with such goals should be a means to assess attainment of those goals. The nature of the committee and the MLA puts this second step out of the scope of the committee’s task. While ICC in the language classroom is not a new research strain, assessing ICC remains an understudied area. It is to this area that the current study seeks to contribute. The following section will consider two possible directions from which to approach the assessment of ICC: formative and summative. The following discussion will consider how each approach impacts curriculum and the learning enterprise. It will show the connection between student performance, classroom practice and formative assessment as well as the how summative assessment measures, especially questionnaires and surveys lend themselves to description of and comparison across groups at the programmatic level.

Intercultural Language Learning

On the heels of Byram's and others' conceptual work on ICC (Crozet & Liddicoat, 1999), scholars have begun to consider the implications for praxis. At the center of this work lies the question: What does such a framework mean for language teaching and learning? What has emerged is the notion of Intercultural Language Learning³ (ILL). Central to this orientation to the foreign language classroom is an awareness of intercultural speakers (including those developing speakers who are our students) as playing two important roles. They are the same time participant-users of the target language (L2) and learner-analyzers of the L2 (Scarino, 2009). In addition to developing communicative competence, ILL attempts to address the fact that the communication language teachers prepare their students for is assumed to have an intercultural dimension to it. In that respect, the sociolinguistic components of earlier theories of communicative competence (Canale & Swain, 1980; van Ek, 1986) have evolved into more of a sociocultural component (Savignon, 2007).

ILL, therefore, implies a deep integration of both language and culture. It encourages language instruction, which requires learners to make connections between language, culture and learning; prior and new knowledge/learning; language and thinking; L1 and L2; and prior and new experiences (Liddicoat, 2008). Such connection-making allows for the development of skills which help students—through language—

³ Also alternately referred to as Intercultural Language Teaching (Crozet & Liddicoat, 1999) and Intercultural Language Teaching and Learning (Liddicoat, 2008). For the sake of consistency, this section will refer to ILL, without the intention of excluding these formulations.

transfer meaning from one language/culture system to another. The analysis and interpretation skills which can emerge through FL learning with an ILL orientation, aligns ILL well with the recommendations from the MLA Ad Hoc Committee on Foreign Languages' (2007) report advocating for the development in students of "deep translingual and transcultural competence." Such competence, as reinforced by Kramsch (2008) involves the ability to interpret cultural products, practices and perspectives in ways, which are meaningful. In this perspective foreign language students learn to both make meaning and interpret meaning and in so doing, they engage in four specific learning activities: Noticing, Comparing, Reflecting and Interacting (Liddicoat, 2008).

For example, at the introductory level students can notice that in German greetings, it is not customary to ask some version of "How are you?" and to compare that to the prevalence of such questions in American English greetings. This awareness of difference can lead to reflecting on the appropriateness of certain greetings and/or questions in the specific cultural contexts as well as contemplation on alternative, more fitting greetings strategies. All of this is, of course, in preparation for real interaction, but with German-speaking age peers as well as teachers, shop-keepers or internet interactants (in forums, social networks, gaming, etc.). At a more intermediate level, the process can involve noticing that the English teacher's taboo on the passive voice does not apply to much German writing. This new awareness can be developed during instruction by providing a variety of text types to help students compare situations in which the passive is used and identify for what purposes it is used. Such comparison is by nature reflective,

but that reflection can also lead to a better awareness of both what the passive is in the students L1 as well as what its use effects in the student's languaculture.

In conclusion, FL teaching for intercultural language learning should be understood as a more explicit articulation of the fact that ICC has a role in the FL classroom and not vice versa, that foreign languages have a role in the ICC classroom. A teacher who has oriented her instruction to develop intercultural competence in fact relies on language as the vehicle for such development. ICC provides a framework to more fully integrate language and culture. In so doing, students are supported in the cultivation of their abilities to understand their C2 partners on their own cultural and linguistic terms and their abilities to "de-center" and understand themselves as participants in one possible linguacultural system among many. Assessment of student progress in such development is integral to curricular planning

ASSESSING ICC

Scholarship of ICC assessment generally falls into two categories: summative assessment on the basis of psychometric survey instruments (Fantini, 2006; Hammer et al., 2003; Kelley & Meyers, 1993; R. M. Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003) and formative, descriptive assessment (Belz, 2005; J. M. Bennett et al., 2003; Byram, 1997; Schulz, 2007; Schulz et al., 2005). Both categories of assessment approach the problem of describing a psychological disposition based on observation of visible behaviors and expressed attitudes.

Formative assessment recommendations generally address classroom or course-specific settings. They commonly employ qualitative methods to collect data. As such

they are very individualistic and context dependent; they also offer an opportunity for the researcher to collect very rich data on ICC development in students. Conversely, survey instruments such as the Intercultural Development Inventory (IDI) (Hammer et al., 2003), the Cross-Cultural Adaptability Inventory (CCAI) (Kelley & Meyers, 1993) and the Assessment of Intercultural Competence (AIC) (Fantini, 2006) are quantitative self-assessment instruments which offer an opportunity to examine larger populations.

One of the most understudied areas concerning intercultural communicative competence (ICC) is indeed the assessment of the construct in the classroom. The two types of assessment— whether performance-based or psychometrically-measured—seem to align themselves with two approaches to the ICC construct itself. The following section addresses the correlation of assessment categories with the frameworks, examines their strengths and weakness, and then discusses their relevance for the current study.

Formative Assessment

The performance-based model of assessment generally corresponds with Byram's (1997) formulation of ICC from his seminal book *Teaching and Assessing Intercultural Communicative Competence*. This volume outlines ICC as consisting of 5 *savoirs*: Knowledge, Attitude, Skills of discovery and interaction, Skills of reflection and relativization and Critical cultural engagement/political education. Byram identifies more than 20 specific objectives for the language/culture classroom, nearly all of which are performance-based. That is, these objectives specify what students should be able to do and/or know as they become increasingly interculturally competent. Because this model of ICC is decidedly student-centered, Byram deems portfolio assessment to be the preferable means of evaluation.

In this view, he is not alone. Jacobson and colleagues (1999) and Schulz, et al. (2005) also consider portfolio assessment to be a very appropriate means of assessment. Schulz reasons it along these lines: portfolios are collections of student work over time. As these collections develop, they can allow for varied and alternative means of representing student learning and development and are not restricted to learning, which can be demonstrated in pen-and-paper testing. Because ICC is a collection of skills, attitudes and orientations, a varied collection of student performance in a variety of contexts is deemed more fitting than traditional forms of assessment.

Belz (Belz, 2005, 2007) shows another alternative to the portfolio, though she does not formally call it a means of assessment. When discussing telecollaborative exchanges (TEs) in the context of ICC education, she describes two aspects of student interaction and language, which consistently appear in the transcripts of intercultural interaction: forms of inquiry and forms of appraisal. Belz argues that these two features demonstrate a number of Byram's *saviors*. Forms of inquiry, or the way learners ask questions of their intercultural partners, can demonstrate increasing ICC when students, over time, show that they ask an increasing number of 'why' and "how" questions as opposed to confirmation or yes/no questions (asked of British students: "Is it true that you drive on the wrong side of the street?"). This sort of confirmatory question immediately positions the partner as outside an accepted norm and does not recognize him or her as a member of a legitimate other culture. The questioner does not demonstrate key ICC abilities to relativize the C1, to accept other points of view, or even a basic awareness that alternative forms of driving can actually function. Conversely, a questioner who asks

"I've heard that the UK uses a lot of traffic circles instead of stop lights. Is that true [confirmation]? If it is, do you think they work well? Do you prefer one over the other? Why?"

shows an interest in the concept as a legitimate alternative, an ability to suspend C1 values and norms, and an openness to new information before reaching a judgment.

Likewise, the notion of appraisals in Belz' construct assesses the way students react to and evaluate their encounters with new or other ideas. Belz argues that as students become more interculturally competent they react less emotionally and less negatively when confronted with "cultural rich points" (Agar, 1994, p. 100). More competent learners will react more and more neutrally or in a more positive and constructive manner.

As stated above, Belz does not address a specific means of assessment, but these concepts of inquiry and appraisal can be appropriate criteria for formative assessments. In a telecollaborative classroom, for example, as students and instructors periodically reflect on their interactions, attention to such language can draw student's attention to what their language expresses and the potential consequences of particular language choices.

At their core, then, these formative means of assessment are student-centered and performance-oriented. They emerge from classroom objectives and instructional outcomes. They provide ongoing, developmental feedback which incorporates student perspectives in addition to teacher judgments. Significantly, the studies above reflect a perspective on ICC assessment very much consistent with other practitioners. In the same study described in a previous section, Deardorff (2006) describes a consensus on evaluating the development of ICC for FL learners. According to the study's participants, preferred methods for assessing ICC include interviews, portfolios, papers, presentations, 3rd-party observation, pretests and post-tests (p. 249). Specifically, institutional administrators agreed on these methods: "judgment by self and others" case studies, mixed methods, narrative diaries, self-report instruments (Ibid.) A consensus was expressed advocating for the implementation of multiple assessment methods—an

inventory is not enough. For assessing individual students' performance, qualitative methods are preferred; quantitative methods are regarded with skepticism. However, the article did not address occasions when programmatic evaluations required comparisons of various groups or the production of generalizable conclusions—both of these purposes are suited to more quantitative methods. Thus while quantitative methods encountered some skepticism, no consensus was reached on the use of these methods as well as standardized measures (survey instruments) to assess ICC.

Summative Assessments

The above orientations to assessment are focused on observing and assessing student activity and performance, regardless of whether the teacher or the student herself provides that assessment. The following assessments are much less based in direct observations of behavior and are exclusively psychometrically constructed. Concomitantly, they tend to be 1) self-reported surveys, 2) more oriented to intercultural sensitivity and awareness and 3) more focused on interior dispositions than on external behavior.

The first and most researched is the Intercultural Development Inventory (IDI) (Hammer et al., 2003). This is based on Bennet's (1993) Developmental Model of Intercultural Sensitivity (DMIS). This model consists of two super stages (ethnocentric and ethnorelative) each of which consists of three sub-stages ranging from "defense" in which an individual rejects cultural difference and otherness to "integration" in which a person expresses the ability to make the C2 a part of his or her own life and expression of culture. The IDI has been used in a variety of professional and educational contexts and has been extensively tested for validity and reliability. The IDI, however, is a tightly

controlled and privately maintained instrument. The owners of the tool have made it into a business venture and are not affiliated with any research university. While this in and of itself is not a reason to disqualify the instrument from use, it does make access to its potential benefits for learning a significant challenge.

A second, widely known (and more accessible/affordable) tool is the Cross-Cultural Awareness Inventory by (Kelley & Meyers, 1993). This tool, like the IDI, has been used to assess adaptability to new cultural situations and experiences in a variety of contexts. The authors of the survey have not made widely available the theoretical framework or the process of constructing the survey's questions, unlike the IDI or the next survey the AIC (Fantini, 2006). The difficulty with the CCAI stems from a study by Davis and Finney (Davis & Finney, 2006) which raised a number of serious concerns concerning construct validity, factor loading and reliability. The study's final recommendation was that use of the survey be suspended pending further revision of the construct and of a number of specific survey questions.

Three significant challenges exist for using summative self-assessments in general and the IDI and CCAI specifically. The first consideration for researchers is the nature of self-reported surveys; they rely on participants' ability to accurately report about themselves. Ruben (1989) raised this question specifically in reference to intercultural testing especially in the context of employment situations or as prior to overseas placement. He connects the potential for deception to an attempt to manipulate the system for personal advantage. I would argue, however, that this concern is somewhat minimized in our context because student participation in the current survey is not tied to any future personal advantage. There is no reason for them to "game the system."

Regarding the two specific instruments there are two concerns. First, both are more focused on constructs of intercultural sensitivity than on prevailing models of

intercultural competence. As such they focus intensively on measuring personal, affective factors rather than on “appropriate” activity and interaction in “intercultural encounters” (Hiller & Vogler-Lipp, 2009). Second, challenges exist to actual implementation of the surveys. Access to the IDI is tightly controlled by a private corporation. The owners of the tool have made it into a business venture and are not affiliated with any research university. While this in and of itself is not a reason to disqualify the instrument from use, high costs for training and implementation do make access to its potential benefits for learning a significant challenge, especially for un- or underfunded researchers. The CCAI, a measurement of adaptability to cross-cultural environments, has been shown to contain significant issues which seriously compromise the instrument’s ability to evaluate what it claims to assess (Davis & Finney, 2006). This study showed the following statistical concerns with the instrument:

- 1) Complex model misspecification: the underlying structure of factors (categories) identified by the authors of the instrument is not what is indicated by the instrument itself
- 2) Substantial factor correlations: the dimensions which organize the individual items of the survey overlap and are not discrete unto themselves.
- 3) Large structure coefficients: the individual items correlated to more than one factor, undermining the ability of items to claim that they test on one and only one factor.

Analysis of these two instruments show their less than optimal suitability for general use in FL programs with limited resources and which seek to assess the extent to which students have developed any of the dimensions of the Byram/Fantini conception of ICC. Consequently we see an assessment situation in which, on the one hand, large-scale instruments are either inaccessible or invalid. On the other, we have instructionally

coherent and effective tools which are not suited for broader curricular uses. This is the research gap the current study seeks to bridge. The Assessment of Intercultural Competence (AIC) (Fantini, 2006) departs from the preceding survey tools in three significant ways. First, it is less concerned with interior dispositions of sensitivity than it is with individual action. It asks the participant how he or she responds to specific contexts, experiences, interactions, etc. Second, its theoretical framework is more consistent with generally agreed-upon constructs of ICC which account for knowledge, skills and attitudes (see above). Third, the tool was written for educational contexts, though not necessarily for traditional foreign language classrooms. The current study intends to demonstrate its adaptability for that context. Moreover, the construction of the tool is well documented and internal validity testing is promising (Fantini, 2006), though the survey has yet to be independently assessed.

Summary

The previous discussion addressed the two possible directions from which to approach the assessment of ICC. Formative assessment methods were presented as best suited to provide feedback in the process of ongoing learning and skills development. Research showed a preference for this type of assessment to describe learners' ICC. It was noted, however, that the question of programmatic assessment of ICC has not been considered in previous scholarship. Summative assessment instruments were presented as standardized survey methods which serve descriptive ends in contrast to formative methods which inform the *formation* of subsequent learning, instructional design, etc. Existing surveys were described vis-à-vis their suitability to answer the research

questions of the current study. Only one, the AIC, was seen as possibly appropriate for the education context and theoretical framework of ICC as applied to this study.

CONCLUSION

This chapter has addressed two central questions surrounding ICC and FL instruction: What is ICC, especially as it relates to the foreign language classroom? How can we as language educators know if and how our students are developing ICC during the course of their language learning experience? Regarding the first question, three conceptualizations of ICC key to the current study were described: Byram's (1997) model of the 5 *savoirs*, Fantini's (2000, 2005) formulation of 3 Domains x 4 Dimensions, and Deardorff's (2006c) consensus-building study in which practitioners and researchers endorsed both Byram's model and the language of "*appropriate and effective*" interaction.

In answering the second question, this chapter classified assessment practices as either formative or summative. Each type was addressed for its particular purpose in the curriculum. It then discussed at length sample methods of formative assessment and illustrated that there is no shortage of techniques or research on student-centered, performance-based formative assessment. When summative assessment is the intent, however, the resources available to language instructors and administrators are far more limited. Three common survey instruments were discussed: the IDI, the CCAI and the AIC. Challenges to the practical implantation of the IDI and the CCAI were explained and a rationale was presented for the decision to adapt the AIC for use in the current study.

Chapter 3: Methodology

This study seeks, in part, to adapt the AIC (Assessment of Intercultural Competence) in such a manner as to design a valid instrument to assess ICC levels of undergraduate foreign language students. The data provided by the instrument are intended to answer the following questions.

1. Is an increase in Intercultural Communicative Competence (ICC) observed in the cross-section of participants?
2. To what demographic or experiential factor or factors can ICC be attributed?
3. Which, if any, of the four subdomains of ICC (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level?
4. Based on the demographic and experiential data collected, what are the best predictors of Intercultural Communicative Competence?

In order to answer these questions, the study used quantitative analyses to compare the data of various groupings of participants. Quantitative analyses are required in order to a) compare the means of four different groups and b) to establish correlations and relationships among various factors.

SETTING

The study was conducted during the spring semester 2010 at University of Texas at Austin, which enrolls over 33,000 undergraduate students a year. Over 30 languages are offered at the undergraduate level. In response to budgetary pressures a process was initiated in the summer of 2009 ultimately leading to the restructuring of the undergraduate language program not only for German but also Spanish, French and

Italian. The German language program, which formerly lasted four semesters, was phased out in the fall semester of 2010. The last two 3-hour courses, which comprised the second year of the program, were replaced by one intensive course which meets for 6 hours per week.⁴ The German language program is housed within the Department of Germanic Studies (the Department also offers courses in Danish, Dutch, Norwegian and Swedish).

CURRICULUM

First-year German

The Department of Germanic Studies' German language program produced and makes use of the online, open resource language learning program, *Deutsch im Blick*⁵ (*DiB*) in the first year of instruction. The text consists of 10 units; the first five are taught in the first semester and the second five in the second semester. This progress through the material drives the curriculum of the first year. At its core *DiB* features authentic input from a variety of both native and non-native speakers. This kind of authentic language use—by a variety of speakers for a variety of uses—emerges from a central question of the text: “How would native and non-native speakers use the vocabulary, grammar and sociolinguistic rules in everyday contexts?” (Abrams et al., 2009, *Einführung*). In order to present such language-in-use, the text is based on videos of speakers participating in interviews, describing various ideas, or engaging in specific speech acts such as buying a *Döner* or paying for a meal and tipping a waiter. Learning activities in the text are also contextualized within “plausible language situations” (Ibid.) and make extensive use of

⁴ For background on the process and a presentation of some philosophical and programmatic challenges presented see (Aujla, 2009).

⁵ The *Deutsch im Blick* program was written as a collaborative effort on the part several graduate students, including myself, under the direction of Dr. Zsuzsanna Abrams, the advisor of this dissertation.

such realia as train schedules, song texts, cafeteria menus and Ikea catalogs. Engagement with authentic materials begins in the first chapter of the first semester. In this manner, students are exposed to and work with a variety of cultural products and practices early and often from the very start of their language learning experience.

Instructors in the German language program are afforded great leeway in the design of day-to-day instruction as well as the in sequencing and evaluation of learning activities. Professional rigor and coherence are achieved through collaboration such as instructors' collective design of unit assessments (chapter tests). These assessments focus to a great extent on linguistic targets, be they language-in-use features or explicit grammatical structures. Assessment activities require students to produce language which largely describes their own personal context. Prompts such the following are not uncommon: "Describe your dorm room or apartment." "How does dating work in your circle of friends." These assessment materials are administered to all sections of each course at three pre-determined points in the semester.

Second-year German

Whereas the focus of the first year of the German language program is the development of the knowledge and skills necessary to communicate about daily life, with particular focus on the individual student's specific experience, the second year changes focus to the German-speaking countries. The text used is *Stationen* (Augustyn & Euba, 2007) and, as in the first year, progress through the various chapters drives the curriculum of the two courses. The text (and thus the courses) is organized around chapters which investigate various cities in the German-speaking world. The courses expand students' communicative skills in the language as well as develop their linguistic knowledge of the language by training them in increasingly sophisticated language acts and expecting

language production at a higher, more academic register. The content of *Stationen* allows for exploration of aspects of the present and the past of Germany and, to a lesser extent, Switzerland and Austria. Because the text focuses on cities, the curriculum risks a perspective on this region of Europe that disproportionately features urban life and neglects more rural dimensions of the German-speaking world. That said, the second year affords a more specifically targeted exploration of elements of “big C” culture—that of the arts, historical and political elements of Germany (and the German-speaking world)—thereby allowing students access to these higher register discourses.

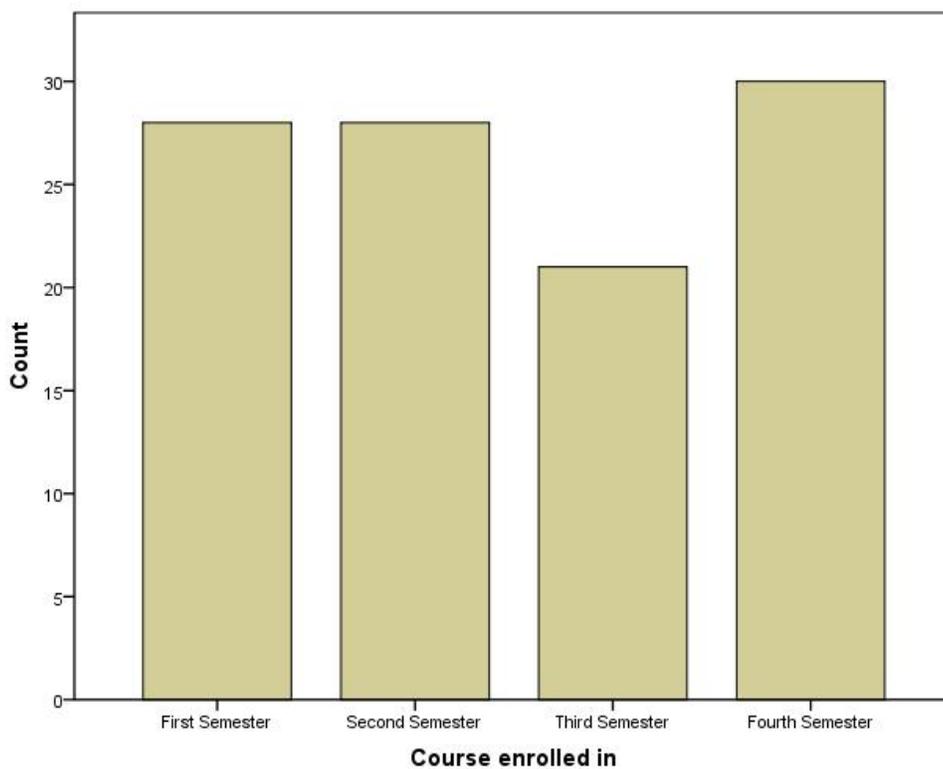
PARTICIPANTS

All participants were students enrolled in the lower-division German language program in the Department of Germanic Studies at the University of Texas at Austin. The program participants were solicited from all sections of the four-semester program. The German program currently enrolls over 300 students each semester. Students may enter the language program at the university at all possible points in their educational career. Thus a first semester class can have new freshmen as well as seniors preparing to graduate. German language students can potentially represent every school at the university and nearly every major program, though an analysis of the study’s participants will show that less than half the university’s colleges are represented. Many participants are enrolled in order to fulfill a language requirement of between 2 and 4 semesters. Most of the participants are alumni of the state’s high schools and represent a range of experiences with other cultures. Because all students enrolled in the language program were asked to participate, it is assumed that a representative, cross-sectional sample of

German language students at the university will be surveyed, pending analysis of actual respondents. More complete demographic data will be presented in Chapter 4.

A total of 207 students from all levels expressed an interest in participating in the study and all of these students were sent invitations to participate via Survey Monkey. Of these, 127 students began the survey and a total of 108 completed the survey, resulting in a 52% response rate. These 108 respondents were distributed across the four courses as follows: first-semester German: 29, second-semester: 28, third-semester: 21, fourth-semester: 30. This distribution can be seen in Figure 3.1.

Figure 3.1: Distribution of Participants into Course Groups



In order to more accurately describe each cohort of students, the following section addresses information regarding the four courses, specifically describing the learners in terms of gender, age, class, experience abroad, and intercultural relationships. The variables of gender, age and class were included in order to give a more complete description of exactly who the participants in the study are. Gender was later analyzed as was experience broad and intercultural relationships for their possible effects on ICC scores.

First-Semester German

29 students in the first-semester course completed the survey (distributed across 6 sections). 59% of these participants were female and 41% were male. 90% were between 18 and 24 years old, 7% between 25 and 29. One student was over 35. 34% of students were in their first year of college. 24% were sophomores. 27% were juniors and 10 % were in their last year of study. One student was a graduate student. The top three majors for the cohort were Biology (17%), Chemistry (10%) and English (10%). German and English were the most represented minors, with three declared students each. Nearly two-thirds of the group had not declared a minor at the time of the survey. 76% of all students in the first semester claim significant language and culture learning experiences. Over two-thirds of these students tie this experience to their language courses in high school. The remaining five students cite having lived in a foreign country or in a country in linguistic and cultural pluralism is the norm. Nearly 70% of all students in first-semester German state that they had important intercultural relationships, which predate the start of learning German in college. Students were ask to categorize these relationships as Friends, Classmates, Work Colleagues, Family or Other and were permitted to declare

more than one category. 80% of these students have intercultural friends, 55% have classmates they characterize as intercultural. 55% also claim to have intercultural family members. All of these students describe these relationships as positive experiences. 69% of students have not had lived outside of their home countries for any length of time. Of the nine who responded affirmatively, six years is the maximum amount of time, one month is shortest period spent abroad. Two claim the U.S. as “outside the home country.” Regarding this experience, 44% (4) said it helped develop skills useful in their current coursework. All four describe linguistic skills when asked to elaborate. 55% of these students said that their experiences abroad resulted in the further study of another language. No students have chosen a future career as a result of their experiences abroad.

Second-Semester German

28 students in the second semester (4 sections) took part in the survey. 57% were female and 43% were male. All students were between 18 and 24 years old. 18% of students were in their first year of college. 43% were sophomores. 21% were juniors and 14 % were in their last year of study. One student was a graduate student. The top three majors for the cohort were English, Economics and Government, each with four majors. German led all minors with six students. History, French and Business followed, each with two minors. Slightly over one-third (36%) had not declared a minor. 78% of all students in the second semester claim significant language and culture learning experiences. 80% of these students tie this experience to their language courses in high school. The remaining four students cite having lived in a foreign country. 71% of all students in second-semester German state that they have important intercultural relationships, which predate the start of learning German in college. Students were asked

to categorize these relationships as Friends, Classmates, Work Colleagues, Family or Other and were permitted to declare more than one category. 95% of these students have intercultural friends, 50% have classmates they characterize as intercultural. 55% also claim to have intercultural family members. All of these students describe these relationships as positive experiences. 68% of students have not had lived outside of their home countries for any length of time. Of the nine who responded affirmatively, nine years is the maximum amount of time, three month is shortest period spent abroad. One respondent claimed the U.S. as “outside the home country.” Regarding this experience abroad, 55% (5) said it helped develop skills useful in their current coursework. All of these students describe linguistic skills when asked to elaborate. 33% of these students said that their experiences abroad resulted in the further study of another language. Three students have chosen a future career as a result of their experiences abroad. Two of these participants plan on becoming professors of literature and the third will pursue a career with non-governmental organizations.

Third-semester German

21 students in the third semester (3 sections) completed the survey. 62% were female and 38% were male. 86% were between 18 and 24 years old, 19% between 25 and 29. One student was over 35. 9% of students were first-year students. 43% were sophomores. 9% were juniors and 29 % were in their last year of study. There were two graduate students. The top three majors for the cohort were Government (18%), History (18%) and Theater (12%). Art History, Business and German were the most represented minors, with two declared students each. Over two-thirds of the group had not declared a minor at the time of the survey. 76% of all students in the third semester claim significant

language and culture learning experiences prior to starting German in college. 85% of these students tie this experience to their language courses in high school. The remaining three students cite having lived in a foreign country. 62% of all students in third-semester state that they have important intercultural relationships, which predate the start of learning German in college. Students were asked to categorize these relationships as Friends, Classmates, Work Colleagues, Family or Other and were permitted to declare more than one category. 92% of these students have intercultural friends, 61% have classmates they characterize as intercultural. 61% also claim to have intercultural family members. All of these students describe these relationships as positive experiences and 54% of them attribute their study of German to these relationships. 52% of students have not had lived outside of their home countries for any length of time. Of the 10 who responded affirmatively, nine years is the maximum amount of time, one month is shortest period spent abroad. No students in this group claim the U.S. as “outside the home country.” Regarding this experience, 60% (6) said it helped develop skills useful in their current coursework. Five of the six describe linguistic skills when asked to elaborate. Two also cite a capacity to accommodate cultural variety. 50% of these students said that their experiences abroad resulted in the further study of another language. Two of the ten participants have chosen a future career as a result of their experiences abroad.

Fourth-Semester German

30 students in the fourth-semester course (4 sections) completed the survey. 57% were female and 43 % were male. 90% were between 18 and 24 years old, 7% between 25 and 29. One student was over 30. No first-year students in 312L responded to the

survey (it is also highly unusual for a freshman to be enrolled in fourth-semester German). 30% were sophomores. 27% were juniors, and 43% were in their last year of study. Communications, Government and Radio/Television/Film were the top three majors, each with four students. German (5) and Business (4) were the most represented. Nearly 30% of the group had not declared a minor at the time of the survey. 66% of all students in the fourth semester claim significant language and culture learning experiences. Slightly less than two-thirds of these students (65%) tie this experience to their language courses in high school. The remaining seven students cite a residential or a study abroad experience. 63% of all students in fourth-semester German state that they have important intercultural relationships, which predate the start of learning German in college. Students were asked to categorize these relationships as Friends, Classmates, Work Colleagues, Family or Other and were permitted to declare more than one category. 84% of these students have intercultural friends, 47% have classmates they characterize as intercultural. 42% also claim to have intercultural family members. All of these students describe these relationships as positive experiences and 47% attribute their study of German to these relationships. 70% of students have not lived outside of their home countries for any length of time. Of the nine who responded affirmatively, 10 years is the maximum amount of time, two weeks is shortest period spent abroad. Regarding this experience abroad, 67% (6) said it helped develop skills useful in their current coursework. All but one describe linguistic skills when asked to elaborate; the remaining respondent cited study skills and the ability to respond to “unfamiliar subject matter.” 67% of these students said that their experiences abroad resulted in the further study of another language. Only one student has chosen a future career as a result of his experiences abroad.

MEASURES

The present study measured Intercultural Communicative Competence using an inventory, the Assessment of Undergraduate Intercultural Competence (AUIIC). This inventory is an adaptation of the Fantini's Assessment of Intercultural Competence (2006) modified for use with undergraduate German language learners. The assessment consists of 55 items. Respondents rated these items on a scale of 0-5, which were recoded on a scale of 1-6 for the statistical analyses. This recoding was necessary in order to avoid division by zero and distortion of the results. There were no items for which inversion of the values was required. Examples of the recoding can be seen in Table 3.1

Table 3.1: Recoding of Response Values

Survey Items	Student response on Likert-type scale	Recoded value
I could cite a definition of culture and describe its components and complexities	4	5
I know the essential norms and taboos of Germany (e.g., greetings, dress, behaviors, etc.)	2	3
I know when I am experiencing stress arising from cultural differences	5	6

Higher scores indicate greater agreement with or applicability to the respondent's own context or understandings. The items assessed four separate subscales or subdomains: Knowledge, Attitude, Skills and Awareness. These subdomains correspond to the theoretical components of the Intercultural Competence presented in the review of literature.

The Intercultural Competence Score was generated by the following procedure. The items in the section of the survey “ICC Abilities” were organized by the subdomain which they were intended to describe: Knowledge, Attitude, Skills or Awareness. The mean of all items in each subdomain was calculated resulting in each respondent having four mean scores, one for the Knowledge subdomain, one for Attitude, etc. The mean of these means was then calculated to generate the individual’s ICC score. This procedure places equal weight on each domain, regardless of the aggregate number of items which assessed any particular domain.

Validity and Reliability

In order to establish the usefulness of the survey, it is essential to determine its validity and reliability. In order to say that the instrument is reliable, we need a method which can tell us that if the survey were repeatedly taken by the same population sample, the results would not be statistically different each time. For this estimate of internal consistency, the test for Cronbach’s alpha is used. When speaking of validity, this study is concerned with *construct* validity. When testing for the instrument’s construct validity, I want to know whether the items in the survey test only the concept in question. When testing a concept with more than one component (such as ICC with four subdomains), the researcher needs to know that each item addresses one and only one component. In this survey a Principal Components Analysis (PCA) was used to address the survey’s construct validity. The ensuing discussion will first address the PCAs employed. The results of reliability testing will follow.

The validity of the assumed relationship of the AUIC survey items to the four subdomains of ICC was established by running a Primary Components factor analysis

(PCA) of the survey items with varimax rotation. The PCA was chosen for its ability to reduce a given number of variables or, in this case, survey items to a smaller number of factors. When this happens we say that the items “load” onto the factor(s). The number of factors produced (or “extracted”) by the analysis is a function of the analysis itself and is not predetermined by the researcher. This collection of factors generated by the PCA is called a “factor structure.” It is the model, which describes the underlying structure of a collection of variables (in this study, those variables are the survey items). In the output, the factors are simply numbered; it is up to the analyst to determine the nature of any particular factor. This is done by closely examining the kinds of items that load onto a specific factor.

In the context of the current study, the PCA was used to determine to what extent the survey items, which purported to assess the Knowledge, Attitude, Skills and Awareness subdomains do, in fact, load onto these single factors respectively. If this were the case, the PCA would have generated 4 factors (numbered 1-4) and the survey items which we claim to assess Awareness would load onto the same factor; the items for Knowledge, all onto a different factor; the Skills items would be associated with a third factor; and the items for Attitude would all load onto the fourth factor. Fantini’s (2006) analysis of the original AIC survey found the questions to map onto the subdomains quite accurately. That is, the questions that addressed Attitude, for example, all loaded onto a single factor. However, since the questions for the current study were adapted to the needs of our students and their learning context, it was important to re-establish the fact that this adapted array of questions still can be explained by a factor structure which reflects the four-part framework for ICC.

The PCAs for this study were used to determine 1) if the adaptations for the current survey were appropriate and 2) if the survey is a valid test for the current

population. Of particular interest to the analysis of these PCAs was 1) communality values and 2) cross-loading of items on factors. Communality describes to what extent the analysis can account for the variance in the scores for any particular survey item. Of special concern would be values less than .50 because that would indicate that the analysis cannot account for more than half of the item's variance. Cross loading occurs when a survey item can be explained by more than one factor. This can be determined by examining the resultant "Component Matrix" or the "Rotated Component Matrix." Both matrices report the same information, but a rotated matrix often presents the relationship of item to factor in a much more understandable way. In either matrix, component coefficients of .40 or higher indicate meaningful item-to-factor associations.

Primary Components Analysis (PCA)

As with all analyses in this study, SPSS/PASW 18 was used. Two sets of analyses were used to understand the relationship of the survey items to the underlying factor structure. First, all 55 survey items were analyzed to discover the factors underlying the survey instrument as a whole. It was hypothesized that between four and six factors would emerge. This assumption was based on the premise that the items for at least two of the subdomains would load onto only one factor. Based on Fantini's (2007) analysis, there was a possibility that one or two of the subdomains would be composed of one or two subfactors. This chance would have increased the number of factors from four (one per subdomain) to six. The analysis ultimately extracted 10 factors. This factor structure will be discussed first.

After the discussion of the first analysis and the resultant 10-factor model, a second analysis will be presented. In this analysis, each subdomain was analyzed

separately. This was done to better understand complex factor structures and evaluate whether any items which showed cross loading (were attributable to more than one factor) should be removed from the inventory. If the survey items for a particular subdomain converged on single factor, the conclusion was drawn that these items comprised, in fact, a suitable scale for the subdomain. If more than one factor emerged from the procedure, further analysis was needed to draw appropriate conclusions about the survey items. The following discussion will start with the analyses for Attitude and Awareness which presented rather clear results and conclusions. It will then address Knowledge and Skills. The data produced by these subdomains required a closer and more nuanced analysis. The discussion will reference Tables 3.2-3.11 which present the items, the factors they loaded on and their factor loading coefficients. Factors loads below .40 were considered weak loads and were not considered for analysis.

The first analysis examined all 55 survey items at once and it extracted 10 underlying factors⁶. This model (or collection of factors) explains 75% of the variance in scores. The complete rotated component matrix for this analysis can be found in Appendix D. As is reflected in Table 3.2, the items which were intended to describe the Awareness subdomain were all associated with the same factor. This indicates that the collection of all of these items is an appropriate index for Awareness. Only one item showed some cross-loading. However, this item was not removed from the analysis because 1) its communality values were acceptable (.85) and its component coefficient on the primary factor (.71 on Factor 1) was considerably higher than the secondary factor (.46). Thus, it was determined that the item still contributes substantially to the Awareness subdomain and there was no reason for its removal.

⁶ These 10 factors were generated by the PCA itself and cannot be determined *ex ante*. The analyst's task is to generate meaningfulness from these factors—after the PCA produces them.

Table 3.2: PCA Factor Loading for Awareness Items

Awareness	Factor	
	1	4
the potential consequences of generalizing individual behaviors as representative of the whole culture	.802	
responses by Germans to my own social identity (e.g., race, class, gender, age, etc.)	.789	
my personal values that affect my approach to ethical dilemmas and their resolution	.782	
how Germans might view me and why	.781	
my choices and their consequences (which make me either more, or less, acceptable to German conversation partners)	.779	
myself as a "culturally conditioned" person with personal habits and preferences that are expressions of my own culture	.777	
how my values and ethics are reflected in specific situations	.763	
how varied situations in German culture might require modifying my interactions with others	.762	
differences and similarities between my own and German language and culture	.743	
my own level of intercultural development	.732	
Germans' reactions to me that reflect their cultural values	.721	
varying cultural styles and language use, and their effect in social and working situations	.714	
diversity in Germany (such as differences in race, class, gender, age, ability, etc.)	.713	
the level of incultural development of others with whom I interact (fellow students, professors, friends, co-workers, etc.)	.706	.462
my negative reactions to these differences (e.g., fear, ridicule, disgust, superiority, etc.)	.681	
how others perceive me as communicator, facilitator, or mediator in intercultural situations	.679	

Likewise, the items which were written to assess Attitude load onto one factor in a rather straightforward manner. This factor loading is presented in Table 3.3. All items, save one, loaded onto this single factor (Factor 2) and no others. The cross-loading item, “...interact with Germans (I wouldn’t avoid them or primarily seek out other Americans),” loaded equally onto Factors 2 and 5. The decision to retain or discard this item was complicated by the fact that the model still accounts for 67% of the variance in this item. In order to better inform this decision, the secondary analysis was run and will be discussed in the following section. First, however, the other two subdomains will be discussed vis-à-vis the primary analysis. After their factor structures are discussed and similarly “complex” items are identified, the secondary analysis will be presented and final recommendations made as to the suitability for these items.

Table 3.3: PCA Factor Loading for Attitude Items

Attitude	Factor	
	2	5
try to understand differences in the behaviors, values, attitudes and styles of host members	.871	
take on various roles appropriate to different situations (e.g., in the family, as a student, friend, etc.)	.782	
deal with different ways of perceiving, expressing, interacting and behaving	.777	
reflect on the impact and consequences of my decisions and choices on Germans I interact with	.770	
adapt my behavior to communicate appropriately in Germany (e.g., in non-verbal and other behavioral areas, as needed for different situations)	.768	
deal with the ethical implications of my choices (in terms of decisions, consequences, results, etc.)	.749	
try to communicate in German and behave in "appropriate" ways, as judged by my German hosts	.737	
suspend judgment and appreciate the complexities of communicating and interacting interculturally	.734	
show interest in new cultural aspects (e.g., to understand the values, history, traditions, etc.)	.729	
interact in alternative ways, even when quite different from those to which I was accustomed and preferred	.722	
deal with my emotions and frustrations with German culture (in addition to the satisfaction and enjoyments it offered)	.717	
learn from Germans, their language, and their culture	.695	
interact with Germans (I wouldn't avoid them or primarily seek out other Americans)	.443	.469

The items to assess the Skills subdomain loaded onto one of four factors (see Table 3.4). All but three of the items clustered into Factor 3 or Factor 4. The remaining three items clustered onto either Factor 8 or Factor 9. The following items cross-loaded onto factors which were not associated with the Skills subdomain (such as Factor 1 or 2—Awareness and Attitude) and concurrently did not strongly favor a Skills-associated factor (Factors 3, 4, 8 or 9):

“I can use information about German culture to improve my communication skills” (Factors 1, 3, 4)

“I can contrast and compare German culture with my own” (Factors 2, 3, 8, 9)

Likewise, a decision on these items was deferred pending the results of the second analysis. That analysis will also suggest a clearer understanding of how *all* items describe the Skills subdomain.

Finally, the Knowledge items grouped into 4 different factors (Factors 5, 6, 7 and 10). As shown in Table 3.5, of the 12 items which targeted Knowledge, 5 cross-loaded onto factors which were not associated with other Knowledge items. They are:

I know some techniques for effectively asking and learning about German culture (Skills)

I could describe interactional behaviors common among Germans in social areas (e.g. family roles, hospitality, friendship, problem solving, making presentations, etc.) (Awareness)

I could discuss and contrast various behavioral patterns in my own culture with those in Germany (Skills and Awareness)

I know some techniques to aid my learning of German language (Skills)

Table 3.4: PCA Factor Loading for Skills Items

Skills	Factors						
	1	2	3	4	8	9	
I can use strategies for learning German language			.785				
I have at my disposal various strategies and techniques for learning German language			.779				
I can use strategies for learning about German culture	.406		.634				
I can interact appropriately in a variety of different social situations in Germany			.595				
I have at my disposal various strategies and techniques for learning about German culture	.463		.572				
I have at my disposal various strategies for adapting to the German culture and reducing stress arising from newness and difference	.466		.506				
I am generally aware of my behavior and reflect on how it impacts my learning, my growth, and especially people I interact with			.474				
In the past I have helped to resolve cross-cultural conflicts and misunderstandings when they arose				.663			
I can figure out when a miscommunication is occurring because of a cultural misunderstanding	.406			.609			
I can ask the right questions to learn about the deeper cultural issues at play in a specific cultural product (magazine article, TV commercial, a political cartoon, etc.)				.588			
I can use information about German culture to improve my communication skills and interactions with Germans I encounter	.424		.412	.442			
I can adjust my behavior, dress, etc., as appropriate, to avoid offending German hosts					.793		
I can be flexible when interacting with persons from Germany					.525		
I can contrast and compare German culture with my own		.301	.369		.347	.390	

Table 3.5: PCA Factor Loading for Knowledge Items

Knowledge	Factor							
	1	3	4	5	6	7	10	
I know the essential norms and taboos of Germany (e.g., greetings, dress, behaviors, etc.)				.653				
I know some techniques for effectively asking and learning about German culture		.433		.597				
I know some strategies for overcoming stress from cultural differences				.539		.511		
I could describe interactional behaviors common among Germans in social areas (e.g. family roles, hospitality, friendships, problem solving, making presentations, etc.)	.408			.488				
I can describe some important historical and socio-political factors that shape German culture					.769			
I can describe some important historical and socio-political factors that shape my own culture.					.749			
I could discuss and contrast various behavioral patterns in my own culture with those in Germany	.423		.421		.430			
I know when I am experiencing stress arising from cultural differences						.726		
I can describe phases I might experience if I were to have to adjust to living for a longer amount of time in Germany						.674		
I can contrast my own behaviors with those of German peers in important areas (e.g., social interactions, basic routines, time orientation, etc.)						.424		
I could cite a definition of culture and describe its components and complexities							.625	

Summary

Table X graphically summarizes the results of the first PCA. Any given row addresses the collection of questions which were supposed to have measured a specific subdomain (specified in Column 1). The second column shows how many factors the items for that subdomain loaded onto. Here, “1” is the ideal number. It means that no survey item for the subdomain is associated with another subdomain. Where the items for a subdomain map onto more than one factor, Column 3 shows the number of these cross-loading items. If a subdomain is composed of only one factor, there will be no cross-loading items.

Table 3.6: Summary of Cross-Loadings by Subdomain

Subdomain	Number of Factors (1 is ideal)	Number of Problematic Cross-loading Items (the fewer the better)
Awareness	1	0
Attitude	2	1
Skills	4	2
Knowledge	5	5

The secondary analysis will address challenges to describing a particular subdomain with a simple factor structure (one factor with no cross-loading items). Of most concern in this second investigation are 1) whether having more than factor to describe the subdomain is conceptually suspect and 2) whether the cross-loading items should be removed from the analysis.

Secondary PCA

In this analysis, each subdomain was treated in its own analysis. Communalities and cross-loadings were examined as in the above discussion. Particular attention was

paid to items which were observed to load onto factors which were not associated with the target subdomain of those items. For example an item which was intended to target Knowledge, but which also cross-loaded onto a factor associated with Attitude, was given particular attention in the secondary analysis. The following discussion treats each subdomain individually.

Attitude

The analysis of these items extracted a somewhat more nuanced picture of the underlying structure of the subdomain. First, there was no need to rotate the component matrix; the data in their original form gave a clear enough representation which is presented below in Table 3.X In this configuration all items but two loaded onto a single factor, which was the hypothesized outcome. The remaining two items cross-loaded onto a second item. These were:

“On future travel to Germany I would interact with Germans (I wouldn’t avoid them or primarily seek out other Americans)”

“On future travel to Germany I would learn from Germans their language and their culture”

The first item was observed to cross-load strongly onto a Knowledge factor (Factor 5) and the second item also showed a (somewhat) weak cross-loading onto a different Knowledge factor (Factor 9). Because of this persistent cross-loading, I recommend that these two items be given particular attention in future implementation of this study. They very possibly could be inappropriate items to include for assessing Attitude. Even so, their suitability could also be contingent on the sample population. It is very possible that a different group of student could respond differently to these questions. A population of students who, for example, had already studied abroad might

produce a different response to these items which might change the factor-loading of the items. Further study with augmented populations is necessary before a final verdict can be rendered.

Table 3.7: Secondary PCA for Attitude

Component Matrix^a		
Attitude	Component	
	1	2
take on various roles appropriate to different situations (e.g., in the family, as a student, friend, etc.)	.861	
try to understand differences in the behaviors, values, attitudes and styles of host members	.849	
deal with my emotions and frustrations with German culture (in addition to the satisfaction and enjoyments it offered)	.845	
adapt my behavior to communicate appropriately in Germany (e.g., in non-verbal and other behavioral areas, as needed for different situations)	.825	
deal with different ways of perceiving, expressing, interacting and behaving	.815	
reflect on the impact and consequences of my decisions and choices on Germans I interact with	.810	
learn from Germans, their language, and their culture	.787	.454
try to communicate in German and behave in "appropriate" ways, as judged by my German hosts	.784	
deal with the ethical implications of my choices (in terms of decisions, consequences, results, etc.)	.782	
suspend judgment and appreciate the complexities of communicating and interacting interculturally	.768	
interact in alternative ways, even when quite different from those to which I was accustomed and preferred	.768	
show interest in new cultural aspects (e.g., to understand the values, history, traditions, etc.)	.742	
interact with Germans (I wouldn't avoid them or primarily seek out other Americans)	.597	.579

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Awareness

One item with a communality of .37 was considered for removal because it did not meet the minimum expected communality value of .50. A communality value this low indicates that the factor solution explains less than 50% of the item's variance. This fact raises the question of the role that chance plays in the item's scores (as opposed to Awareness). Even so, the item's factor score was high enough (.61; See Table 3.X, below) to retain it in the scale; item was substantially similar to other items in the Awareness category to indicate they are all part of the same construct. Likewise, the item, which cross-loaded onto a different factor in the primary analysis, did not load onto a different factor in the secondary. Consequently, no item was removed. The scale was retained in its entirety and represents an appropriate collection of survey items describing a student's intercultural awareness.

Table 3.8: Secondary PCA for Awareness

Awareness ^a	Factor 1
my own level of intercultural development	.850
my choices and their consequences (which make me either more, or less, acceptable to German conversation partners)	.843
the potential consequences of generalizing individual behaviors as representative of the whole culture	.843
how my values and ethics are reflected in specific situations	.840
my personal values that affect my approach to ethical dilemmas and their resolution	.839
the level of intercultural development of others with whom I interact (fellow students, professors, friends, co-workers, etc.)	.838
responses by Germans to my own social identity (e.g., race, class, gender, age, etc.)	.820
varying cultural styles and language use, and their effect in social and working situations	.814
Germans' reactions to me that reflect their cultural values	.812
how Germans might view me and why	.809
myself as a "culturally conditioned" person with personal habits and preferences that are expressions of my own culture	.806
how varied situations in German culture might require modifying my interactions with others	.800
differences and similarities between my own and German language and culture	.799
how others perceive me as communicator, facilitator, or mediator in intercultural situations	.794
diversity in Germany (such as differences in race, class, gender, age, ability, etc.)	.754
my negative reactions to these differences (e.g., fear, ridicule, disgust, superiority, etc.)	.610

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Knowledge

Table 3.X below identifies three items with low communalities (less than .50). These items were (numbers in parentheses indicate communality values)

I know when I am experiencing stress arising from cultural differences (.32)

I could cite a definition of culture and describe its components and complexities (.41)

I can contrast my own behaviors with those of German peers in important areas (e.g., social interactions, basic routines, time orientation, etc.) (.32)

However, only the last item was removed from the analysis. This was done because the patterns of cross-loading in both the primary and the secondary analyses suggested that the item's variance was poorly explained by the model *and* it contributed considerably less to the subdomain than other items.

The solution which resulted from the removal of the third item in the above list is composed of 2 factors and has one item which loaded onto both factors: "I could discuss and contrast various behavioral patterns in my own culture with those in Germany." Because of this cross-loading and the cross-loading in the first analysis (onto a Skills factor as well as an Awareness factor) this item was also removed from the subdomain. A third iteration of the Knowledge items was run and it produced a factor matrix composed of two factors. All items but two loaded onto the first factor which accounts for 53% of the variance. These other two items load onto their own factor and account for 14% of the variance in Knowledge scores. The two items in the second factor are:

I can describe some important historical and socio-political factors that shape my own culture.

I can describe some important historical and socio-political factors that shape German culture

Interestingly, these items were derived from one item in the original AIC: “I can describe some important historical and socio-political factors that shape my own and the host culture.” This item was modified in order to obtain some clarity about the participants’ knowledge. The fact that they comprise a factor separate from the other Knowledge items indicates one of two possibilities. First it is possible that had they remained a single item, the analysis would not have separated them from the other items in the factor analysis, though it is not possible to confirm this hypothesis. The second option is that these items indicate a different kind of knowing than the other items. I would argue that this is very likely. An examination of the items (Table Y) shows that the items in factor one all address various aspects of behavior, interaction, language. They refer to strategies and techniques. The two items in the second factor refer to “content knowledge” of the C1 and C2, which does not reference interpersonal interaction the way the first factor does.

Table 3.9: Secondary PCA for Knowledge

Knowledge ^a	Factor	
	1	2
I could describe interactional behaviors common among Germans in social areas (e.g. family roles, hospitality, friendships, problem solving, making presentations, etc.)	.807	
I know some strategies for overcoming stress from cultural differences	.795	
I know some techniques for effectively asking and learning about German culture	.770	
I know some techniques to aid my learning of German language	.747	
I can describe phases I might experience if I were to have to adjust to living for a longer amount of time in Germany	.731	
I know the essential norms and taboos of Germany (e.g., greetings, dress, behaviors, etc.)	.676	
I know when I am experiencing stress arising from cultural differences	.517	
I could cite a definition of culture and describe its components and complexities	.497	
I can describe some important historical and socio-political factors that shape my own culture.		.917
I can describe some important historical and socio-political factors that shape German culture		.820

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Skills

Only one item had to be removed from the analysis: “I am generally aware of my behavior and reflect on how it impacts my learning, my growth and especially how I interact with people” (.48). This decision was made on the basis of both a low commonality score and problematic factor loadings in both the primary and secondary analyses. In spite of the relative simplicity of this part of the analysis, the investigation of

the factor matrix (seen in Table 3.X below) proved to be more complex than the other three subdomains. The factor solution produced three factors which account for 75% of the variance for the Skills subdomain. Five items loaded onto more than one factor. Before a decision was made whether to remove these items from the analysis, the distribution of the items into the three factors was first explored.

This exploration revealed that the Skills items actually investigate three *distinct* types of skills, which correspond to the three factors extracted by the analysis. The resulting typology is not delimited in any of the ICC frameworks presented in the review of literature on ICC (Chapter 2). The first skill type could be called “Using Tools.” These “tools” are actually sets of strategies and techniques that can be implemented to further one’s learning about language and culture. The second skill type could be seen as corresponding to Byram’s (1997) *savoir apprendre* and *savoir comprendre* or the skills for interacting, discovering, interpreting and relating. This type addresses the skills necessary for either deriving new cultural learning by interacting or for putting such learning to use in interaction. Finally, the third skill type addresses adjusting one’s behavior or language in order to interact appropriately with their intercultural interlocutor(s). The last item in Table Z, however, does not seem to follow this classification. “Comparing and contrasting German culture and my own” would seem to more a cognitive exercise more appropriate for type 2 which addresses the necessary skills to interpret and relate two sets of cultural information. It remains unclear why this item has loaded onto this third factor.

Table 3.10: Secondary PCA for Skills

Skills ^a	Component		
	1	2	3
I have at my disposal various strategies and techniques for learning German language	.829		
I can use strategies for learning German language	.776		.447
I have at my disposal various strategies and techniques for learning about German culture	.771	.471	
I can use strategies for learning about German culture	.727		
I have at my disposal various strategies for adapting to the German culture and reducing stress arising from newness and difference	.689	.523	
I can figure out when a miscommunication is occurring because of a cultural misunderstanding			.835
I can ask the right questions to learn about the deeper cultural issues at play in a specific cultural product (magazine article, TV commercial, a political cartoon, etc.)			.822
In the past I have helped to resolve cross-cultural conflicts and misunderstandings when they arose			.776
I can use information about German culture to improve my communication skills and interactions with Germans I encounter	.467	.721	
I can adjust my behavior, dress, etc., as appropriate, to avoid offending German hosts			.821
I can be flexible when interacting with persons from Germany			.736
I can interact appropriately in a variety of different social situations in Germany	.579		.605
I can contrast and compare German culture with my own			.601

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Conclusion

The Principle Components Analysis showed that, to a large extent, the assumed factor structure for this survey bears out to be valid. When analyzed together, the 55 items are associated with the appropriate subdomains. Very few items presented a compelling case for their removal from the instrument. Furthermore, the secondary analysis for each individual subdomain produced a number of interesting findings. First, the more affective subdomains, Attitude and Awareness, each converge onto one factor and can be described as rather one-dimensional. That is, they address more or less the same idea. The other two subdomains, however, are more multi-dimensional. As discussed above, Knowledge is composed of two factors and Skills, is composed of three: Using Tools, Interacting and Adjusting. At the beginning of this discussion, I had said that a desirable outcome of the analysis was a singular factor structure (all items converge on one factor). However, a close investigation of the text of the constituent items showed that there was conceptual consistency in the distribution of the items in the various factors. This outcome indicates that the items address various aspects of their appropriate subdomain. Such a finding is, ultimately, no cause for alarm regarding the validity of the scales for the current study.

There is one important caveat to the preceding discussion. The sample size required for a valid factor analysis can be determined according to one of two criteria. The first criterion considers the ratio of sample size to total items or variables. These ratios can range between 2:1 to 20:1. A survey of social science studies employing factor analysis identified over 60% of studies in a two year period used ratios of 10:1 or less (Costello & Osborne, 2005). The current study's sample-to-item ratio is approximately 2:1. The current study's ration is roughly 2:1—at the very low end of what is acceptable. The other school of thought on the subject considers only sample size. Here again,

recommended samples range from 100 as a minimum n to 1000. My study has 108 participants, which is again at the low end of what is considered acceptable. Thus, while the sample size of the current study would be considered small, by both of these measures, it is still within range of acceptable values. That said, factor analysis will always benefit from larger data sets and further testing of the survey with larger populations would strengthen validity claims. In spite of the relatively low sample size, however, the results of the analysis provided rather consistent factor loading and revealed clear patterns. The items which were intended to address Awareness and Attitude proved particularly valid as subscales for those two domains. The subscales for Knowledge and Skills showed more complexity, but also revealed a more about the various dimensions which should be accounted for when assessing those subdomains. In conclusion, I would suggest that, pending the use of the AUIC in larger studies with expanded sample populations, the items which present special concern be treated with special attention, but that they not be removed from the instrument entirely.

Reliability Testing

In order to gauge the internal consistency of the inventory, Cronbach's alpha was identified for the composite scores (ICC score) and for each of the subscales. The results are summarized in Table 3.2. All alphas indicate very high internal reliability of the assessment instrument. This indicates that there is a very high probability that the scores produced by this survey are not produced by chance; the instrument itself is well correlated with the scores it produces.

Table 3.11: Cronbach's Alpha Reliability Values

Scale	Cronbach's Alpha	N of Items
Knowledge	.90	12
Attitude	.95	13
Skills	.93	14
Awareness	.96	16
Composite ICC	.97	55

Respondents' scores are presented below in Table 3.3. As can be seen in the standard deviation values, a large proportion of values are gathered around the mean, which suggests that the scores are not widely distributed across the range of possible responses; they tend to cluster around the mean of the subscale. In other words, the means reflect strongly a general trend among the participants. Additionally, the means themselves are very similar across the course groups. These observations also suggest, then, that there is a lack of effect for Course in ICC scores, and regardless of what stage students are at in their curricular progress, the scores are generally around 4.70. This lack of effect for Course in ICC scores will be quantified in the analysis for Research Question 1.

The Assessment of Undergraduate Intercultural Competence (AUIC) gathered participant responses on a Likert-type scale which was demonstrated to have high internal reliability. A composite ICC score was derived from the means on 4 subscales assessing the domains of Knowledge, Attitude, Skills and Awareness. Scores in the subdomains were produced and found to have a very narrow distribution. Similarly, the scores differed very little, indicating that further analysis will show a lack of effect for Course in

ICC scores. The following section will address more precisely how the AUIC was adapted to the specific undergraduate language learning context.

Table 3.12: Distribution of ICC and Subdomain Scores

Scale	First Semester		Second Semester		Third Semester		Fourth Semester	
	M	SD	M	SD	M	SD	M	SD
Knowledge	3.96	1.07	4.28	.74	4.29	.67	4.46	.72
Attitude	5.37	.66	5.26	.70	5.49	.44	5.39	.58
Skills	4.68	.98	4.76	.82	4.99	.35	5.00	.68
Awareness	4.37	1.21	4.50	1.04	4.70	.60	4.63	.94
Composite ICC	4.60	.86	4.70	.70	4.87	.38	4.87	.58

THE SURVEY INSTRUMENT

The survey instrument is a modified Assessment of Intercultural Competence (AIC) (Fantini, 2005a). This original survey had a total of 215 items, of which 53 comprised the core assessment of intercultural competence. The remaining items collected personal and demographic data about the participants including information on personality traits, motivations and communication styles. Table 3.4 shows the breakdown by category of items in the original survey. The complete original survey can be viewed in Appendix A.

Table 3.13: Comparison of Survey Structures

Category	Number of Items	
	AIC	UAIC
I. About the respondent (demographic data)	37	23
II. Personal characteristics	32	32
III. Motivations and Options	18	14
IV. Language proficiency	15	15
V. Communication styles	47	0 (section deleted)
VI. Intercultural areas	12	12
VII. Intercultural abilities	54	55
Knowledge	11	12
Attitude	13	13
Skills	11	14
Awareness	19	16

When designing the modifications for the current survey instrument several considerations had to be made. First, the entire context of the survey had changed. Whereas the AIC surveyed participants in an experiential learning program in Ecuador, the new instrument, the Assessment of Undergraduate Intercultural Competence (AUIC) is intended for undergraduate language students, most of whom have likely had no study-abroad experience. With this in mind, all references to time spent in Ecuador and speaking Spanish had to be revised.

Second, all questions referring to a participant's time in the "host country/culture/language" were changed to refer to an appropriate context for the

undergraduate students in the university’s program. For example, the section assessing language proficiency originally prompted participants to describe “your Spanish language ability at the BEGINNING and the END of your stay in Ecuador” (emphasis original). This was changed to read “your German language ability at the BEGINNING of the current semester.” The second reference point, “the end,” was rewritten to say “at this point in the semester.” Questions such as number 25 in Part V, “When discussing an issue with others in the host culture, I believe they...” was changed to read, “When discussing an issue with others in Germany...”

Third, references to the past, as in, “I knew some techniques to aid my learning of the host language...” were changed to refer to the present, such as: “I know some techniques to aid my learning of German.” Other past tense references to lived experience became hypothetical statements about possible travel to Germany are summarized in Table 3.14:

Table 3.14: Textual modifications of mood

AIC	UAIC
How would you characterize your motivation toward the host culture while in Ecuador?	How would you characterize your motivation toward German culture when thinking about potential travel to Germany?
While in Ecuador I demonstrated a willingness to...	While on a trip to Germany I would be willing to...
During my stay in Ecuador I established and maintained good relationships with...	If I were to study at UT’s Würzburg program, I’d be able to establish and maintain relationships with...

Fourth, Part IV had to be adapted significantly. In the original questionnaire, items 7-19 address informants who have returned from a study program in Ecuador. The questions inquire about the informant’s desire to participate and learn about the target culture. The undergraduate participants in the current study do not have this unifying experience. In order to address the undergraduate context, this section first asks a disambiguating question: “Prior to studying German at UT, did you live for any length of time outside of your home country?” Participants responding “yes” answered four follow-up questions. Participants responding “no” continued with the survey.

Fifth, the prompt for the section “Intercultural Areas” was modified. In the original it was a retrospective measure of a participant’s sense of accomplishment in general areas while participating in a specific, shared, study-abroad experience. In order to accommodate the undergraduate language learning experience, the contextualizing phrase, “during my stay in Ecuador,” in the original AIC was rewritten. In its place, prompts ask respondents to consider if they were to participate in the German Department’s summer study program in Würzburg, Germany. These items can be seen in Table 3.15.

Table 3.15: Modifications to Part VI

If I were to study at UT’s Würzburg summer program, I’d be able to...
establish and maintain good relationships with the Germans I meet
communicate in German
communicate in English with the Germans I meet
cooperate with others, as needed, to accomplish tasks of mutual interest.

Sixth, the directions and prompts for each major section were modified for several reasons. Often the online format of the survey required some design changes which, however, did not result in substantive content modification as in the first part on Personal Characteristics. Other times the current context required a revision of the section entirely as in part six on Intercultural Areas. Here, the AIC considered only one group of participants: recent alumni of a study abroad program. In order to evaluate change over time, this section took on a repeated-measures design in which participants rated themselves twice: once at the beginning and once at the end. The goal of the UAIC, on the other hand, is to assess change between groups of students and, by implication, over time. Thus, participants were asked to rate each item only once; variation over time would be analyzed by comparing first-semester respondents to second-, third- and fourth-semester groups. Finally, directions were modified in order to improve clarity for the respondents as in the final four sections. These modifications to the prompts are presented in Table 3.16.

Table 3.16: Modifications in Current Instrument to Prompts in Original AIC

	AIC	UAIC
I. Personal Characteristics	Please answer all of the following questions. Using a scale of 0 to 5 (highest), rate yourself on each characteristic listed below by checking the number that best represents how you perceive yourself in your own culture. Then also rate yourself, as you believe your hosts perceived you during your stay in Ecuador.	Please respond to all of the following items. For both questions you will use a scale of 0 (lowest) to 5 (highest) to rate yourself on each characteristic listed below. For question 1 rate each characteristic on how you perceive yourself in your own culture. In question 2 rate each characteristic as you believe Germans might perceive you during a trip to Germany
II. Motivation and Options	(no instructions)	Please rate each item using the following scale: 0 (none) 5 (extremely high)
III. Language Proficiency	Mark with an (X) the one item below that best describes your Spanish language ability at the beginning and at the end of your stay in Ecuador	In this section consider your language ability when you started this semester and now at the end of the course. Of the 15 descriptive items below, choose that describes most closely your language skills at the start of the course. Choose another one to describe your language skills now, at the end of the course.
IV. Intercultural Areas	Check the number below (from 0=Not at all to 5=Extremely well) that best describes your situation	Check the number below that best describes how you believe you might perform in each given situation. 0 (Not at all), 5(extremely well)
VI. A. Intercultural Abilities—Knowledge	Please respond to the questions in each of the four categories below, using the scale from 0 (=Not at all) to 5(=Extremely High). Mark each item twice. First, mark with an (X) to indicate your ability at the beginning of your stay in Ecuador. Then, mark the same item with an (X) to indicate your ability at the end of your stay. This will provide a basis for comparison before and after.	Please respond to the questions in each of the four categories below, using the scale 0 (Not at all) to 5 (Extremely high)
VI. B. Intercultural Abilities--Attitude	See Knowledge above	Please respond to the items below, using the scale 0 (Not at all) to 5 (Extremely high). Consider the following prompt: “While on a trip to Germany, I would be willing to...”
VI. C. Intercultural Abilities—Skills	See Knowledge above	Please respond to the items below, using the scale 0 (Not at all) to 5 (Extremely high).
IV. D. Intercultural Abilities—Awareness	See Knowledge above	Please respond to the items below, using the scale 0 (Not at all) to 5 (Extremely high). Consider the following prompt: “During my study of German language and culture, I have come to realize the importance of...”

A final category of modification to the survey involved the addition of items for one of two reasons. First, the survey needed to account for the undergraduate context in collecting demographic data. Items such as “Major,” “Study Abroad Experience” and “German Course” were added. Second, the section, “Intercultural Abilities” was found not to address a very few, yet important dimensions of ICC, especially as conceived by Byram (1997). For this reason two items were added to the sections “Skills” as follows:

I can figure out when a miscommunication is occurring because of a cultural misunderstanding

I can ask the right questions to learn about the deeper cultural issues at play in a specific cultural product (magazine article, TV commercial, a political cartoon, etc.)

DATA COLLECTION PROCEDURE

In order to solicit participants, I visited each section of all four courses of German language offered at the university, with one exception. Because I taught one section of second-semester German during the semester of data collection, this section had to be exempted from the study in order to prevent exposing students to any appearance of undue influence or coercion. During each visit, which occurred at the very beginning or end of a class session, I introduced myself and extended a personal invitation to take part in the survey. The nature of the study and the procedures used to maintain confidentiality and anonymity were explained. Interested students were asked to give an identifying name and an email address. This information was then used to send a link to the online study via Survey Monkey. Interested students also received a printed copy of the

informed consent form. Additionally, a copy of the consent form comprised the first page of the online survey with a statement stating that completion of the survey implies giving consent to be part of the study. No identifying data was collected during the survey or interviews and email addresses were collected only to contact subjects for possible follow-up interviews.

The study's survey was administered via Survey Monkey. Participants were asked to complete the survey within two weeks of receiving the email which provided the link to the online survey. Participants could complete the survey on their own time in a location of their own choosing. The completely anonymous survey did not ask for any personally identifying information. This questionnaire asked participants to reflect on their experience as language learners and to consider how they interact with people in intercultural contexts. Participants were asked to report on various personal traits and skills they have which may or may not aid in successful negotiation of interactions with interlocutors from other cultures.

DATA ANALYSIS

The software package SPSS/PASW Statistics 18 was used for all statistical calculations. The survey data were first organized and coded into several variables central to the answering the research questions. The categorical variables are summarized below in Table 3.17 and were used to answer Research Question 4 and to help parse the results of the analysis for Research Questions 2 and 3.

Table 3.17: Categorical variables used in analyses

	Term	Levels
Variables	Intercultural Relationships (ICR)	Yes (student does have relationships with people of different cultures) No (student has no such relationships)
	Time Spent Abroad (Abroad)	Yes (student has spent significant time living abroad) No (student has not lived abroad)
	Nationality (U.S. or other)	Student is U.S. citizen Student is non-U.S. citizen
	Gender	Male Female
	Place Where Intercultural Relationships Were Formed (ICRPlace)	No relationships Only at home Only abroad Both at home and abroad
	Year in language program (Year)	First-year (enrolled in first or second-semester courses) Second-year (enrolled in third or fourth semester courses)

The survey items, which measured ICC specifically were continuous variables and required the following process in order to produce usable information. First, all responses had to be recoded in order to provide non-zero values. That is, because the scales used in the online survey ranged from 0 to 5 all responses had to be reweighted on a scale from 1 to 6. After this recalculation, items were organized by the subdomain they assessed: Knowledge, Attitude, Skills and Awareness. The mean of the items in each subdomain was calculated, producing four scores, one for each subdomain. The mean of these four scores together was then found. This final number is the ICC score for a

respondent. These five scores were used for all analyses which compare groups vis-à-vis ICC or subdomain scores.

The ICC scores were analyzed by using two-way Analysis of Variance (ANOVAs) in order to determine variation among the different course groups: first-semester, second-semester, third-semester and fourth-semester learners. A repeated-measures ANOVA was run on the subdomain scores to identify differences in the subdomain scores with respect to the course respondents were enrolled in. For these tests, ANOVAs are preferred to other methods of difference testing for their ability to accurately assess difference between groups of large populations (over 20 members). For smaller groups t-tests would have been preferred.

In order to determine what other factors besides “exposure to instruction” might contribute to ICC development, a standard multiple linear regression analysis was performed. Regression analysis was chosen for its ability to describe the relationship of dependent variables to independent variables. It was expected that a specific set of predictor characteristics or factors would emerge which can be used to improve teaching for ICC development. The analysis evaluated the relationships among ICC levels and the following characteristics:

- Gender
- Nationality
- Experience living abroad
- Intercultural relationships
- Year in the language program
- Personality traits
- Possible responses to study abroad experience

These data analysis methods are summarized in Table 3.18 below and shown with their corresponding research questions.

Table 3.18: Methods of analysis by Research Question

Research Question	Data set	Analysis methods
Is there an increase in intercultural competence (ICC) seen in the cross-section of participants?	“Intercultural Abilities”	ANOVA
To what other factor or factors can ICC be attributed?	“Intercultural Abilities” and “About Yourself”	ANOVA
Which, if any, of four dimensions of ICC (Knowledge, Skills, Attitude and Awareness) is more evident at any given level of language learning?	“Intercultural Abilities” by Course (First-, Second- Third-, Fourth-Semesters)	Repeated Measures ANOVA
What is the relationship of other factors, to ICC development?	“Intercultural Abilities” “Personal Characteristics” “Motivation and Options” “About Yourself”	Multiple Regression

Conclusion

This chapter described the methodology for the current study, which surveyed 108 undergraduate German language students enrolled in the first- through fourth-semester lower-division language courses. The study involved the revision and adaptation of an instrument, which collected demographic and personality data as well as responses on items which assessed various components of Intercultural Communicative Competence. PCAs showed the instrument to valid vis-à-vis the four-part construct of ICC and tests for Cronbach’s alpha showed a high degree of internal reliability. The chapter also outlined the analytical methods used to answer the study’s research questions. The following chapter will present the findings of these analyses.

Chapter 4: *Results*

Introduction

This chapter presents the major findings of the study. It begins with a summary of the resulting scores and their distribution as well as the results of reliability testing. Next, demographic information about the respondents will provide a more complete illustration of who participated in the study. Finally, each research question will be addressed in terms of the statistical analyses followed by an interpretation of the meaning of those results.

Demographic Information

The first part of the survey instrument gathered demographic information about participants. Of the 108 students who completed the entire survey, 58.3% were female ($n = 63$) and 42.6 % were male ($n = 46$). The vast majority of participants (92%, $n = 99$) were between the ages of 18 and 24. Only 6% were between 25 and 29 ($n = 6$), whereas only 3 were 30 years old or older. The survey did ask for more granular information, which is a recommendation for future revisions of the instrument. The disparity among the *ns* made treating age as a possible predictor variable for Research Question 2 impractical⁷.

15% of participants identified as a Freshman (first year of study), 34% were Sophomores, 22% were Juniors, 24 % were Seniors and there were four graduate students who participated in the study. These participants in terms of course groups were

⁷ Given that there was no development of ICC over time as measured by Course (e.g., progress through a language program), age was considered another way to investigate ICC development over time. Research on ICC development which describes participants' age generally makes no attempt to connect the two. "College-age students" is a common designation for participants and has no bearing on the proceeding analysis. Future research will have fill in this gap.

distributed as follows, 27% of respondents were enrolled in first-semester, 25% in second-semester, 20% in third-semester and 28 % in fourth-semester. The above demographic information about the participants is summarized in the following table and is organized by course group.

Major Courses of Study

Students represented a broad spectrum of majors and minors; several identified multiple courses of study. Over half of all majors were in the College of Liberal Arts ($n = 60$), studying among other subjects, Psychology, European Studies, Government, German, and History. The College of Communications represented the next largest group of majors with 18% ($n = 19$) studying fields such as Communication Studies and Radio-Television-Film. The College of Natural Sciences can claim 13 majors (12%). Nine students studied in the School of Business (8%) and seven students in the College of Fine Arts (6%). This collection of 5 institutional units represents less than half of the colleges and schools housed at the university.

Nationality and Native Language

Respondents were asked to state their nationality and were permitted to generate their own response label (as opposed to have to choose from pre-determined categories). 78% of respondents ($n= 85$) claimed the “U.S.” or “American” as their nationality. Another 12 responded with “Caucasian” or “white.” All of these participants stated that English was their native language. Other nations of origin included Switzerland, Lebanon, Iran, Great Britain, the Czech Republic and Mexico. Fewer than 8% of all responses claimed a native language other than English. These included, Spanish,

Cantonese, Gujarati, Farsi and German. The variable of native language was not used in the analyses as the vastly unequal group sizes would have distorted the results⁸.

Time Abroad

Over one-third of all participants (34%, $n = 37$) claimed having spent some time living outside of their home country. Of these, 89% claim English as their native language. 25 of them claimed “American” (U.S.) as their nationality. Of this group of students, the maximum time spent outside the home country was 15 years. Three students reported having been born in a foreign country and leaving before they were 5 years old. 18 participants spent one or more years living abroad.

Within the group that had lived abroad, 43% stated that their experiences abroad did not help develop skills useful in their coursework. Of the 57% ($n = 21$) responding affirmatively, 17 participants cited a positive effect on language skills. Of the four participants who did not specifically cite language-related effects, two identified open-mindedness as the main outcome of their experience; one claimed greater facility “interacting and relating with other language learners and foreigners;” and one cited improved study skills. Slightly more than half of this group stated that their experiences abroad led them to their language study. These characteristics of students who have lived abroad are summarized below in Table 4.1

When examining each course level, we see that approximately one-third of first-semester students (31%) and one-third of second-semester students (32%) say that they have spent significant time abroad. This also applies to students in the fourth semester

⁸ Students’ nationality figured in an ANOVA (see chapter 4, Research Question 2) on the variable Nationality which determined that there was no significant effect on the composite ICC scores, though there is a small effect for Skills and Awareness.

course (31%). A larger proportion of the third semester course, 47%, express having spent time abroad. This difference cannot be attributed to participation in the summer abroad program offered by the department in the summer; only one student from third-semester and one student from fourth-semester did so.

Only one quarter of all respondents claim not having any significant language and culture learning experiences before starting their German language studies. Two-thirds of respondents report not having lived outside of their home country.

Table 4.1: Skills Developed During Sojourn Abroad

Course Level	Experience Abroad (not necessarily study)		Skills from Experience Abroad	
	<i>n</i>	%	Linguistic	Other
First-semester	9	31	4	0
Second-semester	9	32	5	0
Third-semester	10	47	5	1
Fourth-semester	9	31	3	3
Total	37	34		

Research Question 1: An Effect for Time in the Language Program

Is there an increase in intercultural competence (ICC) seen in the cross-section of participants?

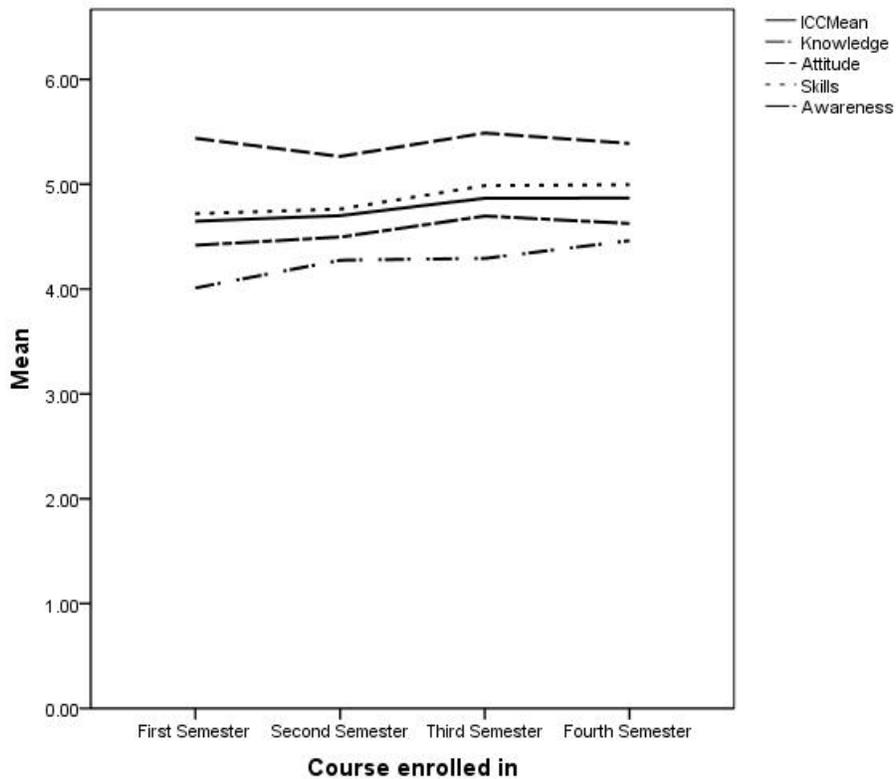
An ANOVA (analysis of variance) was performed to determine if there was a difference in the mean ICC scores of the course groups (Course). The results showed that there is no statistical difference in the scores of the course groups: $F(3, 104) = 1.105$,

$p=.351$. In other words, the mean scores for the first semester were not different from the scores for second, third, or fourth semesters. This means that as a student progresses through the German program we cannot reliably expect a measurable increase in the ICC score which would be attributable to participation in the program. That is, there is no effect for Course on ICC scores. Moreover, there are no significant differences in *any* subdomain across Courses: Knowledge, $p=.133$; Attitude, $p=.651$; Skills, $p=.317$; Awareness, $p=.637$. Thus, a significant difference in Knowledge scores, for example, is not observed from the first-semester course through the fourth semester. This observation applies to the Skills, Awareness and Attitude scores as well. These statistics are summarized in Table 4.2 and the means of the aggregate score as well as the subdomains are represented in Figure 4.1.

Table 4.2: ANOVA Comparing score of course groups

	Subscale	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	ICC	1.468	3	.489	1.105	.351
	Knowledge	3.913	3	1.304	1.906	.133
	Attitude	.613	3	.204	.548	.651
	Skills	2.076	3	.692	1.190	.317
	Awareness	1.60	3	.53	.54	.659

Figure 4.1: Mean scores by Course



There are at least two possible reasons for this result. The first is that four semesters of language instruction is simply not enough time for students to develop in ways which the current assessment instrument is able to measure. This could involve better understanding of the concepts of ICC and its constituent subdomains. It could as well entail students' better understanding the connection of their in-class learning to intercultural interaction. The second possibility is that the curriculum of the program framed cultural learning and skill development in a way, which did not map onto the conceptual framework of the survey. Such a mismatch might have made it difficult for students to transfer their understandings from one framework to another. For example, an assessment question in the third-semester course was, "What makes Heidelberg a

college town (*Studentenstadt*)?” However, it is unclear in the question itself or the instructions for the activity what criteria should be used. Is this simply a matter of identification and vocabulary? Is this an assessment of cultural knowledge/learning? If it is the latter, an approach using the four domains of ICC might help to map “German class” onto intercultural language learning objectives: Knowledge of generic characteristics of *German* “Studentenstädte,” skills to find evidence in Heidelberg which might fit these characteristics; awareness of when students are projecting their own cultural expectations of a “college town” onto the discussion; attitudes of openness and acceptance when their expectations conflict with a different reality. This approach to the question provides a much richer learning environment and might better “map” onto intercultural language learning objectives.

Both of these contingencies require significant further study as they would provide an important perspective on the environments which give rise to specific sorts of cultural learning and skill development. There is no shortage of research which shows that implementation of explicitly intercultural learning activities on a regular basis does result in ICC development (Arevalo-Guerrero, 2009; Belz, 2007; Elola & Oskoz, 2008; Furstenberg, 2010; O’Dowd, 2003; Schuetze, 2008). Therefore a third question arises from this finding: Is it a function of *this specific* language program or is it a function of a type of curriculum? That is, must there be explicit, overt instructional intervention for researchers to attribute ICC to student participation in a language program? Given that the experimental treatments cited above have provided evidence for an effect for instruction, I would hypothesize that, indeed, those findings could be extended to a curriculum.

In order to address these questions, any research program should begin with a study, which administers the AUIC survey to two different types of four-semester

language programs. This kind of contrastive study would provide important data to help determine whether and to what extent curriculum design contributes to ICC development in language students. The first type of program addresses culture in its curriculum in a more or less traditional manner. In such programs, culture is seen as a “fifth skill” in addition to the traditional four skills of reading, writing, listening and speaking. Culture, in many respects, would be seen as the “Culture box” in textbooks, as (co)incidental to the “real” language instruction. These are the kinds of approaches to culture teaching which Galloway (1985) laments with names such as the “Tour Guide” and the “By-the-Way” approaches.

The second type of program addresses ICC much more explicitly and its curriculum addresses ICC as a central component of the curriculum which needs to be taught and assessed. Such a program ideally would have articulated curricular objectives for each course; sense of the kinds of learning activities and assessments suited to help students achieve those objectives; a clear working definition of ICC compatible with departmental goals; and a professional development program for instructors to support them as intercultural teachers.

Admittedly, this is indeed a tall order for a program of research. At a more practical level, a study which simply contrasts a “conventional” first-semester language course to a first semester intercultural language course would provide valuable data with which to begin a longitudinal study of an intercultural language curriculum as it unfolds. Research questions for such a study could include

1. Do intercultural competence scores of students in an intercultural language course differ from the scores of students in a conventional language course?
2. Do contributing factors to ICC differ between the two groups of students? If so, how?

3. Do subdomain scores change differently when comparing these two groups?
4. Is language learning affected by an intercultural curriculum? If so, how?

Summary of Research Question 1

An ANOVA for Course found there to be no effect for time in the language program on ICC scores. This finding seems to be related to existing research on the effectiveness of instructional interventions for developing ICC in language students. Further study must be done in order to determine whether the results of the analysis should be attributed to the construct of ICC itself, or to other factors like curriculum.

Research question 2: ICC development in students.

To what demographic or experiential factor or factors can ICC be attributed?

Because there was no effect for time in the program, other factors were analyzed to determine if a respondents ICC is affected by other variables. Participants were thus organized into separate analyses by:

- Gender;
- Nationality (U.S. American or other nationality);
- Whether respondents had intercultural relationships (friends, relatives, co-workers);
- Where these intercultural relationships were formed;
- Whether respondents had lived outside of their home culture for a length of time.

Two analyses of variance (ANOVAs) were run on each of these variables individually. First, an analysis was done on the composite score with regard to the specific variable. For none of these factors was there a significant difference in the ICC scores. A second analysis was also run on each subdomain vis-à-vis each specific variable. These tests showed a significant between-groups effect for *some* of the factors: on *some* of the subdomains, The following discussion will elaborate on the two analyses for each factor separately, and will elaborate on the factors that showed significant effects on specific subdomains.

Gender

There is no effect for Gender in any of the subscale scores. Male and female students do not score differently from each other for either the ICC composite score nor in any of the subdomains, as seen in the table below.

Table 4.3: ANOVA comparing scores of male participants to female

		Sum of Squares	df	Mean Square	F	Sig.
Composite ICC	Between Groups	.13	1	.13	.29	.593
	Within Groups	47.40	106	.45		
Knowledge	Between Groups	.01	1	.01	.01	.919
	Within Groups	75.06	106	.71		
Attitude	Between Groups	1.30	1	1.30	3.62	.060
	Within Groups	38.08	106	.36		
Skills	Between Groups	.01	1	.09	.01	.908
	Within Groups	62.57	106	.59		
Awareness	Between Groups	.09	1	.09	.09	.768
	Within Groups	104.69	106	.99		

Nationality

The ANOVA for the variable Nationality shows ICC scores to be no different between U.S. citizens and non-U.S. citizens. However, two of the four subdomains do reflect significant differences. The Skills subdomain was shown to be statistically different between U.S. citizens and “foreigners”, $F(1, 106) = 4.07, p = .046$, in that students who claimed U.S. citizenship had consistently lower scores than participants who self-identified as citizens of other countries. The effect size was small. The partial Eta squared value was just .03 which means that Nationality accounts for no more than 3% of any variation of the Skills scores. The means for the subdomain Awareness were also shown to be different between the groups, $F(1, 106) = 4.47, p = .037$ and yet its effect size was also small, with a partial Eta squared of .04. Being a U.S. citizen or not cannot be considered a major contributing factor to either of these subdomains, even though the two groups are statistically distinct.

In spite of the low effect size for Nationality, it is intriguing that Skills and Awareness should be affected by one’s citizenship, though perhaps not wholly surprising. Non-U.S. citizen who took part in this study are by definition study abroad students. Given the fact that data was collected at the end of the Spring semester, these students had already nearly completed at least one semester of living and studying on an American campus. In order to have found a measure of success during that time, they had to have developed a number of intercultural skills to aid them in interacting effectively and appropriately with roommates, professors and classmates. Byram and Feng (2006) have documented a variety of skills which study abroad students have been observed developing. Such facilities range from linguistic skills to making social connections, increasing independence and engagement with the host community. Cohen et al. (2005)

demonstrated that a guidebook for students, which explicitly addresses intercultural skills was quite helpful throughout students' experiences.

Along with increased Skills scores it is reasonable to expect that Awareness would increase among foreign students in the U.S., especially because students rated prompts not specifically related to Germany. For example, students were asked to rate how they came to recognize the importance of understanding themselves as “culturally conditioned” people; the consequences of generalizing behaviors (stereotyping); and personal negative reactions when responding to cultural difference. In total nine of the 16 items for this subdomain did not directly reference Germany or German and instead focused on matter of self-awareness when immersed in culturally different situations. In this respect, foreign students would likely have been drawing on more direct and immediate personal experience than American learners, who had never been outside of the U. S. or at least were not outside their home country at the time of data collection.

Table 4.4: ANOVA comparing scores of U.S. citizens to citizen of other countries.

		Sum of Squares	df	Mean Square	F	Sig.
Composite ICC	Between Groups	1.56	1	1.57	3.60	.061
	Within Groups	45.97	106	.43		
Knowledge	Between Groups	.39	1	.39	.55	.460
	Within Groups	74.68	106	.70		
Attitude	Between Groups	.63	1	.63	1.71	.194
	Within Groups	38.76	106	.37		
Skills	Between Groups	2.31	1	2.31	4.07	.046*
	Within Groups	60.27	106	.57		
Awareness	Between Groups	4.24	1	4.24	4.47	.037*
	Within Groups	100.54	106	.94		

Intercultural Relationships

The analysis of variance for the variable Intercultural Relationships shows a positive effect for having intercultural relationships (ICRs) on ICC score, $F(1, 106) = 4.63, p = .034$. The partial Eta squared value indicates a rather weak effect of .04, meaning that the variable only accounts for about 4% of the variance in ICC score. On the other hand, the effect on Knowledge scores is significant and somewhat stronger, $F(1, 106) = 10.36, p = .002$, partial $\eta^2 = .09$. A marginally significant effect on Skills scores was also observed $F(1, 106) = 4.016, p = .048$. There is no statistically significant effect for Intercultural Relationships on Attitude or Awareness scores.

This result is rather perplexing as there seems to be no studied reason why having intercultural relationships would affect subdomain scores differentially. Whether speaking theoretically (Byram, 1997), about social groups (Chen, 2002), or on instructional concerns (O'Dowd, 2003), research has only spoken about the connection between intercultural relationships and ICC.

Table 4.5: ANOVA results comparing students with intercultural relationships to students with no intercultural relationships

		Sum of Squares	df	Mean Square	F	Sig.
Composite ICC	Between Groups	1.99	1	1.99	4.63	.034*
	Within Groups	45.536	106	.43		
Knowledge	Between Groups	6.69	1	6.69	10.36	.002*
	Within Groups	68.38	106	.65		
Attitude	Between Groups	.27	1	.27	.73	.395
	Within Groups	39.12	106	.7		
Skills	Between Groups	2.29	1	2.29	4.02	.048*
	Within Groups	60.30	106	.57		
Awareness	Between Groups	1.06	1	1.06	1.09	.301
	Within Groups	103.71	106	.98		

Time Spent Abroad

The ANOVA for this variable (Abroad) shows no effect on composite ICC scores. However, significant positive effects were seen in the Knowledge and Attitude subdomains, though the effect sizes were weak (Knowledge partial $\eta^2 = .04$; Attitude partial $\eta^2 = .04$). The F and *p* values for these variables are summed up in Table 4.5.

Table 4.6: ANOVA comparing participant who have lived abroad with those who have not

		Sum of Squares	df	Mean Square	F	Sig.
ICCMean	Between Groups	1.10	1	1.10	2.51	.116
	Within Groups	46.43	106	e.44		
Knowledge	Between Groups	3.19	1	3.19	4.70	.032*
	Within Groups	71.88	106	.68		
Attitude	Between Groups	1.44	1	1.44	4.03	.047*
	Within Groups	37.94	106	.36		
Skills	Between Groups	2.20	1	2.20	3.87	.052
	Within Groups	60.38	106	.57		
Awareness	Between Groups	.08	1	.08	.08	.777
	Within Groups	104.69	106	.99		

These results raise the question of why the effect was on two of the scores only? The literature is mostly silent on what factors could influence subdomain scores. One could, however, hypothesize that other factors are at play here. Principally, I suspect that what one brings back from living abroad is very much contingent on the people encountered during one’s travels. Whether the traveler was able to form relationships would likely have influenced what he or she learned from the experience. Put another way, a series of negative reactions might result in negative attitudes and dispositions towards intercultural interaction. Here the presence or absence of a sort of “guide,” someone to help reflect on and interpret experiences, could also have an impact. Vande Berg and Paige (2009) trace six study abroad programs as they emerged and developed between 1975 and the present. A key trend the researchers observed during the study is rise of an interventionist approach on the part of program designers and administrators. That

is, it was determined that without guides or mentors, students are at least as likely to get very little out of their time abroad as they are to derive some sort of benefit (however vaguely “benefit” is conceived). The analysis for Research Question four will investigate in more depth how living abroad interacts with having intercultural relationships

It is entirely possible that the *insignificant* differences for Skills and Awareness had something to do with the participants’ ages while abroad and the nature of travel. Recall the prompt: “Prior to starting German at UT, did you live for any length of time outside of your home country”? At issue is time *living* abroad; the prompt does not invoke *study* abroad. Consequently, it seems a reasonable conjecture that very few of these students would have been older than 18 if their abroad experiences occurred before their language study at college (half of all participants were in their Freshman or Sophomore years and 92% of all respondents were younger than 25 years old). As valuable and as seminal as the experience might have been, it is likely, given their relatively young ages that the participants had other people to accompany them during the experience. If that was indeed the case, it might have been these “guides” who bridged the intercultural gaps in such a way that the participant’s own intercultural skills were not challenged to develop. In the same way, the student might not have needed to be as interculturally aware as he or she might have been during an experience abroad of a different nature.

Where Intercultural Relationships Were Formed

An ANOVA for the variable ICRPlace, where participants formed their intercultural relationships, showed a main effect for the variable on the scores for ICC ($F(3, 103) = 2.73, p = .047$), Knowledge ($F(3, 103) = 2.95, p = .003$) and Skills scores ($F($

3, 103) = 3.65, $p = .015$). The relevant statistics are summarized in Table 4.6⁹. This first analysis merely reports that a difference exists. Before this result could be interpreted, a post-hoc analysis had to be run on the four levels of ICRPlace in order to locate exactly where (i.e. between which levels of ICRPlace) that difference is seen. That discussion follows.

Table 4.7: ANOVA for ICRPlace on ICC and subdomain scores

		Sum of Squares	df	Mean Square	F	Sig.
ICCMean	Between Groups	3.32	3	1.11	2.73	.047*
	Within Groups	41.66	103	.40		
Knowledge	Between Groups	8.85	3	2.95	4.83	.003*
	Within Groups	62.88	103	.61		
Attitude	Between Groups	1.57	3	.53	1.57	.201
	Within Groups	34.43	103	.33		
Skills	Between Groups	5.86	3	1.95	3.65	.015*
	Within Groups	55.08	103	.54		
Awareness	Between Groups	2.19	3	.73	.75	.525
	Within Groups	100.57	103	.98		

The variable ICRPlace actually contains three levels specifying where respondents indicated they formed their intercultural relationships: 1) at home (n = 51), 2) abroad (n= 6), and 3) both at home *and* abroad (n= 14). A fourth level, “no ICRs” (n = 36), was incorporated into the variable to account for participants reporting that they had

⁹ Note that for the analysis of this particular variable one case was removed. The respondent had indicated having spent no time abroad, yet characterized his ICRs as having been formed *only* abroad. The impossibility of such a situation led to the conclusion that the information drawn from these data would not benefit the analysis.

no intercultural relationships. In order to describe more precisely the relationships among these levels, a least significant differences multiple comparisons post-hoc analysis was run on the composite ICC score and the score of each subdomain. This type of analysis allows for the one-to-one comparison of groups in order to identify where significant differences exists between variables. The following statements summarize the findings of those tests. Statistically significant relationships are summarized in Table 4.7 below. A complete table with all multiple comparisons is provided in Appendix B

Knowledge:

Those with no ICRs scored lower than those with ICRs formed at home, i.e., in their home country ($p=.009$), those with ICRs formed only abroad ($p=.023$) and those with ICRs formed both at home and abroad ($p=.003$). *Where* a respondent formed his or her ICRs is not a factor. There are no significant differences among any of the four levels of ICRPlace. It is only important *whether* or not a participant has ICRs.

Attitude

Likewise, there is no effect on Attitude for where intercultural relationships were formed. The only statistical difference between Attitude scores, as with Knowledge is between those who have ICRs and those who reported having no ICRs.

Skills

There is no significant difference between participants without ICRs and participants with ICRs formed only at home. However, participants without ICRs score significantly lower than participants with ICRs formed abroad ($p=.035$) as well as scoring lower than participants with ICRs formed at home and abroad ($p=.005$). The group with

ICRs formed only at home scored lower than the group with ICRs formed at home and abroad ($p=.035$), but any differences with the other groups were not significant.

This differentiation of place as an important factor of intercultural relationships is interesting and one not readily problematized in the literature. Most writing focuses on the simple existence of intercultural relationships as central to the concept of ICC (Fantini, 2000; Imahori & Lanigan, 1989; Spitzberg & Changnon, 2009). Levine (2006) addresses the potential for mentor/learner relationships which can help develop ICC. Relevant to this discussion, however, might be Parmenter's (Parmenter, 2003) operationalization of Byram's (1997) *savoirs* model of ICC in discussion of intercultural relationships. She raises the relevance of notions of face and roles in the development and maintenance of intercultural relationships. I would add from Imahori and Lanigan (Ibid.) that social distance is also part of this consideration. These factors inform how the formation of relationships proceeds and according to what cultural scripts.

Awareness

There are no significant differences in the scores of any levels. In fact, there is not even a difference in the Awareness scores of students with ICRs and those with none.

Table 4.8: Significant Mean Differences Among Levels of ICRPlace*

Dependent Variable	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
ICCMean	No Relationships	Formed both at home and abroad	-0.52	0.20	0.011
Knowledge	No Relationships	Only formed at home	-0.47	0.17	0.007
		Only formed abroad	-0.80	0.34	0.023
		Formed both at home and abroad	-0.78	0.25	0.002
	Only formed at home	No Relationships	0.47	0.17	0.007
	Only formed abroad	No Relationships	0.80	0.34	0.023
	Formed both at home and abroad	No Relationships	0.78	0.25	0.002
Skills	No Relationships	Only formed abroad	-0.69	0.32	0.035
		Formed both at home and abroad	-0.66	0.23	0.005
	Only formed at home	Formed both at home and abroad	-0.47	0.22	0.036
	Only formed abroad	No Relationships	0.69	0.32	0.035
	Formed both at home and abroad	No Relationships	0.66	0.23	0.005
		Only formed at home	0.47	0.22	0.036

* The mean difference is significant at the 0.05 level.

Summary of Research Question 2

Clearly, having ICRs plays an important role in one's intercultural competence. Students with ICRs score consistently higher than students with no ICRs. Moreover, when analysts are concerned with the Skills subdomain of the construct, it seems that *where* these relationships were formed also makes a difference. Students with at least some relationships which were formed abroad score higher than students with relationships which were formed strictly at home. Based on my discussion above of the contribution that an awareness of how roles and face (following Parmenter, 2003) might figure in relationship formation and maintenance, I would propose the following hypothetical example as a thought exercise. John, a U.S. citizen from Dallas, Texas has several relationships with people not from America. Yet, all of these relationships were formed while John was living in the U.S. We can safely theorize that the cultural scripts and rules regarding the formation of relationships, be they friendships or working relationships, were "American." To use a sports analogy, John had the home field advantage. Conversely, Jane spent her last two years of high school abroad because of her parents' employment situation. Her position as cultural outsider did not guarantee that she could "play by the rules" of her home country. She very likely would have had to negotiate how relationships were formed and how to assign significance to them. This foregrounding of her difference vis-à-vis her host country/culture likely pushed the development of skills necessary to form relationships and communicate more appropriately.

Further qualitative study is necessary to further explore learners' experiences of intercultural relationships. It would be valuable to learn what the impact is of forming these relationships in a foreign context. For example, does the "new" context foreground

the process of relationship building? Were/are there assumptions, which were found not to apply in these circumstances? Was the attempt at establishing relationships always met with success? If not, what led to failure?

Research question 3: The Role of the ICC Subdomains in the Course Groups

Which, if any, of the four subdomains of Intercultural Communicative Competence (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level?

The third research question sought to determine if, in any given course, students scored particularly highly in a specific subdomain. In order to answer this question, the means of the scores of each subdomain were compared within each course group by means of repeated measures ANOVAs. Thus, I was able to determine which domain had the highest mean score for all first-semester students, which for all second-semester students, and so on.

The subdomain with the highest score within *every* course group was Attitude. Moreover this score was significantly different from the other subdomain scores at the $p = .000$ level in nearly every instance. Table 4.8 shows the mean subdomain scores for each course group and Table 4.9 shows the ANOVA results showing that the Attitude score for any given course is significantly different from the other subdomain scores. On the survey, the items in the Attitude category required students to imagine themselves in Germany and evaluate their willingness to engage in certain actions or dispositions. These survey items included, for example, learning from Germans; dealing with emotions and frustrations; or adapting behavior to communicate appropriately.

The centrality of Attitude in ICC is not debated in the literature. Deardorff (2006c) suggests that Attitude actually underlies all other subdomains and is a useful

point of entry into her recursive model of ICC, which does incorporate all of the standard subdomains of Knowledge, Attitude, Skills and Awareness. This fact, however does not necessarily account for the prominence of the subdomain for every course group.

Table 4.9 Descriptive statistics showing higher means for attitude among all courses

	Course enrolled in	Mean	Std. Deviation	<i>n</i>
Knowledge	1st semester	3.96	1.07	29
	2nd semester	4.28	.74	28
	3rd semester	4.29	.67	21
	4th semester	4.46	.72	30
	Total	4.24	.84	108
Attitude	1st semester	5.37	.65	29
	2nd semester	5.26	.70	28
	3rd semester	5.49	.44	21
	4th semester	5.39	.58	30
	Total	5.37	.61	108
Skills	1st semester	4.68	.98	29
	2nd semester	4.76	.82	28
	3rd semester	4.99	.35	21
	4th semester	5.00	.68	30
	Total	4.85	.76	108
Awareness	1st semester	4.37	1.21	29
	2nd semester	4.50	1.04	28
	3rd semester	4.70	.60	21
	4th semester	4.63	.94	30
	Total	4.54	.99	108

Table 4.10: Pairwise Comparisons of Attitude to Other Subdomains

Course enrolled in	(I) Subdomain	(J) Subdomain	Mean Difference (I-J)	Std. Error	Sig. ^a
1st semester	2 ^b	1	1.42*	.14	.000
		3	.69*	.11	.000
		4	1.00*	.17	.000
2nd semester	2	1	1.00*	.14	.000
		3	.50*	.12	.000
		4	.77*	.17	.000
3rd semester	2	1	1.20*	.16	.000
		3	.50*	.13	.000
		4	.80*	.20	.000
4th semester	2	1	.92*	.14	.000
		3	.40*	.11	.001
		4	.76*	.17	.000

Based on estimated marginal means

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

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

b. For all Subdomain column values 1=Knowledge, 2=Attitude, 3=Skills, 4=Awareness

Research has shown that students generally have difficulty projecting themselves into unknown or unfamiliar situations such as this (Arasaratnam & Doerfel, 2005; Kohonen, 2002). In order to verify whether this finding applied here, an ANOVA was run on the Attitude scores by the variable Time Spent Abroad in order to learn whether a real difference exists between the responses of students with experience abroad and those with no such experience. This was done first for the whole group of respondents ($n=108$) and then for the individual course groups. Tables 4.10 and 4.11 below summarize the results of these analyses.

Table 4.11: ANOVA showing effect for Abroad on Attitude scores (Whole group)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.44	1	1.44	4.03	.047
Within Groups	37.94	106	.36		

Table 4.12: Comparison of Course groups and Abroad: 2nd Semester is Significant

Course enrolled in	(I) Abroad	(J) Abroad	Mean Difference	Std. Error	Sig. ^a
			(I-J)		
1 st semester	Yes	No	.19	.24	.446
	No	Yes	-.19	.24	.446
2nd semester	Yes	No	.58*	.24	.020
	No	Yes	-.58*	.24	.020
3 rd semester	Yes	No	.09	.26	.744
	No	Yes	-.09	.26	.744
4 th semester	Yes	No	.07	.24	.784
	No	Yes	-.07	.24	.784

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

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

The analysis shows a significant difference in Attitude scores for all participants between students who have lived abroad and those who have not (Whole group: $F(1, 107) = 4.03$, $p = .047$). However, a closer examination of the separate course groups shows that all of this significance can be attributed to one single group: the only course group for which a difference is significant is the second-semester group (Table 4.11, above). Every other group shows decidedly no difference in Attitude scores between students

who have lived abroad and those who have not. To reiterate, it seems that the difference seen in the whole group is almost entirely attributable to the second-semester group. While this finding appears to contradict the previous research cited above, more data is necessary before any conclusions can be drawn as the Ns for some of the groups were as low as nine students and observed power was as low as 5%.

Indeed a further analysis of the second-semester group provides a direction for further study. The second-semester groups were scarcely different from the other course groups, save for one variable. Nearly three-quarters of students reported having intercultural relationships. This compares to around 63% for each of the other three course groups. In addition, more students in the second-semester group (18%) reported having formed intercultural relationships “both at home and abroad” than any other course group (11% of the first-, 10% of the third- and 13% of the fourth-semester groups). There is, consequently, a possibility that Attitude scores could correlate with having intercultural relationships and do so more than they would with living abroad.

Summary of Research Question 3

A repeated measures ANOVA showed that 1) Attitude is the subdomain with the highest mean in every course group and 2) this difference is significant at $p = .000$. Each course group was then organized into two groups: those who have lived abroad those who had not. An ANOVA compared Attitude scores for these two groups and this analysis showed students in the second-semester course who had lived abroad scored significantly higher than second-semester students who had never traveled abroad. There were no results of significant differences for any other course group.

In interpreting these findings, it was observed that the literature consistently identifies Attitude as central to ICC. Deardorff (2006c) suggests that Attitude can act nearly as a filter, which can affect the development in any of the other domains. This observation this does not necessarily answer why Attitude is subdomain in which each course group scored highest, but might suggest something about students' readiness to learn more about competent intercultural interaction.

Research Question 4: Other Predictors of ICC scores

Based on the demographic and experiential data collected, hat are the best predictors of Intercultural Communicative Competence?

A standard multiple regression analysis was done in order to identify which variables contributed to changes in participants' ICC scores. Because of the sample size (N=108) not all possible variables could be entered into the regression model at one time. Consequently, a procedure to identify the minimally adequate model was implemented which would identify the fewest number of variables accounting for the maximum amount of variability in scores. This procedure began with a regression model, which included five independent, dichotomous variables which were recoded into nominal variables for purposes of the analysis, as well as any two-way interactions of those variables which might play a role. These variables are identified in Table 4.12. The results of that analysis were examined and, beginning with the interactions, the term with the highest p value was identified (that is, the term least statistical significance to the model). The regression was run again with the term removed from the model. These steps were repeated until as many terms as possible are statistically significant and do not pose a significant risk of multicollinearity. That is, there was a low chance that any of the

resulting predictors would predict the same information as another predictor, thereby contributing very little real information to the analysis. The winnowing of non-predicting dichotomous variables was the first in a four-step process. The following section describes that process and its results in detail.

Step 1: Demographic Binary Data

For the survey data, the initial model included 5 categorical variables and 10 interactions of those variables (Table 4.12). Each of these variables had dichotomous values, meaning that for any given factor, participants could have responded only one way or another. These responses were recoded into numerical values, as detailed in Chapter 3. Note that because the variable Course Enrolled In was determined to have no significant effect (see Research Question 1), this variable was not included in the multiple regression analysis used to answer Research Question #4.

Table 4.13: Original Variables Entered into Regression

	Term	Levels
Variables	Intercultural Relationships (ICR)	Yes (student does have relationships with people of different cultures) No (student has no such relationships)
	Time Spent Abroad (Abroad)	Yes (student has spent significant time living abroad) No (student has not lived abroad)
	Nationality (U.S. or other)	Student is U.S. citizen Student is non-U.S. citizen
	Gender	Male Female
	Year in language program (Year)	First-year (enrolled in first or second-semester courses) Second-year (enrolled in third or fourth semester courses)
Interactions	ICR by Abroad	ICR by Gender
	Abroad by Gender	Nationality by Gender
	Abroad by Nationality	ICR by Nationality
	Year by ICR	Year by Nationality
	Year by Abroad	Year by Gender

This first regression returned a model, $F(15, 92) = 3.03$, $R^2 = .331$, $p = .001$. Thus, this model is statistically significant and accounts for 33% of the variance in ICC scores. A closer look at the variables and their coefficients reveals that several terms do not have significance and potentially overlap with another term (they have multicollinearity). Thus, the procedure to find a minimally adequate model (MAM) was begun. The regression was rerun with the term with the highest p -value (of least statistical significance) removed from the model. The process repeated, removing terms one-by-

one, until a model emerged in which as many terms as possible returned p -values less than .05. The order in which variables were removed can be seen in Table 4.14.

Table 4.14: Variables removed from successive regressions

Model	Variable	p
2	ICR by Gender	.949
3	Year by Gender	.886
4	Abroad by Nationality	.660
5	Year by ICR	.454
6	Year by Abroad	.425
6	Abroad by Gender	.307
7	Year by Nationality	.131
8.	ICR by Nationality	.098
9	Gender	.056
	Nationality by Gender ^a	
10	Nationality	.357

a. Note: Because the simple effect “Gender” was removed in step 9, any remaining interactions with this variable must also be removed from the model

The final model, the minimally adequate regression model for this complex of variables, is summarized in Table 4.15 below. The four predictors, which emerged from this process account for nearly one-fourth of the variance in ICC scores ($R^2 = .22$, $p = .000$). Intercultural relationships appear to play a very important role ($\beta = .866$, $p = .000$), as does the interaction of having such relationships with a respondent’s experience living abroad. ($\beta = .834$, $p = .000$). Time spent abroad ($\beta = .313$, $p = .003$) and a participant’s year of the German program ($\beta = .205$, $p = .021$) are the two remaining predictors of ICC

score. This shows that Time Spent Abroad influences ICC scores slightly more than a participant's year in the language program. It also means that having intercultural relationships impact ICC to approximately the same degree as the interaction of these relationships with living abroad (beta values are standardized coefficients which allows for a comparison of predictors).

Table 4.15: Minimally adequate model for dichotomous demographic predictors^a

	B	Std. Error	Beta	t	Sig.	Correlations Zero-order
(Constant)	4.98	.12		40.87	.000	
ICRelations	-1.21	.25	-.87	-4.82	.000	-.21*
Time spent Abroad	-.43	.14	-.31	-3.06	.003	-.15
Year1	.27	.12	.21	2.34	.021	.17*
ICR_Abroad	1.25	.29	.83	4.29	.000	-.04

a. Dependent Variable: ICCMean

* significant correlations at $p < .05$

Step 2: Personality Traits (Continuous Values)

Because ICC is a true complex of variables and should not be attributed to only binary demographic factors as above, data was collected on more affective dimensions as well. As part of the UAIC, respondents were asked to rate the applicability of 13 personality characteristics to themselves. As explained in Chapter 3, the recoded Likert-type scale ranged from 1 (the trait is not characteristic) to 6 (the trait is very characteristic). The five traits most characteristic of all respondents (Table 4.16) were entered into a regression and the process to find the minimally adequate model for these

five terms was begun. The final model returned a single predictor ($R^2 = .20$, $F(1, 105) = 26.75$, $p = .000$). Being perceptive was a strong predictor of ICC score ($\beta = .451$, $p = .000$) and can account for 20% of the variance.

Table 4.16: Most characteristic traits^a

	Mean	Sum
Tolerant of differences	5.38	576
Curious	5.23	560
Open-minded	5.23	560
Adaptable	5.02	537
Perceptive	4.95	530
Flexible	4.88	522
Motivated	4.82	516
Clear sense of self	4.77	510
Empathetic	4.63	495
Can suspend judgment	4.57	489
Patient	4.45	476
Lacks a sense of humor	1.66	178
Intolerant	1.57	168

a. Top five traits were entered into MAM regression procedure

Step 3: Perceptions about Hypothetical Travel (Continuous Data)

Second, students were asked to rate the applicability of a series of statements about how they think they might feel during a potential trip to Germany (the “Motivation and Options” section on the AUIC instrument (see Chapter 3 for a discussion, and Appendix A for the actual instrument). As above, the rescored Likert-type scale had a range of 1 (least applicable) to 6 (most applicable). The statements ranged from “I would sometimes want to return home” to “I would want to get along well with Germans I

meet” to “I would find living among Germans so agreeable that I would work to be as bilingual as possible.” These responses were entered into a regression and a minimally adequate model was determined using the same procedure as described in the first section of the discussion for this research question above. The final model returned two predictors and accounted for 17% of the variance in ICC scores ($R^2 = .168$, $F(2, 103)$, $p = .000$). “I would want to adjust as best I could to ways of living and interacting” (Adjust) significantly predicted ICC score ($\beta = .259$, $p = .000$) as did “I would find living among Germans so agreeable that I would work to be as bilingual as possible” (Bilingual), ($\beta = .228$, $p = .023$). Thus, a willingness to adjust to newness and a desire to become bilingual predict ICC in nearly equal measures and the regression predicts 16% of the variance in ICC scores (see Table 4.17). Additionally, the willingness to adjust is a more important predictor of ICC scores than the anticipated desire to become bilingual.

Table 4.17: Minimally adequate model for perceptions about travelling to Germany^a

	B	Std. Error	Beta	t	Sig.	Correlations Zero-order
(Constant)	2.73	.46		5.89	.000	
Adjust to newness	.25	.09	.26	2.63	.010	.35*
Become bilingual	.15	.06	.23	2.31	.023	.34*

a. Dependent Variable: ICCMean

* Correlations significant at $p < .05$

Step 4: Predictors of Intercultural Communicative Competence in Beginning and Intermediate German Language Learners (Composite Regression Model)

The three variables from Steps 2 and 3 were added to the four terms from the first regression, 2-way interaction variables were computed and a final regression process was begun to determine the minimally adequate model, which took into account demographic, attitudinal and personality factors. The initial model considered 19 variables, far more than the $N (=108)$ would permit. which finally yielded, a final model containing seven predictors: 1) Abroad 2) ICRs 3) Year 4) Perceptive 5) Willingness to Adjust 6) Abroad by ICRs 7) Year by Perceptive. The statistics of these predictors are summarized in Table 4.18.

The regression model allows us to describe how the given variables explain the variance in ICC scores. This model accounts for 44% of the total variation in ICC scores and contains seven predictor variables ($R^2 = .44$; $F(7, 99) = 11.37$; $p = .000$). The variable with the largest unique contribution to ICC scores when all other variables are controlled for is ICR. Its beta value is $-.65$ (coded as 0 = “Yes” and 1 = “No”) This value is equal to the beta for the interaction of ICR by Abroad. The other part of this interaction, Abroad, is not a significant predictor ($p = .067$). These three facts suggest that it is the relation of the two variables which is most important. This relationship will be explored below.

First, however, we must address another set of predictors. The next highest beta value is $.51$ for Perceptive. The next highest after it is the interaction of Perceptive with Year. As above, the other component of the interaction, ‘Year,’ is a non-significant variable on its own ($p = .064$). This interaction, however, differs from the previous in that the beta for ‘Perceptive’ is not equal to the beta for interaction.(it contributes twice what the interaction does). Therefore, these facts suggest that Year is only relevant as it acts

on the effect Perceptive has on ICC scores. This interaction will likewise be discussed in the following section. Finally, Adjust contributes least to the variance in ICC scores with a beta of .24. This means that for each point higher a students rate himself on his willingness to adjust, we can expect the ICC score to increase .24 points.

Table 4.18: Final Multiple Linear Regression Model Coefficients

	B	Std. Error	Beta	t	Sig.
(Constant)	4.88	.11		45.18	.000
ICRelations	-.91	.22e	-.65	-4.09	.000
Time spent Abroad	-.24	.13	-.17	-1.85	.067
Year	.19	.10	.14	1.87	.064
Perceptive	.39	.08	.51	4.91	.000
Adjust	.23	.08	.24	3.01	.003
ICR by Abroad	.98	.26	.65	3.83	.000
Perceptive by Year	-.31	.18	-.26	-2.63	.010

a. Dependent Variable: ICCMean

This model is in itself an interesting finding because it suggests a number of considerations for practitioners. First, language teachers and curriculum designers should reflect on how they can help students become comfortable adjusting and to being open to another culture when living in that culture. Second, it seems crucial that experiences abroad be accompanied by forming relationships. This seems to be supported by the literature on the relational nature of ICC discussed with Research Question 2. The third consideration has to do with being perceptive; more advanced language students who rate themselves as highly perceptive tend to have lower ICC scores than beginning language

students who rate themselves as similarly perceptive. This could be a function of life experience where (marginally) older students have had more opportunities to know the (in)accuracy of their perception, and thus rely on more cognitive, rational factors to weigh more heavily in their ICC.

Interaction 1: Year by Perception

Of the two interactions this one contributes far less to the unique variance in ICC scores the interaction of Abroad and ICRs. That said, it is critical to understanding one of the stronger predictors: being ‘Perceptive.’ Because the interaction is a significant predictor, we can understand that Perceptive’s contribution to the variance differentiated by whether the student is in the first or second year of the language program. The role that perceptiveness plays in the ICC score is larger in first-year students; it makes virtually no difference in the scores of second-year students.

Such a result is puzzling. If the research has valued perceptiveness and its synonym sensitivity as a component of ICC (J. M. Bennett & M. J. Bennett, 2004; Jordan & Cartwright, 1998; King & Baxter, 2005; Sercu, 2006), results suggest just the opposite: that as a student progresses her language learning career, perceptiveness becomes *less* important as a contributor to ICC development. A new research question is suggested in light of this finding: as students move through a language program, do they tend to rely less on affective elements such as perception in their intercultural interaction and perhaps more on cognitive components?

Interaction 2: ICR by Abroad

In order to understand better the relationship between the variable Intercultural Relationships (ICR) and its interaction with Time Spent Abroad, ICR was analyzed by where respondents formed these relationships. For this analysis, the variable ICRPlace was used which is composed four levels: students with no ICRs; students who formed ICRs at home; those who formed ICRs abroad; or those who formed them both at home *and* abroad. Of those respondents who spent no time living abroad, 41% maintain no ICRs, which is more than twice the 19% of students who have lived in another country with no ICRs. Another way of thinking about this is that 81% of students with experience living abroad maintain relationships with people not of their languaculture (the complexity of language and culture (Agar, 1994; Kramsch, 1993). This is markedly more than the 60% of students without experience abroad have formed ICRs. Of this group one assumes that all of these were formed within the respondent's home country. Between 16% and 38% of the Abroad group, however, have formed these relationships outside of their home country, that is, these relationships began within a different cultural context and possibly with social and cultural rules to govern how these relationships are established and maintained. Furthermore, as discussed in Research Question 2, ICRPlace does have a main effect for ICC scores ($F(2.73, p = .047)$). These statistics further suggest that it is important to consider *where* respondents formed their intercultural relationships if one is to understand the interaction effects suggested by the regression model.

The hypothesis that the *place* where intercultural relationships were formed plays a role in ICC scores is also supported by the two analyses of the estimated marginal means. First, comparing of the interaction of the ICR and Abroad. (Table 4.19) shows that for students who spent time living abroad, there is a significant difference ($p = .000$)

in the ICC scores of those students who have ICRs and those who do not have ICRs. Students who have ICRs and spent time living abroad scored on average 1.2 points higher than those who spent time abroad but reported having no ICRs. For students who have spent no time abroad, having ICRs or not results in no significant difference in ICC score ($p = .839$).

Table 4.19: Pairwise Comparisons of Abroad and ICR

Time spent Abroad	(I) ICRelations	(J) ICRelations	Mean Difference (I-J)	Std. Error	Sig.
Yes	Yes	No	1.22*	.25	.000
	No	Yes	-1.22*	.25	.000
No	Yes	No	-.03	.15	.839
	No	Yes	.03	.15	.839

Based on estimated marginal means

The second analysis compares the interaction of Abroad and ICRPlace. A pairwise comparison of the estimated marginal means resulted in the following conclusions. A summary table (4.20) will follow.

1. If a student had lived abroad but still reported having no ICRs, that individual's score will very likely be lower than a student with both experience abroad and intercultural relationships.
2. Among students who report having lived abroad and having ICRs, the place where those ICRs were formed has no statistical effect on ICC scores. There are no statistical differences among the three groups' scores.

3. The presence or absence of ICRs is immaterial to ICC scores if the student has spent no time abroad.
4. A student with no ICRs and who has spent time abroad will likely score *lower* on the ICC measures than a student with no ICRs and no experience abroad.
5. Conversely, students with ICRs formed only at home (i.e., have no ICRs formed abroad, in spite having traveled) score higher on the ICC measure if they have also lived abroad than if they had remained in their home country.

Table 4.20: Pairwise Comparisons of ICRPlace and Abroad

Time spent Abroad	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
Yes	No Relationships	Only formed at home	-1.16*	.27	.000
		Only formed abroad	-1.06*	.33	.002
		Formed both at home and abroad	-1.20*	.31	.000
	Only formed at home	No Relationships	1.16*	.27	.000
	Only formed abroad	No Relationships	1.06*	.33	.002
	Formed at home and abroad	No Relationships	1.20*	.31	.000

Based on estimated marginal means

*. The mean difference is significant at the .05 level. Only significant values are shown. A full table is found in Appendix C

Summary of Research Question 4

Multiple linear regressions produced a model which accounts for 44% of the variation in ICC scores among the survey respondents. It identified several different kinds of predictors of intercultural competence in undergraduate language students. The most important of these are

- 1) the interaction of living abroad with having intercultural relationships;
- 2) the interaction of being perceptive and the respondent's year of language study (year 1 or year 2); and
- 3) being willing to adjust to new ways of living and interacting.

These results led to a more granular analysis of where students formed intercultural relationships. This analysis concluded that having lived abroad and having or not having intercultural relationships while abroad are important factors when considering one's intercultural competence. A respondent who has never lived abroad will have no significantly different ICC scores regardless whether or not he or she has intercultural relationships. But a respondent who *has* lived abroad will have a higher ICC score if he or she also has intercultural relationships than if he or she has no such relationships.

This is the major predictor identified in the regression and deserves further reflection. Recall that in Research Question 2 above it was observed that the variables of (living) Abroad, Intercultural Relationships (ICRs) and Site of ICR formation (ICRPlace) all affected ICR scores. Moreover the literature supported a hypothesis that in-country guides or mentors, that is, "native" informants allow for more positive sojourns abroad and allow for more effective intercultural learning. The identification here, in Research

Question 4, of the interaction between ICRs and Abroad provides further data in support of this hypothesis. In fact it becomes *crucial*, if a student spends time abroad, that he or she develop intercultural relationships. If those relationships do not form, it is very likely, based on this analysis, that the individual will become *less* interculturally competent than if the travel had never happened and the individual had stayed in the home country. This outcome is likely in part attributable to the fact that all participants who have ICRs also reported in the survey that these relationships have been overwhelmingly positive experiences. Even so, it also is supported by Vande Berg and Paige's (2009) conclusions that knowing people in-country can raise the chances that the study abroad student will derive some benefits from the experience.

Such a conclusion also makes sense from a Co-orientational (Spitzberg & Changnon, 2009) approach to ICC. Recall from Chapter 2 that this approach sees ICC as one in which the interaction of individuals from various cultural traditions leads to the establishment of a shared perspective, even if that perspective is a recognition or understanding of each other's differences (Rathje, 2007). If ICC is relational and focused on appropriate and effective interaction, it seems counterintuitive that ICC should develop in an individual with no interaction partner. This is in effect the case for participants who report having traveled abroad, yet also state that they have no intercultural relationships. They have no intercultural partners to help them understand or interpret their new surrounding. Another possibility is that they lack the Skills and Knowledge, which would help form such intercultural relationships (Byram, 1997). This interpretation has significant implications for language and study abroad programs, which will be discussed in Chapter 5.

Chapter 5: Discussion and Conclusions

INTRODUCTION

In this chapter I will first provide a summary of the study and its major findings. A discussion of the implications for theory, curriculum, and future research and concluding remarks will follow.

SUMMARY OF STUDY AND MAJOR FINDINGS

The purpose of this study was to investigate the development of Intercultural Communicative Competence (ICC) of undergraduate German language students. In so doing the study also sought to identify factors, which might contribute to that development. Furthermore, the study established the Undergraduate Assessment of Intercultural Competence (UAIC) survey as a viable tool for describing student ICC. The study adds to existing research on ICC assessment by examining a cross-section of a university language program and identifying factors and predictors of ICC in this group of American college students.

The data for this study were collected using the above-mentioned UAIC and analyzed by quantitative methods. The survey was completed by 108 students during the spring semester, 2010 at the University of Texas at Austin. These students were enrolled in one of four lower-division German language courses. The major findings of the study are summarized below with respect to the four research questions.

Research Question 1: ICC in Lower-Division Language Learning

Is an increase in Intercultural Communicative Competence (ICC) observed in the cross-section of participants?

The purpose of this question was to determine whether students progressing through the German language program at the University of Texas demonstrate any change in intercultural competence from the start of their language learning experience at college to the end of the lower-division program. Descriptive statistics on the data from Intercultural Areas on the AUIC showed the mean ICC scores were for the first-semester 4.60, the second-semester 4.70, the third-semester 4.87, and the fourth-semester 4.87. The data also showed ICC scores to be rather narrowly distributed, indicating very little variation in the students' scores. This was the case within course groups as well as between groups. An ANOVA was run to determine if these scores were statistically different from each other. That analysis found there to be *no* significant differences between course groups. ICC scores do not increase (or decrease) significantly from the first semester to the fourth semester of the program.

Research Question 2: Other Factors Contributing to ICC

To what demographic or experiential factor or factors can ICC be attributed?

This analysis identified factors which themselves had an effect on ICC or any of the subdomains. ANOVAs were run on the variables of gender, nationality, having intercultural relationships (ICRs), where those ICRs were formed (ICRPlace) and living abroad. Nationality had no statistical effect on the composite ICC scores. However, a very small effect was observed for Nationality on the subdomains of Skills and Awareness. Students who were not from the United States had a slightly higher score in

each of these subdomains than students who were U.S. citizens. There was an effect for ICRs on the composite ICC score as well as on Knowledge and Skills. Participants with ICRs scored higher in all three scales than those with no such relationships. There was likewise an effect for ICRPlace on the same three scales. This variable actually supplements the result of the analysis of having/not having ICRs. Skills scores are positively affected when a respondent has ICRs formed outside of the home country. Finally, Living Abroad has no significant effect on the ICC composite score, but participants having lived abroad had higher Knowledge and Attitude scores than someone who had always stayed in the home country.

Research Question 3: Prominent Subdomains

Which, if any, of the four subdomains of Intercultural Communicative Competence (Knowledge, Attitude, Skills, and Awareness) is more evident at any given course level?

This research question sought to identify if, for example, in the first semester there was a subdomain of ICC on which participants scored particularly well. Repeated measures ANOVAs were used to answer the question. For every course group, Attitude was the dominant subdomain. That is, Attitude had the highest mean score of all four subdomains. This result—and its consistency across the four courses—was surprising. It was hypothesized that these high scores could be attributable to a documented difficulty of students to project into hypothetical situations and provide a judgment on a Likert-type scale (Arasaratnam & Doerfel, 2005; Kohonen, 2002). Because the hypothetical in the AUIC items for Attitude was travel to Germany, a two-way ANOVA was run on Attitude for Course and Abroad. Second-semester students who had lived abroad had significantly

higher Attitude scores than those who had not. There were no such differences in the other three subdomains.

Research Question 4: Predicting ICC

Based on the demographic and experiential data collected, what are the best predictors of Intercultural Communicative Competence?

In order to answer this question multiple linear regression analyses were run on several sets of data: demographic information, personality traits and perceptions of possible travel to Germany. Seven factors were merged and regressed to identify how well they predict ICC scores. These factors contribute to 44% of the unique variation in ICC scores. Of these seven, however, only three can be said to be major predictors. The remaining four are contributing factors to the others. The major predictors are:

1. A willingness to adjust to new ways of living and interacting
2. The *interaction* of having intercultural relationships and of living abroad
3. The *interaction* of being perceptive and year of language study (first or second).

Based on these predictors, the following comments can be made. When living abroad it seems critical that one has intercultural relationships (ICRs) as without them one is very likely to be *less* interculturally competent. If one has never spent time abroad, having or not having ICRs does not affect ICC. If one has traveled, it is better to have ICRs formed at home than it is to have no such relationships at all.

Further, the ICC of second-year students seems unaffected by how students consider themselves to be perceptive. In contrast, the more perceptive a first-year student

considers her or himself, the higher that individual's ICC will be. When comparing year groups, second-year students rating themselves in the middle of the range (4 or 5) had statistically higher ICC scores than first year students. There was no difference between the groups at the outer edges of the range (3 or 6).

With this summary of the findings of the present study in mind, the following section will discuss their implications for theory, curriculum and future study.

IMPLICATIONS

Theoretical Implications

This study contributes to existing research on intercultural language learning and its assessment. Much of the existing literature focuses on describing student intercultural behavior and learning, (Belz, 2007; Byram & Feng, 2005; Elola & Oskoz, 2008; Furstenberg et al., 2001; Lund, 2008; Schulz et al., 2005; Ware, 2005; Ware & Kramsch, 2005) whereas the perspective of this study focused more on first connecting student ICC development to the programmatic language learning context. That is, it asked whether there was a connection between a student's development of ICC and that student's progression through a four-semester lower-division language program. In response to this question the survey results indicated no such connection. Students in the first semester of the program understand themselves to be just as interculturally competent as their peers in the fourth semester do. Additionally it also identified other student factors, which could contribute to ICC development. These factors include one's willingness to adjust to newness and the rather complex interaction of having intercultural relationships with past experiences of living abroad. The study suggests that these factors are important predictors of a student's ICC.

The study also contributes to the literature on ICC development by more granularly considering how the four subdomains of Knowledge, Attitude, Skills and Awareness are affected by different factors. Specifically, changes in scores for Knowledge and Skills were observed most often. Attitude and Awareness scores seemed to be least affected by the variables of this study. Until now, research on ICC in the language classroom has been mostly concerned with describing student activity which reflects ICC development in more general terms (Belz, 2007; Müller-Hartmann, 2006). Studies that analyze individual subdomains tend to consider the feasibility of instruction to develop the relevant skills (Vogt, 2006). The current study's results suggest that ICC subdomains respond differently to different experiences of individuals. In particular, Knowledge and Skills are most responsive and Attitude and Awareness, most resistant. This characterization would agree in part with Vogt (2006) who contends that the affective dimension of ICC is nearly impossible to teach. Yet, that implication seems to conflict with Deardorff (2009a) who asserts that Attitude underpins all other aspects of ICC. At the same time, however, her recursive model implies that all domains of ICC can—and do—influence other domains, including Attitude. Thus, while Attitude might initially color how one enters an intercultural interaction, the learning that can happen during that exchange can work to modify Attitude and perhaps increase Awareness of one's interlocutor or one's own cultural assumptions, for example.

These apparent tensions seen in this study's data, Vogt's assessment-resistant Attitudes and Deardorff's characterization of Attitude as catalyst and catalyzed become more manageable upon further analysis. Recall that for Deardorff (2009a), Attitude interacts with all other aspects of ICC. This perspective is also confirmed in Vogt's (2007) proposals for ICC evaluation. Her discussion advocates that Attitude should not be assessed as a discrete category but rather be integrated and contextualized. These

recommendations recall the fact that Byram's (1997) reflections on the assessment of Attitude advocated a similar position, namely, that instructors look for evidence of learners seeking out new perspectives; avoidance of or critical engagement with stereotypes and C1 assumptions; and an openness to newness as equal to the familiar. Thus, Attitude is in essence willingness: to seek the other, to seek non-dominant perspectives and practices to engage with implicit assumptions and stereotypes, to experience newness, to adapt to other ways of life. In other words, Attitude reflects one of the major predictors identified by Research Questions 4: the "willingness to adjust to new ways of living and interacting." Consequently, this study underscores the centrality of Attitude in ICC. In so doing, however, the study also confirms Vogt's (Vogt, 2006, 2007) concerns that Attitude poses unique challenges to instruction and assessment.

A third contribution to theory is revealed in the Principal Components Analysis (PCA) of the survey instrument. In the process of validating the underlying conceptual structure of the survey, the PCA provided a more in-depth understanding of the AUIC. Based on student responses, the Skills subdomain is actually comprised of three subfactors. *Using Tools* refers to the techniques and strategies students (might) use when interacting with people from different cultural backgrounds. *Interacting* actually corresponds to Byram's (1997) *savoir comprendre* and *savoir apprendre* and refers to the "productive" skills used to interact, interpret, and learn more from other people or cultural (C2) products. *Adjusting* indicates the skills and abilities (linguistic or behavioral) that can help foster "appropriate" communication with interactants from the C2. The tripartite division of the Skills survey items was not seen in Fantini's (2006) interation of the AIC, nor was it anticipated in first composing the survey. This is a unique finding to this study and its sample of participants.

Curricular Implications and Recommendations

The results of Research Question 1 indicate a disconnect between instruction (i.e., time spent in the language program) and ICC development. Another way of conceiving this finding is that first-semester students describe themselves essentially as interculturally competent as fourth-semester students do. In spite of the cultural “input” students receive from their learning materials, there seems to be little impact on how they develop as intercultural speakers. Though this study was not designed to probe in a more qualitative fashion the causes of this apparent disconnect, I would concur with Crozet and Liddicoat (1999) that culture, and by extension ICC, needs to be taught in a conscious and deliberate way.

The implication here is that curriculum and instruction be designed to incorporate aspects of ICC. However, it is at this point that FL professionals encounter several challenges. These include how to conceive of intercultural interaction which is appropriate for each developmental stage of a language program and how to incorporate intercultural interaction into instruction which is both feasible given institutional resources and supportive of course and program goals and objectives. The following discussion concerns itself with these two points knowing full well that the professional development of FL *instructors* presents a significant challenge for ICC in FL instruction (see (Ghanem, 2010)). As discussed in Chapter 2, ICC is understood as complementary to communicative language learning. It helps FL professionals be mindful of the fact that language instruction often is intended to prepare students for future interaction with other people and/or cultural products and perspectives that are connected to the target language. For schools, colleges and universities with the resources to facilitate real interaction with other speaker-bearers of the target languaculture, the literature has already demonstrated a number of possibilities for instruction. Chapter two reviewed how

telecollaborative exchanges, for example, have been employed for this specific purpose. My concern in the current section is that the majority of language programs do not have the contacts or resources for such exchanges. What is possible for students and teachers in such programs?

In order to answer this question it is helpful to return to the finding that intercultural experiences in the form of relationships lead to development of ICC. I would recommend that it is important for FL professionals to provide *experience* if they are to expect that ICC will develop in students. That said, I would also recommend that FL professionals understand the word “experience” rather broadly given the fact that instructional contexts, goals and capabilities can vary greatly from school to school and teacher to teacher. Such variability in what a particular school or program can offer students will likely affect what that particular environment can expect concerning its students’ ICC development. For example, it would be unreasonable to expect students in a German language class with no partnerships with speakers from German-speaking countries to finish their course with having developed the same skills as peers who spent an equal amount of time in-country. The literature currently has little to say on what different learning contexts could expect concerning ICC development. I would suggest that researchers consider the following possibilities for intercultural experience. They are listed in order of potential intensity of intercultural interaction.

Intercultural experience in the C2 via study abroad. This would provide the most immersive and comprehensive experience possible. However, that is not enough. As Vande Berg and Paige (Vande Berg & M. Paige, 2009) suggest, deliberate structure and instructional intentionality especially with regard to cultural learning are increasingly seen as keys to effective and worthwhile study abroad programs.

Intercultural experience through telecollaborative interaction with learning partners residing in the C2. The literature (cf. (Belz, 2007; Belz & Müller-Hartmann, 2003; Müller-Hartmann, 2006; O’Dowd, 2007; Ware & O’Dowd, 2008) details many possibilities for constructing learning environments and projects to set up intercultural inquiry and negotiation of meaning. These projects have shown, on the one hand, how students develop (to varying degrees and at varying rates) aspects of ICC and on the other challenges that can arise during intercultural interaction.

Intercultural experience through interaction with international students at the local institution (this may be more possible at some colleges and universities than at high school). This opportunity is not seen in the literature on ICC (clearly suggesting a need for further research), but could offer to FL students the potential for engaging in interaction with people from another culture. When considering how to involve these international students in the language program, FL professionals should be cognizant of the dangers should these students come to be treated as “native informants” in a way which reifies the same kind of “othering” and stereotyping that ICC should ideally help speakers avoid. In this respect it would behoove all involved to seek out alternative or complementary experiences and perspectives, diffusing the perception or construction of (inadvertent) master narratives.

Intercultural experience through engagement with various cultural products, practices and perspectives through instruction in the language class. This imagining of “experience” is perhaps the most realistic for the vast array of language programs and students in the United States where contact with speakers of the L2 is limited or not accessible.

In spite of the fact that intercultural interaction in most current instructional circumstances remains logistically unrealistic to achieve, I maintain that we as FL

professionals can engage with our students in preparing them for future interaction. By laying the groundwork and developing basal skills, knowledge and awareness as promoted by Intercultural Language Learning (ILL, as discussed in Chapter 2), we still can help students begin to approach texts, products and perspectives from unfamiliar cultures effectively and appropriately. The following discussion will address what I believe are possibilities; it offers some examples of how classroom activities might be designed with these priorities in mind. The suggestions are offered as answers to the question, “What can we do to prepare students for intercultural interaction?”

1. We can help students learn to be aware of how embedded and unconscious culture can be. This involves helping them see where, how and when they make assumptions of sameness instead of simply observing, inquiring and reflecting.

An example from my own teaching of Dutch will help illustrate the idea. During a lesson in which students explored Dutch want-ads in preparation for writing their own, a question arose concerning the benefits which came with a particular position opening. The questioning student only wanted to know the “equivalent” word in Dutch. In response, I asked, in Dutch, what the student meant, to give examples of what he assumed “benefits” to mean. In the brief list that he and the class collectively produced, it became clear that for these American students, “benefits” referred primarily to various levels of health insurance coverage. This discussion formed the basis of a homework assignment in which I presented them with two lists. One was the benefits listed by an American company and the “*secundaire arbeidsvoorwaarden*” (literally, “secondary working conditions”) of a Dutch company in the same industry. Students were asked to identify the similarities and differences in the two lists. They were also asked to hypothesize reasons for the specific composition of these lists. The following day

students shared their work first in small groups and then in the whole group. The exercise provided an opportunity to discover the embeddedness of culture in language. One simple word led to the discovery that the “translation” actually indexes a very different set of items which is connected to broader societal (conceptions of the role of government), financial (who plays a major role in the health care of an individual) and labor-related (by what means can an employer compete for/attract a job candidate) factors.

This “teachable moment” was a rather unplanned interlude to the lesson, but it was one that very clearly began to look like an intercultural manifestation of Long’s Focus on Form (FonF)(Long, 1991; Long & Robinson, 1998). That is, certain aspects of this lesson resembled certain dimensions of FonF. FonF can be seen as an orientation to instruction to help FL learners attend to linguistic features while still prioritizing cultural meaning-making. According to some scholars, FonF can be planned or incidental (Ellis, Basturkmen, & Loewen, 2001). That is, instructors can plan explicit activities or tasks which deliberately draw students’ attention to a target form in the course of communicative action or it can be incidental, arising from a need felt by students during learning activities. The constant has to be meaningfully contextualized language. As an extension to ILL, the above example could illustrate a similar, incidental, “Focus on the Intercultural.” The question prompted a brief discussion and follow-up assignment, which raised awareness and prompted students to rely on prior knowledge (or acquire new learning) in order to understand why the two lists of employment benefits were different. Even though this is an example of spontaneous Focus on the Intercultural, planning for such learning should be beneficial as well.

This excursus on the seeming parallels of developing students’ intercultural awareness as part of ILL and certain aspects of FonF requires clarification on two points. First, I am *not* advocating a “by-the-way” approach as documented by Galloway

(Galloway, 1985) in which cultural lectures feature randomly and detached from the rest of the curriculum. The incidental nature of the above-described lesson remained grounded in meaning-making; there was follow-up work by the students to develop and incorporate their learning; and the lesson was consistent with previous (and later) work on the embeddedness of culture in language. Second, this discussion concerns the observation that some elements of FonF seemed *reflected* in instruction oriented towards intercultural language learning. Specifically, the activities focused students' attention to certain factors (the hiddenness of their assumptions about a word's meaning; the divergent expectations within "benefits" and its Dutch translation; the connectedness of these terms to larger assumptions about the role of the state vis-à-vis the individual). The activities also emerged and remained grounded in meaning-making. Students' evaluation of want-ads produced generated a need to accomplish a specific communicative goal: to compare the "benefits" of one position to those of another. That need reflected an assumption: that a Dutch translation of "benefits" would provide the same information as the American English source (i.e., details about insurance coverage, primarily). Further analysis of this assumption produced a more refined literacy regarding the evaluation of Dutch (and Flemish) employment opportunities.

2. We can help students develop skills to describe and observe without judging, or at least to distinguish between judgment, commentary and description. This ability to discern judgment from observation and analysis is an attendant ability to the "de-centering" so important to notions of the intercultural speaker (Byram, 1997). It allows the speaker to regard the cultural phenomena and C2 speakers on their own terms and draws students' attention to their own cultural filters. I have found the Describe-Interpret-Evaluate activity (R. M. Paige, Cohen, Kappler, Chi, & Lassegard, 2007) to be particularly useful in 1) raising students' awareness of how they approach a cultural

product or phenomenon (from either the C1 or C2) and 2) developing the requisite linguistic skills for accomplishing each of the analytical goals.

3. Activities can also draw students' attention to their personal reactions to novelty and difference. This goal is informed by Belz' (Belz, 2003) writings on the applicability of *Appraisal Theory*¹⁰ to online intercultural interaction. Reflective writing activities (journals, blogs, etc.) can be designed reflect on their responses to cultural products or (if available) intercultural interaction. By drawing students' attention to, for example, the emotional content of their responses, or to the types of questions they bring to their reflections, instructors can demonstrate student language use which reflects the degree to which students are "de-centering" vis-à-vis the C2 or responding within their own C1.

Belz's work with Appraisal Theory and online intercultural interaction occurred in the context of telecollaborative exchanges (TEs). Her work and that of others (Belz, 2007; Hung, 2006; O'Dowd & Ritter, 2006) suggests that the student interaction which occurs in TEs could also be by generated by means of customizable social organizational websites such as ning.com or group.ly. These do-it-yourself social networks allow instructors to set up closed (or open) social networks and create assignments which allow students to interactively practice activities like intercultural inquiry (Belz, 2007), self-reflective journaling/blogging (Elola & Oskoz, 2008), describe-interpret-evaluate activities (J. M. Bennett et al., 2003). These activities have all been shown to impact one or another aspect of ICC.

¹⁰ Appraisal Theory is "an approach to exploring, describing and explaining the way language is used to evaluate, to adopt stances, to construct textual personas and to manage interpersonal positionings and relationships' (White, 2005). An extended discussion of Belz' application of Appraisal Theory to evaluation of student interaction appears in Chapter 2.

Future Research

The study has perhaps raised as many questions as it has answered, providing rich opportunity for future investigation. First, the survey should be administered to a number of different populations. These include more German programs; students of other languages, (with appropriate adaptations to the study made); upper-division language students; study abroad students (pre- and post-sojourn); liberal arts colleges as well as more large public universities. Using the survey with these different populations will allow an evaluation of the instrument's flexibility and validity as a general undergraduate assessment tool.

Second, one aspect of ICC that has not been addressed in this study is that it is often characterized as a process that takes place over time (Scarino, 2009). In order to take this perspective into account a longitudinal version of this study should be undertaken. Such an investigation would help researchers better understand exactly how students develop their ICC over time. In this respect a qualitative component would be extremely valuable because it would provide richer information about the interactive and dialogic dimensions of ICC development. What do students wrestle with? What types of personal relationships and interactions are integral to positive development of one's ICC? How do students respond to ICC when it is incorporated in the language class? A longitudinal study would help establish the validity of the cross-sectional findings presented here.

Third, another recommendation is that future studies should collect qualitative input from participants about their intercultural experiences and relate them to the findings of this study. Wendt (Wendt, 2002) explains how qualitative approaches help researchers and practitioners stay mindful of the importance of context in matters of language learning. This context, of students interacting with meaning-making processes,

will do two things. First it can help to verify the interpretations of the quantitative findings above. Second, context can also provide insight into students' "...perceptions of world and self" (Ibid., p. 294). For example Research Questions 2 and 4 addressed somewhat different aspects of the relation of living abroad and having intercultural relationships. Students' descriptions of their intercultural relationships and the circumstances under which they were formed could lead to deeper understanding of how these two factors help students become more competent intercultural speakers (Byram, 1997). Likewise, international student-respondents would be able to provide an interesting perspective on factors, which have helped them interact effectively while studying in the U.S. Moreover, it would be very informative for these students to describe the personal traits they have found most helpful when living abroad as well as those traits which seem to have hindered their interactions with their American peers. A final recommendation would be to gather students' impressions of how participation in the study and completion of the survey affected their thinking about their language and cultural learning.

Fourth, student feedback should also be collected to aid the revision of the instrument itself. Such information would be particularly useful on items or sections, which were either confusing or not applicable to the context of the new sample population.

Finally, this study focused exclusively on characterization of ICC independent of L2 linguistic ability or participants' academic success in their language courses. It would be very interesting to correlate performance in the target language and/or general academic success with self-reporting of ICC. Even though scholars are in general agreement that language is a central part of ICC there is still no articulated consensus on what the relationship of the L2 should be to intercultural behavior (Byram, 1997;

Deardorff, 2009b). Data analysis on populations of students in this regard would add substantially to the literature.

CONCLUSIONS

This study sought to advance the understanding of what contributes to the development of Intercultural Communicative Competence in undergraduate beginning and intermediate language students. This study found there to be no relationship of ICC development to a students' enrollment in a German language program. In spite of this finding, a number of other factors were found to positively affect a student's ICC. The existence of intercultural relationships appears to have a very important effect on one's intercultural abilities, as do prior experience in residence abroad and a willingness to be flexible to new ways of living. In most instances, though a difference in ICC scores from one group to the next might have been observed, these divergences were small, often less than one point. In addition to these findings, which emerged from the research questions, the study provided an interesting opportunity to reflect on the research methods for studying such a complex construct as a ICC.

During the defense of this dissertation the question was posed whether I was surprised by the result of Research Question 1: that there was no effect on ICC for time in the German program. My initial reaction was affirmative, because I had, indeed, expected that students would be conscious enough of their culture learning and developing awareness of new perspectives that such change would be reflected in the survey results. Much can be said for implicit, deductive approaches to learning. We can anticipate that student learning will target more (or at least different) factors than our lessons and objectives expect. Moreover, I expected that the sociolinguistic approach to language

learning in the program's textbook and online learning materials would have promoted development that could be seen in the survey's results. Upon further reflection, however, I've come to wonder whether those assumptions were misplaced. Consider the following. First, the professional development of the instructors of the study participants did not include ICC and its application to FL teaching (Ghanem, 2010). Second, while a communicative, contextualized approach is generally prioritized in the program, an intercultural component is not an explicit or systematic part of the curriculum. Intercultural skills and knowledge are not thematized in the common assessments of the courses. Third, it is generally assumed to be poor pedagogy to assess what is not taught. This study tested exactly that assumption. The AUIC was looking for development of a construct over the course of a program, which does not incorporate that construct into its learning materials, its instruction, its assessment or its instructor's professional development.¹¹ Given these circumstances, it now seems unreasonable of me to have expected much development of students' ICC, which can be connected to instruction and not to chance.

This is but one outcome of my reflection on the result of Research Question 1. Additional deliberation concerns the nature of the assessment instrument and the attendant analysis. The question was also raised as to whether the study showed the inability of quantitative methods to analyze ICC development. The question is a valuable one to pose, but I think it is actually the wrong question. A more productive question would be to what extent the study helps illustrate the kinds of questions quantitative (and by implication qualitative) methods are capable of answering. In this study it is clear that the methods used were for testing hypotheses: that there is a connection between FL

¹¹ Please note this observation does *not* assert that the culture of German-speaking people/in German-speaking countries is not taught, only that an *intercultural* orientation to culture and culture-learning in the FL classroom is not a focus.

instruction and ICC development, for example. In contrast, with that hypothesis tested and rejected, new analyses and methods need to be tapped to answer different questions: How do students characterize their cultural learning? What is the relationship of FL instruction to ICC? How do students apply what they learn in their FL course to intercultural interactions, if at all? These questions might indeed reveal a connection between the FL classroom and ICC learning, but the reasons for posing them are different from those guiding this study. The findings of such study would likewise provide rich, more particular data, which would promote our understanding of individual students' experiences with culture and FL learning. In effect, the two methods, comparative and generalizable quantitative surveys and rich and particularized qualitative description, can be two layers of the same image: the former gives the general shape while the latter provides thick and rich detail. With this perspective, this study serves as the very beginning of a research program into the interaction of student, FL instruction and ICC.

Appendices

APPENDIX A: ASSESSMENT OF UNDERGRADUATE INTERCULTURAL COMPETENCE

2. Part I: About Yourself

Please complete each item below:

1. My nationality is

2. My native language is

 Arabic Chinese (Cantonese) Chinese (Mandarin) English Other (please specify) Hindi Russian Spanish Vietnamese

3. I also speak

4. I participated in UT's Würzburg Summer Study Abroad Program. (If "yes," please indicate the year you participated and the courses completed during the program.)

 No Yes. Indicate the year you participated and the courses completed during the program.)

5. Gender

 Female Male

6. How old are you (in years)?

 18-24 25-29 30-34 35-39 40-45 Other (please specify)

7. What is your current year of study?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

8. What German course did you take in the Spring semester, 2010?

- GER 506
- GER 507
- GER 312K
- GER 312L

9. What is/are your major/s? (more than one response is possible)

- | | | |
|---|---|---|
| <input type="checkbox"/> Anthropology | <input type="checkbox"/> Comparative Literature | <input type="checkbox"/> Italian |
| <input type="checkbox"/> Archeology | <input type="checkbox"/> Dance | <input type="checkbox"/> Kinesiology |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Economics | <input type="checkbox"/> Linguistics |
| <input type="checkbox"/> Art | <input type="checkbox"/> English | <input type="checkbox"/> Music |
| <input type="checkbox"/> Art History | <input type="checkbox"/> French | <input type="checkbox"/> Physics |
| <input type="checkbox"/> Astronomy | <input type="checkbox"/> Gender Studies | <input type="checkbox"/> Political Science |
| <input type="checkbox"/> Biology | <input type="checkbox"/> Geography | <input type="checkbox"/> Radio, Television and Film |
| <input type="checkbox"/> Business | <input type="checkbox"/> Geology | <input type="checkbox"/> Spanish |
| <input type="checkbox"/> Chemistry | <input type="checkbox"/> German | <input type="checkbox"/> Sports Medicine |
| <input type="checkbox"/> Classics | <input type="checkbox"/> Government | <input type="checkbox"/> Theater |
| <input type="checkbox"/> Communications | <input type="checkbox"/> History | <input type="checkbox"/> None yet |

Other (please specify)

10. What is/are your minor/s? (more than one answer is possible)

- | | | |
|---|---|---|
| <input type="checkbox"/> Anthropology | <input type="checkbox"/> Comparative Literature | <input type="checkbox"/> Italian |
| <input type="checkbox"/> Archeology | <input type="checkbox"/> Dance | <input type="checkbox"/> Kinesiology |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Economics | <input type="checkbox"/> Linguistics |
| <input type="checkbox"/> Art | <input type="checkbox"/> English | <input type="checkbox"/> Music |
| <input type="checkbox"/> Art History | <input type="checkbox"/> French | <input type="checkbox"/> Physics |
| <input type="checkbox"/> Astronomy | <input type="checkbox"/> Gender Studies | <input type="checkbox"/> Political Science |
| <input type="checkbox"/> Biology | <input type="checkbox"/> Geography | <input type="checkbox"/> Radio, Television and Film |
| <input type="checkbox"/> Business | <input type="checkbox"/> Geology | <input type="checkbox"/> Spanish |
| <input type="checkbox"/> Chemistry | <input type="checkbox"/> German | <input type="checkbox"/> Sports Medicine |
| <input type="checkbox"/> Classics | <input type="checkbox"/> Government | <input type="checkbox"/> Theater |
| <input type="checkbox"/> Communications | <input type="checkbox"/> History | <input type="checkbox"/> None |

Other (please specify)

11. A second stage of this study is to interview a small number of participants. The interview will be audio recorded. The recording will be kept confidential. Your participation is entirely voluntary and will not affect your participation in this online survey. Are you willing to be interviewed?

- No. Please do not contact me for an interview
- Yes. Please contact me. If you indicate "yes" please choose a code name for yourself (to protect your anonymity) and provide an email address with which to contact you.

12. Prior to starting German at UT, did you have any significant language and culture learning experiences?

- No
- Yes. Explain which language(s) and what kind of experience? (Please specify.)

13. Prior to studying German, did you have any important intercultural relationships (friends, family, work colleagues...)

Yes

No

3. Experience Abroad

1. Prior to starting German at UT, did you live for any length of time outside of your home country (in-residence, for work, for study, on a mission trip, etc.)?

No

Yes. Please specify for how long

4. Intercultural Relationships

1. What type(s) of intercultural relationships did you have?

- Friends
- Classmates
- Work Colleagues
- Family
- Other (please specify)

2. Were those relationships developed through contact at home or abroad?

- At home
- Abroad. Please indicate where.

3. On the whole, would you say this was a positive experience?

- Yes
- No

4. Did these intercultural relationships influence in any way your decision to start learning German?

- Yes
- No

5. Time Abroad

1. Did this experience help you develop skills that were useful in your coursework?

- No
- Yes. Please identify specific skills

2. Did you go on to study/learn an other language

- as a result of your intercultural experiences abroad
- for other reasons (please explain)

3. As a result of your intercultural experience(s) abroad, have you gone on to pursue any related field(s) of study?

- No
- Yes. (please specify)

4. As a result of your intercultural experience(s) abroad, have you chosen to work in any related field(s)?

- No
- Yes, (please specify)

6. Personal Characteristics

Please respond to all of the following items. For both questions you will use a scale of 0 (LEAST characteristic of yourself) to 5 (MOST characteristic of yourself) to rate yourself on each characteristic listed below.

For question 1 rate each characteristic on how you perceive yourself in your own culture.

In question 2 rate each characteristic as you believe Germans might perceive you during a trip to Germany.

1. Perception of Yourself in YOUR OWN CULTURE

	(LEAST characteristic of me) 0	1	2	3	4	5 (MOST characteristic of me)
Adaptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tolerant of differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can suspend judgment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lacks a sense of humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intolerant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-reliant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empathetic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear sense of self	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perceptive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tolerant of ambiguity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other qualities you possess that are relevant to the way you interact with people in your own culture. Please list any characteristics and rate as above from 0 to 5.

2. How You Think You Might be Perceived in GERMANY

	(LEAST characteristic of me) 0	1	2	3	4	5 (MOST characteristic of me)
Adaptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tolerant of differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can suspend judgment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lacks a sense of humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intolerant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-reliant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empathetic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear sense of self	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perceptive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tolerant of ambiguity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other qualities you possess that are relevant to the way you interact with people in your own culture. Please list any characteristics and rate as above from 0 to 5.

7. Motivation and Options

Please rate each item using the given scales.

1. What was your level of interest and motivation towards German culture?

	0 (None)	1	2	3	4	5 (Extremely high)
before beginning your language study	<input type="radio"/>					
upon starting 506 (or its equivalent)	<input type="radio"/>					
upon starting your current German course	<input type="radio"/>					
at this point in the semester	<input type="radio"/>					

2. How would you characterize your motivation towards German culture when thinking about potential travel to Germany?

	0 (Least Motivating)	1	2	3	4	5 (Most Motivating)
I would sometimes want to return home	<input type="radio"/>					
I wouldn't learn very much	<input type="radio"/>					
I would feel forced or obliged to adjust to ways of living and interacting	<input type="radio"/>					
The goal would be to survive as best I could	<input type="radio"/>					
I would want to get along well with Germans I meet	<input type="radio"/>					
I would want to adjust as best I could to ways of living and interacting	<input type="radio"/>					
I would find the German way of life so interesting and agreeable that I would work to become as bicultural as possible	<input type="radio"/>					
I would find living among Germans so agreeable that I would work to be as bilingual as possible	<input type="radio"/>					

3. Can you see yourself maintaining contact with people you meet in Germany upon your return home?

Yes

No

Why or why not?

4. To what extent do you feel such a trip might change you, if at all?

8. Language Proficiency

1. In this section consider your language ability when you started this semester and now at the end of the course. Of the 15 descriptive items below, choose ONE that describes most closely your language skills at the START of the course. Choose another ONE to describe your language skills now, at the END of the course.

	at BEGINNING of semester (choose ONE from this column)	at END of semester (choose ONE from this column)
no ability at all	<input type="radio"/>	<input type="radio"/>
unable to function in the spoken language	<input type="radio"/>	<input type="radio"/>
able to communicate only in a very limited capacity	<input type="radio"/>	<input type="radio"/>
able to satisfy immediate needs with memorized phrases	<input type="radio"/>	<input type="radio"/>
able to satisfy basic survival needs and minimum courtesy requirements	<input type="radio"/>	<input type="radio"/>
able to satisfy some survival needs and some limited social demands	<input type="radio"/>	<input type="radio"/>
able to satisfy most survival needs and limited social demands	<input type="radio"/>	<input type="radio"/>
able to satisfy routine social demands and limited work requirements	<input type="radio"/>	<input type="radio"/>
able to communicate on some concrete topics and to satisfy most work needs	<input type="radio"/>	<input type="radio"/>
able to speak with sufficient structural accuracy and vocabulary to participate effectively in most formal and informal situations	<input type="radio"/>	<input type="radio"/>
able to speak with sufficient structural accuracy and vocabulary to discuss relevant professional areas	<input type="radio"/>	<input type="radio"/>
able to speak German fluently and accurately on all levels	<input type="radio"/>	<input type="radio"/>
speaking proficiency sometimes equivalent to that of an educated German, but not always able to sustain performance	<input type="radio"/>	<input type="radio"/>
proficiency equivalent to that of an educated German	<input type="radio"/>	<input type="radio"/>

Is there anything else you want to add?

9. Intercultural Areas

Check the number below that best describes how you believe you might perform in each given situation.
0 = Not at all, 5 = Extremely well

1. If I were to study at UT's Würzburg summer program, I'd be able to establish and maintain relationships with

	(Not at all) 0	1	2	3	4	5 (Extremely well)
German students	<input type="radio"/>					
German professors	<input type="radio"/>					
other Germans I'd interact with	<input type="radio"/>					

2. If I were to study at UT's Würzburg summer program, I would be able to communicate in German with

	(Not at all) 0	1	2	3	4	5 (Extremely well)
German students	<input type="radio"/>					
German professors	<input type="radio"/>					
other Germans I'd interact with	<input type="radio"/>					

3. If I were to study at UT's Würzburg summer program, I would be also able to communicate in English with

	(Not at all) 0	1	2	3	4	5 (Extremely well)
German students	<input type="radio"/>					
German professors	<input type="radio"/>					
other Germans I'd interact with	<input type="radio"/>					

4. If I were to study at UT's Würzburg summer program, I would be able to cooperate with others, as needed, to accomplish tasks of mutual interest with

	(Not at all) 0	1	2	3	4	5 (Extremely well)
German students	<input type="radio"/>					
German professors	<input type="radio"/>					
other Germans I'd interact with	<input type="radio"/>					

11. Intercultural Abilities--Knowledge (Cont.)

1. Please respond to the questions in each of the four categories below, using the scale 0 = "Not at all" to 5 = "Extremely high."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
I can contrast my own behaviors with those of German peers in important areas (e.g., social interactions, basic routines, time orientation, etc.)	<input type="radio"/>					
I can describe some important historical and socio-political factors that shape my own culture.	<input type="radio"/>					
I can describe some important historical and socio-political factors that shape German culture	<input type="radio"/>					
I can describe phases I might experience if I were to have to adjust to living for a longer amount of time in Germany	<input type="radio"/>					
I could describe interactional behaviors common among Germans in social areas (e.g. family roles, hospitality, friendships, problem solving, making presentations, etc.)	<input type="radio"/>					
I could discuss and contrast various behavioral patterns in my own culture with those in Germany	<input type="radio"/>					

12. Intercultural Abilities--Attitude

1. Please respond to the items below, using the scale 0 = "Not at all" to 5 = "Extremely high."

Consider the following prompt:

"While on a trip to Germany, I would be willing to..."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
interact with Germans (I wouldn't avoid them or primarily seek out other Americans)	<input type="radio"/>					
learn from Germans, their language, and their culture	<input type="radio"/>					
try to communicate in German and behave in "appropriate" ways, as judged by my German hosts	<input type="radio"/>					
deal with my emotions and frustrations with German culture (in addition to the satisfaction and enjoyments it offered)	<input type="radio"/>					
take on various roles appropriate to different situations (e.g., in the family, as a student, friend, etc.)	<input type="radio"/>					
show interest in new cultural aspects (e.g., to understand the values, history, traditions, etc.)	<input type="radio"/>					

13. Intercultural Abilities--Attitude (Cont.)

1. Please respond to the items below, using the scale 0 = "Not at all" to 5 = "Extremely high."

Consider the following prompt:

"While on a trip to Germany, I would be willing to..."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
try to understand differences in the behaviors, values, attitudes and styles of host members	<input type="radio"/>					
adapt my behavior to communicate appropriately in Germany (e.g., in non-verbal and other behavioral areas, as needed for different situations)	<input type="radio"/>					
reflect on the impact and consequences of my decisions and choices on Germans I interact with	<input type="radio"/>					
deal with different ways of perceiving, expressing, interacting and behaving	<input type="radio"/>					
interact in alternative ways, even when quite different from those to which I was accustomed and preferred	<input type="radio"/>					
deal with the ethical implications of my choices (in terms of decisions, consequences, results, etc.)	<input type="radio"/>					
suspend judgment and appreciate the complexities of communicating and interacting interculturally	<input type="radio"/>					

14. Intercultural Abilities--Skills

1. Please respond to the questions below, using the scale 0 = "Not at all" to 5 = "Extremely high."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
I can be flexible when interacting with persons from Germany	<input type="radio"/>					
I can adjust my behavior, dress, etc., as appropriate, to avoid offending German hosts	<input type="radio"/>					
I can contrast and compare German culture with my own	<input type="radio"/>					
I can use strategies for learning German language	<input type="radio"/>					
I can use strategies for learning about German culture	<input type="radio"/>					
I can interact appropriately in a variety of different social situations in Germany	<input type="radio"/>					

15. Intercultural Abilities--Skills (Cont.)

1. Please respond to the questions below, using the scale 0 = "Not at all" to 5 = "Extremely high."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
I have at my disposal various strategies for adapting to the German culture and reducing stress arising from newness and difference	<input type="radio"/>					
I have at my disposal various strategies and techniques for learning German language	<input type="radio"/>					
I have at my disposal various strategies and techniques for learning about German culture	<input type="radio"/>					
I am generally aware of my behavior and reflect on how it impacts my learning, my growth, and especially people I interact with	<input type="radio"/>					
I can use information about German culture to improve my communication skills and interactions with Germans I encounter	<input type="radio"/>					
In the past I have helped to resolve cross-cultural conflicts and misunderstandings when they arose	<input type="radio"/>					
I can ask the right questions to learn about the deeper cultural issues at play in a specific cultural product (magazine article, TV commercial, a political cartoon, etc.)	<input type="radio"/>					
I can figure out when a miscommunication is occurring because of a cultural misunderstanding	<input type="radio"/>					

16. Intercultural Abilities--Awareness

1. Please respond to the items below, using the scale 0 = "Not at all" to 5 = "Extremely high."

Consider the following prompt:

"During my study of German language and culture, I have come to realize the importance of..."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
differences and similarities between my own and German language and culture	<input type="radio"/>					
my negative reactions to these differences (e.g., fear, ridicule, disgust, superiority, etc.)	<input type="radio"/>					
how varied situations in German culture might require modifying my interactions with others	<input type="radio"/>					
how Germans might view me and why	<input type="radio"/>					
myself as a "culturally conditioned" person with personal habits and preferences that are expressions of my own culture	<input type="radio"/>					
responses by Germans to my own social identity (e.g., race, class, gender, age, etc.)	<input type="radio"/>					
diversity in Germany (such as differences in race, class, gender, age, ability, etc.)	<input type="radio"/>					

17. Intercultural Abilities--Awareness (Cont.)

1. Please respond to the items below, using the scale 0 = "Not at all" to 5 = "Extremely high."

Consider the following prompt:

"During my study of German language and culture, I have come to realize the importance of..."

	(Not at all) 0	1	2	3	4	5 (Extremely high)
the potential consequences of generalizing individual behaviors as representative of the whole culture	<input type="radio"/>					
my choices and their consequences (which make me either more, or less, acceptable to German conversation partners)	<input type="radio"/>					
my personal values that affect my approach to ethical dilemmas and their resolution	<input type="radio"/>					
Germans' reactions to me that reflect their cultural values	<input type="radio"/>					
how my values and ethics are reflected in specific situations	<input type="radio"/>					
varying cultural styles and language use, and their effect in social and working situations	<input type="radio"/>					
my own level of intercultural development	<input type="radio"/>					
the level of intercultural development of others with whom I interact (fellow students, professors, friends, co-workers, etc.)	<input type="radio"/>					
how others perceive me as communicator, facilitator, or mediator in intercultural situations	<input type="radio"/>					

2. Is there anything else you would like to add? Your comments are valuable to this survey's ability to accurately describe and ultimately to recommend curricular improvements. If you have no further remarks, however, simply type "no comment"

You are finished! Thank you for your time and your input.

You will receive an email by June 15 if you have been chosen to for a individual interview. Your participation is completely optional and voluntary, but we hope that you choose to participate.

Best wishes for a relaxing restorative summer!

APPENDIX B: LSD ANALYSIS FOR IRCPLACE ON ICC SCORE AND ALL SUBDOMAINS

Dependent Variable	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
ICCMean	No Relationships	Only formed at home	-0.24	0.14	0.088
		Only formed abroad	-0.46	0.28	0.103
		Formed both at home and abroad	-0.52	0.20	0.011
	Only formed at home	No Relationships	0.24	0.14	0.088
		Only formed abroad	-0.22	0.27	0.418
		Formed both at home and abroad	-0.28	0.19	0.151
	Only formed abroad	No Relationships	0.46	0.28	0.103
		Only formed at home	0.22	0.27	0.418
		Formed both at home and abroad	-0.05	0.31	0.86
	Formed both at home and abroad	No Relationships	0.52	0.20	0.011
		Only formed at home	0.28	0.19	0.151
		Only formed abroad	0.05	0.31	0.86
Knowledge	No Relationships	Only formed at home	-0.47	0.17	0.007
		Only formed abroad	-0.80	0.34	0.023
		Formed both at home and abroad	-0.78	0.25	0.002
	Only formed at home	No Relationships	0.47	0.17	0.007
		Only formed abroad	-0.33	0.34	0.327
		Formed both at home and abroad	-0.31	0.24	0.185
	Only formed abroad	No Relationships	0.80	0.34	0.023
		Only formed at home	0.33	0.34	0.327

Dependent Variable	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
		Formed both at home and abroad	0.02	0.38	0.965
	Formed both at home and abroad	No Relationships	0.78	0.25	0.002
		Only formed at home	0.31	0.24	0.185
		Only formed abroad	-0.02	0.38	0.965
Attitude	No Relationships	Only formed at home	-0.06	0.13	0.643
		Only formed abroad	-0.46	0.25	0.072
		Formed both at home and abroad	-0.26	0.18	0.159
	Only formed at home	No Relationships	0.06	0.13	0.643
		Only formed abroad	-0.40	0.25	0.108
		Formed both at home and abroad	-0.20	0.17	0.254
	Only formed abroad	No Relationships	0.46	0.25	0.072
		Only formed at home	0.40	0.25	0.108
		Formed both at home and abroad	0.20	0.28	0.47
	Formed both at home and abroad	No Relationships	0.26	0.18	0.159
		Only formed at home	0.20	0.17	0.254
		Only formed abroad	-0.20	0.28	0.47
Skills	No Relationships	Only formed at home	-0.19	0.16	0.227
		Only formed abroad	-0.69	0.32	0.035
		Formed both at home and abroad	-0.66	0.23	0.005
	Only formed at home	No Relationships	0.19	0.16	0.227
		Only formed abroad	-0.50	0.32	0.118

Dependent Variable	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
		Formed both at home and abroad	-0.47	0.22	0.036
	Only formed abroad	No Relationships	0.69	0.32	0.035
		Only formed at home	0.50	0.32	0.118
		Formed both at home and abroad	0.03	0.36	0.939
	Formed both at home and abroad	No Relationships	0.66	0.23	0.005
		Only formed at home	0.47	0.22	0.036
		Only formed abroad	-0.03	0.36	0.939
Awareness	No Relationships	Only formed at home	-0.23	0.22	0.278
		Only formed abroad	0.11	0.44	0.808
		Formed both at home and abroad	-0.36	0.31	0.248
	Only formed at home	No Relationships	0.23	0.22	0.278
		Only formed abroad	0.34	0.43	0.426
		Formed both at home and abroad	-0.13	0.30	0.672
	Only formed abroad	No Relationships	-0.11	0.44	0.808
		Only formed at home	-0.34	0.43	0.426
		Formed both at home and abroad	-0.47	0.48	0.335
	Formed both at home and abroad	No Relationships	0.36	0.31	0.248
		Only formed at home	0.13	0.30	0.672
		Only formed abroad	0.47	0.48	0.335

*. The mean difference is significant at the 0.05 level.

APPENDIX C: LSD ANALYSIS FOR IRCPLACE AND ABROAD ON ICC SCORE

Time spent Abroad	(I) ICRPlace	(J) ICRPlace	Mean Difference (I-J)	Std. Error	Sig.
Yes	No Relationships	Only formed at home	-1.16*	.27	.000
		Only formed abroad	-1.06*	.33	.002
		Formed both at home and abroad	-1.20*	.31	.000
	Only formed at home	No Relationships	1.16*	.27	.000
		Only formed abroad	.10	.29	.734
		Formed both at home and abroad	-.04	.26	.887
	Only formed abroad	No Relationships	1.06*	.33	.002
		Only formed at home	-.10	.29	.734
		Formed at home and abroad	-.14	.32	.678
	Formed at home and abroad	No Relationships	1.20*	.31	.000
		Only formed at home	.04	.26	.887
		Only formed abroad	.14	.32	.678
No	No Relationships	Only formed at home	.05	.15	.721
		Only formed abroad	^b	.	.
		Formed at home and abroad	-.26	.27	.329
	Only formed at home	No Relationships	-.05	.15	.721
		Only formed abroad	^b	.	.
		Formed at home and abroad	-.32	.27	.234
	Only formed abroad	No Relationships	^c	.	.
		Only formed at home	^c	.	.
		Formed at home and abroad	^c	.	.
	Formed at home and abroad	No Relationships	.26	.27	.329
		Only formed at home	.32	.27	.234
		Only formed abroad	^b	.	.

Based on estimated marginal means

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

APPENDIX D: COMPLETE PRINCIPLE COMPONENT ANALYSIS

This table displays the composite factor model for all survey items. The colors correspond to the respective subdomains. Green represents Awareness; orange indicates Attitude; blue refers to Skills and violet designates Knowledge. For purposes of legibility, load values less than .4 were omitted from table cells.

Survey Item	Factor									
	1	2	3	4	5	6	7	8	9	10
the potential consequences of generalizing individual behaviors as representative of the whole culture	.802									
responses by Germans to my own social identity (e.g., race, class, gender, age, etc.)	.789									
my personal values that affect my approach to ethical dilemmas and their resolution	.782									
how Germans might view me and why	.781									
my choices and their consequences (which make me either more, or less, acceptable to German conversation partners)	.779									
myself as a "culturally conditioned" person with personal habits and preferences that are expressions of my own culture	.777									
how my values and ethics are reflected in specific situations	.763									
how varied situations in German culture might require modifying my interactions with others	.762									
differences and similarities between my own and German language and culture	.743									
my own level of intercultural development	.732									
Germans' reactions to me that reflect their cultural	.721									

Survey Item	Factor									
	1	2	3	4	5	6	7	8	9	10
values										
varying cultural styles and language use, and their effect in social and working situations	.714									
diversity in Germany (such as differences in race, class, gender, age, ability, etc.)	.713									
the level of intercultural development of others with whom I interact (fellow students, professors, friends, co-workers, etc.)	.706			.462						
my negative reactions to these differences (e.g., fear, ridicule, disgust, superiority, etc.)	.681									
how others perceive me as communicator, facilitator, or mediator in intercultural situations	.679									
try to understand differences in the behaviors, values, attitudes and styles of host members		.871								
take on various roles appropriate to different situations (e.g., in the family, as a student, friend, etc.)		.782								
deal with different ways of perceiving, expressing, interacting and behaving		.777								
reflect on the impact and consequences of my decisions and choices on Germans I interact with		.770								
adapt my behavior to communicate appropriately in Germany (e.g., in non-verbal and other behavioral areas, as needed for different situations)		.768								
deal with the ethical implications of my choices (in terms of decisions, consequences, results, etc.)		.749								
try to communicate in German and behave in "appropriate" ways, as judged by my German hosts		.737								

Survey Item	Factor									
	1	2	3	4	5	6	7	8	9	10
suspend judgment and appreciate the complexities of communicating and interacting interculturally		.734								
show interest in new cultural aspects (e.g., to understand the values, history, traditions, etc.)		.729								
interact in alternative ways, even when quite different from those to which I was accustomed and preferred		.722								
deal with my emotions and frustrations with German culture (in addition to the satisfaction and enjoyments it offered)		.717								
learn from Germans, their language, and their culture		.695								
I can use strategies for learning German language			.785							
I have at my disposal various strategies and techniques for learning German language			.779							
I know some techniques to aid my learning of German language			.663		.409					
I can use strategies for learning about German culture	.406		.634							
I can interact appropriately in a variety of different social situations in Germany			.595							
I have at my disposal various strategies and techniques for learning about German culture	.463		.572							
I have at my disposal various strategies for adapting to the German culture and reducing stress arising from newness and difference	.466		.506							
I am generally aware of my behavior and reflect on how it impacts my learning, my growth, and especially people I interact with			.474							
In the past I have helped to resolve cross-cultural conflicts and misunderstandings when they arose				.663						

Survey Item	Factor									
	1	2	3	4	5	6	7	8	9	10
I can figure out when a miscommunication is occurring because of a cultural misunderstanding	.406			.609						
I can ask the right questions to learn about the deeper cultural issues at play in a specific cultural product (magazine article, TV commercial, a political cartoon, etc.)				.588						
I can use information about German culture to improve my communication skills and interactions with Germans I encounter	.424		.412	.442						
I know the essential norms and taboos of Germany (e.g., greetings, dress, behaviors, etc.)					.653					
I know some techniques for effectively asking and learning about German culture			.433		.597					
I know some strategies for overcoming stress from cultural differences					.539		.511			
I could describe interactional behaviors common among Germans in social areas (e.g. family roles, hospitality, friendships, problem solving, making presentations, etc.)	.408				.488					
I can describe some important historical and socio-political factors that shape German culture						.769				
I can describe some important historical and socio-political factors that shape my own culture.						.749				
interact with Germans (I wouldn't avoid them or primarily seek out other Americans)		.443				.469				-.429
I could discuss and contrast various behavioral patterns in my own culture with those in Germany	.423			.421		.430				
I know when I am experiencing stress arising from cultural differences							.726			

Survey Item	Factor										
	1	2	3	4	5	6	7	8	9	10	
I can describe phases I might experience if I were to have to adjust to living for a longer amount of time in Germany							.674				
I can contrast my own behaviors with those of German peers in important areas (e.g., social interactions, basic routines, time orientation, etc.)							.424				
I can adjust my behavior, dress, etc., as appropriate, to avoid offending German hosts								.793			
I can be flexible when interacting with persons from Germany								.525			
I can contrast and compare German culture with my own											
I could cite a definition of culture and describe its components and complexities											.625

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