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## The Impact of Acculturation on Self-Reported Measures of Self-Efficacy with International Counseling Students

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THE IMPACT OF ACCULTURATION ON SELF-REPORTED MEASURES OF  
SELF-EFFICACY WITH INTERNATIONAL COUNSELING STUDENTS

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A dissertation

Presented to

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In Partial Fulfillment

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by

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Keywords: acculturation, self-efficacy, international students

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### ABSTRACT

The purpose of this study was to investigate how acculturation strategies relate to self-reported ratings of self-efficacy for international counseling students. Acculturation strategy usage may provide an important insight into the self-efficacy estimates of international students. Forty-three participants were recruited via e-mail from counseling programs within the United States. Participants were briefly instructed regarding the online completion of a demographic questionnaire, the Abbreviated Multidimensional Acculturation Scale ([AMAS-ZABB] Zea, Asner-Self, Birman, & Buki, 2003), and the Counseling Self-Estimate Inventory ([COSE] Larson et al., 1992). Thirty-four participants completed the AMAS-ZABB and thirty-one participants completed the COSE. Findings revealed the most common acculturation style to be the integrated style, and significant relationships existed between international students' Orientation to Host culture and self-efficacy scores. Time in the United States was significantly related to international students' Orientation to Host culture.

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## CHAPTER 1

### INTRODUCTION

Acculturation is a process that all people must go through when they move outside of their cultural locale and spend time immersed in another culture. All people experience challenges and chances for growth that lead to changes in their lives and well-being (Phinney, 2006). Almost everyone experiences some type of acculturation process at some point in life. When a child leaves her or his family to begin the first day of pre-school or kindergarten, an aspect of acculturation has begun with the experience of new social rules and a different environment. One can also see aspects of acculturation at work in social settings when traveling between different regions in the same country or progressing from one level of education to the next.

The prototypical view of acculturation is the macro-cultural differences that are experienced when immigrants travel between countries and are forced to learn new languages and customs. However, many groups, such as refugees, students, employees, and aboriginal people dealing with the encroachment of a new culture, experience the process of acculturation. All of these individuals may find themselves in vastly different cultural environments (Phinney, 2006). The level of cultural difference often indicates the amount of stress or acculturation difficulty a person may experience (Sheehan & Pearson, 1995). If the new culture involves

differences in language, humor, human rights, laws, or taboos, the process of acculturation is often more difficult.

Another major concept considered in this research is perceived self-efficacy, which can be difficult to define. Put simply, self-efficacy is the judgment of one's personal capability. This concept is distinctly different from self-esteem or self-appraisal. Self-esteem involves evaluation of personal worth, and self-appraisal refers to how one conceptualizes herself or himself as a whole (e.g., funny, awkward, wise). Bandura (1997), on the other hand, described self-efficacy as how effective a person feels at doing a certain task. Bandura introduced a new way of thinking about self-efficacy as being derived from four sources of information: experiences of mastery, comparison with others, evaluations by others, and self-knowledge of personal capabilities. Self-efficacy, like self-esteem, is experienced by everyone. A plumber, a mother, and an international student all estimate how well they perform the tasks given them, but because of other related factors, such as acculturation, some individuals may experience more hindrances to their performance and thus evaluate their ability more poorly than those who do not have these barriers.

International students are likely to be one of the populations in which the interplay and impact of self-efficacy and acculturation are most pronounced (Nilsson & Anderson, 2004). It is important to note that while all students experience stress from the growth process of training, minority and immigrant students experience a unique stress due to their position as cultural minorities (Rodriguez, Myers, Morris, & Cardoza, 2000). International students, in particular, may experience more adjustment problems than their colleagues and fellow students (Sandhu & Asrabadi, 1994). Berry (1990, 1997) proposed that the acculturation strategies adopted by

adjusting individuals, namely integration, assimilation, separation, and marginalization, are central factors moderating the adaptive outcomes of acculturation.

Sojourner (typically temporary visitors) and immigrant (typically permanent residents) students have been traveling to the United States in increasing numbers to seek training and education. These students seek out the United States because it has the special status as a “Mecca” for learning and knowledge throughout the world (Sandhu & Asrabadi, 1991). A survey of 702 institutions of higher education revealed that from 2006 to 2007, 55% of those institutions estimated that they had more international students than the previous year; furthermore, 79% of colleges that claimed over 1000 international students reported an increase within the last year (Institute of International Education, 2007). These increases are also likely to be true for training in counseling, a special branch of psychology originally developed in the United States.

Because all students experience certain amounts of cultural stress and adaptation when they pursue bachelor or graduate degrees, institutions often take healthy adjustment for granted and expect all students to be able to handle the stress of this period of their lives. International students may experience higher levels of acculturation stress than typical students because of a lack of resources in the new culture and isolation from the resources of their own culture. International counseling students in particular may experience an environment in which it is difficult to thrive due to a combination of lack of insight regarding their difficulties and a lack of knowledge regarding how to meet their unique needs.

### **Gaining Insight into International Student Acculturation**

Few studies have been conducted on international students’ process of acculturation, and there have been even fewer studies on the acculturation of international counseling students. The

phenomenon of acculturation is of particular importance to psychology because the emphasis on language and culture within the social sciences provides a greater barrier for psychology students who are not completely fluent in English (Nilsson & Anderson, 2004). The process of cultural adjustment will likely have less impact on the academic performance of an international physics student than an international psychology student because the concepts of physics are less language dependent. As international student enrollment continues to increase, it seems vital to understand what factors influence international students' ability to feel successful in the field of counseling.

Research has been conducted with international students and areas related to international student functioning. Researchers have studied migrant students (Phinney, Horenczyk, Liebkind, & Vedder, 2001; Rodriguez et al., 2000), international students' perceptions of counseling (Constantine, 2002; Martin, 1997; Mocan-Aydin, 2000), and how students' self-confidence (self-efficacy) impacts the quality of counseling service provided (Bradley & Fiorini, 1999). An acculturation scale has also been developed for international students (Sandhu & Asrabadi, 1994).

Nilsson and Anderson (2004) are the only researchers so far who have specifically focused on supervision, self-efficacy, and acculturation in counseling students. In their study of supervision experiences, they used the Supervisory Working Alliance Inventory – Trainee form ([SWAI-T] Efstation, Patton, & Kardash, 1990) to measure the supervisor-supervisee relationship, the Counseling Self-Estimate Inventory ([COSE] Larson et al., 1992) to measure self-efficacy, and the American-International Relations Scale ([AIRS] Roysircar-Sodowsky & Maestas, 2000) to measure acculturation. Nilsson and Anderson found that 25% of the variance

in their participants' self-efficacy could be explained by their level of acculturation and rapport between the supervisor and supervisee.

Understanding the influence of acculturation on international counseling students is important because of the impact different acculturation orientations could have on their work, especially in the early stages of acculturation when the most acculturative stress is likely to occur. International counseling students are expected, as part of their training, to provide therapy to clients who have very different cultural experiences than theirs, and their success is dependent upon how easily they can incorporate bi-culturalism into their practice (Nilsson & Anderson, 2004). It is possible that the relationship between an international student's success and acculturation can be determined and clarified by measuring a student's acculturation orientation and feelings of self-efficacy.

### **Purpose**

The purpose of this study was to investigate the process of acculturation and its relationship to self-reported ratings of self-efficacy for international counseling students in training in the United States. Demographic data were collected and correlated with the self-efficacy scores of the individuals; of particular interest was the current estimated acculturation strategy, years in the current culture, and years in counselor training.

In the current study, acculturation strategies were estimated by determining international counseling students' orientations toward host and origin cultures using the Abbreviated Multidimensional Acculturation Scale ([AMAS-ZABB] Zea et al., 2003). The host and origin culture sub-scale scores were analyzed in relation to the students' self-reported self-efficacy scores on the COSE (Larson et al., 1992). Students whose scale scores indicate that they are oriented toward Berry's (1990) integrated strategy of acculturation (complex relationship of

acceptance of both host and origin culture systems) will most likely have more resources (social, familial, and societal) available to them through maintaining open channels to possible supports in both cultures. These more abundant resources may result in their devoting more energy to learning the skills necessary to be a counselor and comprehending the values of the culture in which they are practicing. In contrast, the experience of acculturative stress and the symptomology of unsuccessful acculturation which often results in those who have marginalized orientations (complex relationship of rejection of both host and origin cultures) will likely hinder students' ability to learn the skills to become a counselor and to feel effective when they practice in a non-familiar environment due to the closing of channels of possible support from both cultures.

### **Research Questions**

This study was guided by the following questions:

1. What is the most common acculturation orientation (separation, assimilation, integration, or marginalization) present among international counseling students in U.S. counseling training programs?
2. What relationship exists between the host culture and culture of origin dimensions of acculturation and feelings of effectiveness as a counselor within U.S. training programs?
3. Does a measurable relationship exist between international counseling students' acculturation orientation and the amount of time they: (a) have been in counselor training in the United States, (b) have lived in the United States, and (c) estimate they will reside in the United States?



### **Definitions**

Acculturation was originally defined by Redfield, Linton, and Herskovits (1936) as a process that begins with a first-hand contact between two autonomous cultural groups through which changes arise in either or both of the contacting groups. In general, acculturation refers to the consequences of prolonged contact between people belonging to different cultural groups. In psychology, acculturation usually refers to the way an immigrant who has temporarily or permanently settled deals with the culture of origin (cultural maintenance) and with the culture of the country of settlement (cultural adaptation; Arends-Tóth, van de Vijver, & Poortinga, 2006). In this research, I adopted Arends-Tóth's and van de Vijver's (2006) definition of acculturation as the strategy or strategies adopted by temporary or permanent immigrants to deal with the stress of adapting to a new culture.

Perceived self-efficacy is concerned with evaluations of personal capability (Bandura, 1997). It was defined, for the current research, as how a person rates his or her skill level in a particular area of function.

## CHAPTER 2

### LITERATURE REVIEW

What follows is a review of the constructs, concepts, and research that are relevant to the current study of acculturation. The review begins with the basic concepts of acculturation and self-efficacy, as well as the current understandings of the constructs. After these foundational concepts are discussed, more specific principles related to the study of acculturation are discussed. Specifically, ethnic identity and how it relates to acculturation, domains of acculturation, cross-cultural counseling, data about international counseling students, and commonly used measures of acculturation are addressed. Finally, a summary of the information is presented.

#### **Acculturation**

While the concept of acculturation has been well established and has a long history (Redfield et al., 1936), interpretations of the construct have changed over time. For example, The International Organization for Migration (IOM, 2004) defined acculturation as the progressive adoption of elements of a foreign culture (ideas, words, values, norms, behavior, institutions) by persons, groups, or classes of a given culture. However, this definition has been criticized as have many other previous definitions since the concept's inception in 1936. A variety of acculturation strategies (Berry, 1990, 1997) have been used by immigrants or

sojourners to cope with the process of acculturation and the stress that accompanies the process. However, there is disagreement among researchers about the dimensions of acculturation.

The one-dimension or “unidimensional” model of acculturation considers native culture maintenance and new culture adaptation as polar opposites of a single dimension (Gordon, 1964). It was long believed that the acculturation process was linear and that individuals who adopted the dominant culture of a new locale did so at the expense of their native cultural competence. The linear view predicted that individuals who are less acculturated experience more psychological distress in the new culture (LaFromboise, Coleman, & Gerion, 1993). According to this model, an immigrant must either be assimilated, which means abandoning his or her minority identity, or become separated, which means rejecting (and typically being rejected by) the dominant culture. This linear model has fallen out of favor in more recent research, due in large part to the two-dimensional model proposed by Berry in 1990.

The “bi-dimensional” model considers four different attitudes individuals can endorse through the process of acculturation. Berry (1990) developed an early methodology for testing the four categories of his bi-dimensional model by asking two questions:

1. Is it considered to be of value to maintain one’s cultural heritage?
2. Is it considered to be of value to develop relationships with the larger society?

From these responses, four categories were derived: integration (“yes,” “yes”), separation (“yes,” “no”), assimilation (“no,” “yes”), and marginalization (“no,” “no”). Integrated individuals retain a strong ethnic or national identity and also identify with the new society or culture in which they are immersed. Separated individuals have a strong ethnic or historical national identity but do not identify with their current cultural or national identity. Assimilated individuals identify with the new culture or nationality but abandon their historical ethnic or

national identity. Marginalized individuals discard their historical ethnic or national identity and also reject their current cultural or ethnic identity. Table 1 illustrates how these dimensions can be conceptualized.

Table 1

*Berry's Bi-dimensional Model of Acculturation*

Maintenance of Culture of Origin	Maintenance of Culture of Host	
	Yes	No
Yes	Integration	Separation
No	Assimilation	Marginalization

*Note.* Adapted from "Immigration, acculturation, and adaptation" by J. W. Berry, 1997, *Applied Psychology: An International Review*, 46, p. 5-34.

A two-dimensional model of acculturation acknowledges important aspects of acculturation, namely preservation of one's own heritage and adaptation to a new society, and allows the two dimensions to be conceptually distinct and vary independently (Liebkind, 2001). The four-category model also illustrates that there may be many differing ways that immigrants can acculturate and affirms that immigrants do not have to give up competence in their culture of origin to adapt to the new society. Many now believe that individuals may retain ties to and become competent in more than one culture without negative mental health outcomes (LaFromboise et al., 1993). In effect, the bi-dimensional model allows an important aspect of multiculturalism, namely pluralism, to function theoretically. Specifically, the model conceptually explains how diverse subcultures made up of people with different orientations toward acculturation can coexist within the same immigrant population in a society.

Researchers indicate that the integrated strategy is highly correlated with the highest levels of adjustment in acculturating individuals and that marginalization is the least conducive to higher levels of well-being (Berry, 1997; Berry & Sam, 1997). Similarly, with regard to identity, positive psychological outcomes for immigrants are expected to be related to a strong identification with both their ethnic group and the larger society (Berry, 1997). Integration presumably provides the most supportive socio-cultural base for the mental health of the individual as it permits involvement in two cultural systems (Berry & Kim, 1998). However, integration is not necessarily the dominant strategy even though researchers have identified it as being the most adaptive. Each of the four possible identity categories is dominant in some groups and in some settings (Phinney et al., 2001).

Integration can be considered the most successful acculturation strategy. In recent years, successful acculturation has been defined in terms of mental and physical health, psychological satisfaction, high self-esteem, competent work performance, and good grades in school (Liebkind, 2001). Unsuccessful acculturation can be defined conversely as psychological dissatisfaction, low self-esteem, incompetent work performance, and poor grades in school. Another way of defining unsuccessful acculturation is the experience of the symptoms of acculturative stress, which is a major consequence of having minimal support during acculturation. Acculturation stress is a reduced level of health functioning including psychological, somatic, and social components experienced by individuals who are in the process of adjusting culturally (Berry, Kim, Minde, & Mok, 1987).

Individuals and their social context must be understood simultaneously (Roccas, Horenczyk, & Schwartz, 2000). It is misleading and likely inaccurate to identify an acculturation orientation and use the characterization as a way to sum up an individual's

acculturation experience and the root of all experiences, either positive or negative. For example, an isolated acculturation orientation, such as a separated or marginalized attitude, may prove more adaptive in a hostile new culture than an assimilated or integrated strategy. An individual would not experience as much hostility from the new culture because he or she would not be seeking connections or support from it.

Acculturating individuals face added stress from many aspects of their experience in their new contexts. There are no simple causes or solutions for these stressful experiences. For instance, the specific cultural characteristics that sojourners or immigrants bring to a new society exert strong influences on their acculturation process and their levels of acculturative stress (Berry, 1997). Some cultures of origin may equip their residents to better adapt to new cultures than others, and typically those cultures that share more common factors prove easier to adapt to than those with few commonalities. Furthermore, it must be noted that numerous other factors are assumed to influence adaptation as well. These include moderating factors such as age, gender, personality, cultural distance from the host society prior to migration, coping strategies employed by the individual, experiences of prejudice and discrimination, social support, and contextual factors like demographics, immigration policy, and ethnic attitudes of the receiving society (Berry 1990, 1997). While the bi-dimensional model is still a simple label for a complex concept, it allows for a more insightful understanding regarding the attitudes of immigrants.

Berry's work inspired new and more complex conceptualizations of acculturation. For instance, Roccas et al. (2000) related a more complex conceptualization of the bi-dimensional model. They theorized that an individual's beliefs about the expectations of the dominant culture (e.g., a Jewish individual's belief about the German culture's view of Jews just before World War II) relates to the strategy of acculturation an individual adopts. The actual expectation of

the dominant culture matters less than the perceived expectation the individual feels from the dominant culture. For example, if an individual believes that the dominant culture wants him or her to be marginalized or assimilated, the individual is likely to feel anger, hostility, or resentment toward the dominant culture and is less likely to endorse acceptance of any of the culture's beliefs or values.

From this perspective, acculturation strategies as defined by Berry in 1990 are summative reflections of individual experience that simplify complex dilemmas and decisions related to personal and cultural identity among people undergoing cultural transition. In other words, acculturation strategies chosen by individuals are not fixed but are a generalization of the accepting or rejecting attitudes they hold about their own and host cultures at the moment.

A fusion type model has also been developed in which an individual creates a personal culture which is a mixture of the cultures he or she is experiencing (Arends-Tóth & van de Vijver, 2006). The fusion model, also referred to as coexistence, is relatively new and posits that there are no formal stages or strategies of acculturation. Instead, individuals make acceptance/rejection decisions about specific aspects of their social lives to create an integrated culture (Coleman, 1995). Integrated culture individuals select the most positive aspects of both their culture of origin and their host culture to create the integrated culture.

### **Ethnic Identity and Acculturation**

Conflicting assumptions exist about the differences between the concepts of acculturation and ethnic identity. Acculturation, as defined by Berry (1990), is an individual's holding on to or letting go of cultural identities as he or she has new cultural experiences. In this sense, acculturation is the process of modification of an individual's identity. Ethnicity is primarily an assumption of ancestry and origin and a feeling of belonging in that group. When the assumption

of ancestry creates a bond within a certain group, an ethnic group exists (Liebkind, 2006). However, according to Roccas et al. (2000), ethnic identity is more complex and deals with not only subgroup identification but also incorporation of values from other cultures. More specifically, the term ethnic identity can be used to refer to a sense of identity pulled from various subgroups which is then understood within a larger context, such as a nation or popular media. When ethnic identity is understood in this broader sense, it seems very similar to acculturation. In fact, the distinction between the concepts of ethnic identity and acculturation has been so under-examined (Liebkind, 2001) that the terms are used almost interchangeably in some research (Nguyen, Messé, & Stollak, 1999).

Phinney (1990) emphasized that acculturation is thought to be a broader construct than ethnic identity. While ethnic identity is an important construct, it is only a portion of the broader construct of acculturation, which encompasses a wider range of behaviors, attitudes, and values that change due to contact between cultures.

### **Domain-Specific Acculturation**

Domain-specific models of acculturation posit that acculturation does not happen within an individual as a whole. Instead, individuals adopt different acculturation strategies in different environments or situations. A worker, for instance, may behave very similarly to the host culture in terms of humor, language, social norms, and dress while at work but behave and think more in line with his or her culture of origin while at home. Domain-specific models also allow the acculturation strategy used in one life domain to change as needed without modifying strategies used in other domains.

Three levels are associated with domain-specific acculturation. The first level of acculturation strategies centers on specific clusters of life domains, usually divided into public



and private life clusters. The second level includes specific life domains such as spousal roles, child-rearing, and religious practice. The third and most basic level is specific to certain situations such as child-rearing in public or spousal roles with visiting relatives. Each of these levels can be examined and measured (Arends-Tóth & van de Vijver, 2006). While these levels are important distinctions, they bring a level of complexity to acculturation research that is difficult to manage, especially with regard to the second and third levels of domain-specific acculturation. It would be almost impossible to include all the aspects of acculturation at the second or third level of domain-specific acculturation. Furthermore, if data could be collected on those levels, it would be extremely difficult to pull meaningful results from them, (e.g., what does it mean about a person's broader functioning that he or she is isolated when relating to other parents at day-care, but integrated when chatting with friends online?). To use this construct, it is vital to understand the domains that are relevant to a research question and have a reasonable chance of providing meaningful distinctions between categories of the acculturation processes.

### **Perceived Self-Efficacy**

In its simplest form, perceived self-efficacy is a judgment about one's own personal power or capability to accomplish a given task. It is important to understand that this is not an "omnibus" trait that will either be high or low but a trait that will change given personal, environmental, and task-based factors (Bandura, 1997).

Bandura stated that self-efficacy is constructed from four sources of data. The first, termed "enactive mastery," is the ability to successfully complete a task. If the task is simple, such as hammering a nail, discerning enactive mastery is relatively easy. However, more abstract tasks, such as providing therapy to a client, are difficult to measure as successes or

failures. A person must go by the cues of the situation to try to make a best guess of how successful she or he was at the abstract task.

The second source of self-efficacy information comes from seeing another person practice a task. For example, if an individual feels a high amount of enactive mastery about hammering a nail in straight, it might erode her self-efficacy to see someone else hammer in a nail with a single blow of the hammer. By comparing her ability at a task with the ability of others at that task, an individual gains vital self-efficacy information.

The third source is social influence. If others respect an individual's abilities and convince her of that ability at certain tasks, it raises her efficacy beliefs about that task. For example, an individual who has a low estimation of her ability at a certain task but is praised for a performance will likely have improved self-appraisal.

The fourth source of efficacy information is related to how capable a person sees himself in general. A person who holds an over-arching belief in his capabilities has a higher sense of self-efficacy in general. This holds true even if that belief is inaccurate. For example, a carpenter may know that he has mastery of a great many specific tasks related to carpentry, but it is his physical conditioning and mental abilities which suit him well for these tasks. If asked to build something new, the carpenter's level of self-efficacy would probably support him well enough to attempt the new task; however, if asked to defuse a bomb or climb a mountain, these feelings of self-efficacy would be likely to suffer because of the carpenter's beliefs about his capabilities.

Larson and Daniels (1998) worked together to write an integrative review of the literature on counseling self-efficacy. Larson (1998a, 1998b) took the next steps to connect and illustrate how counseling self-efficacy was a subset of social cognitive theory. Social cognitive theory

centers on the idea of learning through observation and imitation. Social cognitive theory, as presented by Bandura (1997), was then adapted by Larson to explain how counselors or therapists can develop feelings of effectiveness with clients. Counseling self-efficacy, though central to the current research, is only one construct in a larger theory of self-efficacy.

Al-Darmaki and Daniels (2004) demonstrated that undergraduate students enrolled in practicum training experiences in psychology at the United Arab Emirates (UAE) University had high levels of anxiety and low levels of self-efficacy as they began their training. After supervised training, these students demonstrated greatly reduced anxiety and significantly increased levels of self-efficacy. As Bandura (1997) might have predicted, positive self-efficacy beliefs developed for these UAE students as self-referent performance data were obtained and skill mastery was practiced within the environment of supervised training.

Tang et al. (2004) found that counselors in training enrolled in Midwestern U.S. schools had strong links between perceived self-efficacy and coursework ( $r = .59, p < .01$ ), internship experiences ( $r = .47, p < .01$ ), and clinical instruction ( $r = .40, p < .01$ ). They indicated that these results provide further evidence of Bandura's 1997 theories regarding perceived self-efficacy at work within counselor training.

### **Cross-Cultural Counseling**

Is it possible for counselors to effectively work with individuals native to cultures different from their own native culture? Does the context of the counseling, either within the counselor's own native context or immersed in a foreign context, impact the counseling process? These questions are not easily or definitively answerable. There is too little research regarding counselor effectiveness in general, much less when bringing issues of cross-cultural context into

the equation. Although research and theory are limited in this area, some recent contributions should be noted.

### **Color-Blindness**

The theory of color-blindness has been identified by multicultural psychologists. While this theory was never formally endorsed, and in fact was only named by those who sought to destroy it, it has been widely used (Constantine, 2002). Typically, therapists who hold color-blind racial attitudes are likely to believe that race plays little or no part in the life experiences of ethnic minorities. Color-blind racial attitudes can be defined as the belief that race does not and should not matter (Neville, Lilly, Duran, Lee, & Browne, 2000). The achievement disparities seen between groups, according to color-blind theory, are explained by therapists as traits of an individual, such as a lack of intelligence or high motivation (Burkard & Knox, 2004). Color-blind theory is restricting in the context of the current acculturation research because it limits the influence of bias to issues of perceived race. Color-blindness excludes influences related to many other perceived groupings, such as sexuality, nationality, or socio-economic status.

Color-blindness may hinder a therapist's ability to correctly attribute differences between internal and external problems (Burkard & Knox, 2004) because it operates at a level below a therapist's awareness. When asked, a therapist would deny any form of racism, yet still practice the color-blind construct by treating all clients as if they had no race.

### **Unintended Bias**

In the current discussion of cross-cultural counseling, the issue of unintended bias is particularly relevant. As people in developing countries receive training from and borrow Western models of psychology, other non-explicit theories such as Color-Blindness, Nihilism, or Constructionism could be transplanted as well. For instance, many counselors in Turkey have

begun using the color-blind approach in their practices (Mocan-Aydin, 2000). Because counseling theories have been developed primarily in the cultures of Western societies, they are difficult to apply unilaterally to other cultures. The disconnect between the theoretical underpinnings of the psychology used in a given culture and the perhaps very different beliefs of the culture the psychology is being used within was first recognized by U.S. counselors who began counseling clients from diverse cultural backgrounds (Das, 1995; Ottabi, Pope-Davis, & Dings, 1994). Fisher, Jome, and Atkinson (1998) believe that psychology is best understood as a projection of the culture from which it arises. According to this view, it would be difficult if not impossible to transplant counseling theory from one culture to another.

In contrast, if theory can be used across cultures, then a therapist's awareness of her or his own biased attitudes and beliefs would be vital to effective therapy. In the limited research that has been conducted in the area, Constantine (2002) found that therapists who rated themselves higher in negative racial attitudes (i.e., prejudicial and biased attitudes toward other social and ethnic groups) also rated themselves lower in multicultural counseling competencies. Some argue that this disparity is not an issue of theoretical inadequacy but a lack of cultural insight and training on the part of the clinician. If the clinicians knew more about cultures other than their own, they would feel more adequate to counsel clients from other cultures. To be thoroughly trained in every culture is an admirable ambition, but Mocan-Aydin (2000) stated that it would be all but impossible to know the general characteristics of each subculture. Even if those characteristics were known, it would be impossible to remain familiar with all the necessary cultural material.

## **Cultural Competence**

The most informative and insightful option currently seems to be to encourage a more developmental and culturally aware perspective. This view does not discount the need for a strong knowledge base in cultural, sub-cultural, and individual differences which can enhance sensitivity to the cultural multiplicity both across and within cultures but emphasizes the need for openness and insight in all counseling experiences. In this light, the multicultural model has received criticism because of its preoccupation with finding techniques that will meet diverse needs instead of emphasizing counselor competence that is inherent to a productive relationship (Patterson, 1989).

According to McFadden (1996), a culturally competent counselor will not only understand and respect cultural differences, but also encourage the client to learn how to function in a larger culture without neglecting to appreciate his or her own culture. For example, many Western models of psychology set forth independence as a goal of therapy, but this therapeutic goal of Western counseling may be unfamiliar and inappropriate for clients in other cultures. Helping clients to achieve insight, self-awareness, and personal growth may be a counselor's goals. However, unless these goals are shared or owned by the client, no positive outcomes can result. Shared and appropriate goals must be developed by asking clients what their goals are and then negotiating a common purpose.

This issue is far from settled as theorists continue to clash over whether there are common factors linking all humanity or insoluble differences between peoples and cultures. For instance, some theorists have stressed that there are common existential values, worldviews, or needs for self-actualization that motivate people in every culture and that the worldviews of people across cultures are generally more similar than different (Chang & Page, 1991; Patterson,

1989; Vontress 1979, 1983). On the other hand, other theorists emphasize that various worldviews are much more different than similar (Sue & Sue, 2008). Cross-cultural counseling is likely to become increasingly important and problematic in the coming years as counselor training programs and their trainees interact with more diverse cultures. Because of this trend it will be important to develop the competencies of counseling students with cross-cultural clients as well as the theoretical and knowledge base that counselors use to educate trainees regarding cross-cultural counseling.

### **International Counseling Students**

Institutions of higher education have experienced a growing proportion of international students (Institute for International Education, 2007), with the result that educational systems in the United States are becoming increasingly internationally diverse. A challenge for U.S. counselors working at colleges or universities is to adapt themselves to the specific needs of different racial, ethnic, national, and international student populations. However, the phenomenon of diversification must be understood as an issue which will have an effect beyond institutions of higher education within the United States. International education is being forced to adapt to the increasing influx of students from across the globe. It is vital that mental health professionals become better prepared to treat this population because international students suffer from a wide variety of psychological difficulties ranging from simple loneliness, homesickness, and irritability to severe depression, confusion, and disorientation (Sandhu & Asrabadi, 1991). A consensus is developing within the United States that international students are a higher risk group and that this group has far greater numbers of psychological problems than their counterpart native U.S. students (Sandhu & Asrabadi, 1991; Tatar & Horenczyk, 2000).

From a theoretical perspective, cultural relocation may impact many aspects of the self and typically demands significant restructuring and redefining of both personal and social identities. During this process, individuals must continuously reorganize the delicate structures and relationships among their various sub-identities. Some of these sub-identities are results of new memberships within a host society; others can be cherished or loathed identities that were filled in the native culture of their former home. As the redefining process continues, newcomers develop inferences regarding the expected roles that members of the new society have of them. These perceptions of expectation have an impact on the process of identity development (Horenczyk, 1996).

The acculturation process is difficult not only in terms of the new environmental context but also because of identities individuals carry with them as they settle into a new context. As indicated by Berry (1997), the cultural characteristics that accompany individuals on their journey to a new society are likely to exert strong influences on their acculturation. There are other strong influences at work in this process as well. According to Akhtar (1995), one of the most important factors affecting outcomes of cultural transition is the permanence of the move. It is believed that as individuals cope with the new culture, knowledge of the permanence of the transition acts to support or undermine their attempts to adjust. The phenomenon is difficult to study, however, because the majority of researchers ignore duration of stay as a factor in the demographic questionnaires, listing sojourners and immigrants in the same category of international students. Some studies have even included members of ethnic minority groups and refugees as being in the same adjustment process (Berry & Sam, 1997).



### **Measures Used in Acculturation Studies**

Acculturation has not been widely studied in modern cultures despite its relevance to multicultural research. Conceptualization and measurement problems with acculturation studies are common. It is only recently that researchers have begun focusing on summarizing and integrating theory into a more researchable construct (Arends-Tóth & van de Vijver, 2006). The acculturation process can be thought of in many ways. The uni-dimensional, bi-dimensional, and fusion models can be used as frameworks to describe the acculturation process and thus used as models for research. For the current research, the bi-dimensional model has the best conceptual fit, and is a model used in research on acculturation.

An important aspect of acculturation research is which domains will be the most relevant and meaningful. International students often have much less contact with friends and family than when they lived in their native culture. The immersion international students experience often affects both public (e.g., school, work) and private (e.g., home life, relationships, child-rearing) cultural experiences. Sojourners sometimes seek out subgroups with the same or similar culture of origin to foster maintenance of and comfort in native culture experiences. Because of this, when studying international counseling students, it is important to measure the maintenance of culture of origin and adoption of mainstream culture practices in both public and private domains.

Different methods have been used to study acculturation, including observations, case studies, questionnaires, scales, vignettes, interviews, and information gained from the spouses or significant others of acculturating individuals. Most studies use self-report questionnaires (Arends-Tóth & van de Vijver, 2006). The ease with which information is attained makes this

the most widely-used method; however, self-reported questionnaires have some difficulty because of bias due to social desirability.

Related to important factors of acculturation research is the need to measure both attitudes and behaviors related to acculturation. Arends-Tóth and van de Vijver have shown that measuring both yields complementary information. Because of this structural equivalence, researchers believe measures of behavior and attitude describe the same psychological construct. Including measures of both behaviors and attitudes should create two indicators of acculturation that generally point to the same category of acculturation.

Researchers have attempted to measure acculturation in several ways. The most common and less modern are the one-, two-, and four-statement models (Arends-Tóth & van de Vijver, 2006). The one-statement model has the benefit of being simple to understand and administer with little need to interpret. For example, the research participant chooses between statements that personally fit best, such as “I prefer to have more American friends than Korean friends” or “I prefer to have more Korean friends than American friends.” The problem with the one-statement model is that it does not allow individuals to express a range regarding how strongly they feel about the statement. Some individuals would simply select all the responses, which would likely invalidate all their responses.

The two-statement model has been very popular in recent years and is the model used most commonly by Berry (1990). The two-statement model allows for the dimensions of acculturation to be evaluated separately. For example, one statement would evaluate the acceptance/rejection of the mainstream culture (e.g., “I find it important to maintain strong connections with the mainstream culture”) or acceptance/rejection of the culture of origin (e.g., “I find it important to maintain strong connections with my native culture”). These statements

are rated on a Likert-type scale which ranges from *strongly agree* to *strongly disagree*. The two-statement method is beneficial because it allows for a range of responses from the individual and it is more difficult for participants to invalidate.

The underlying basis of the two-statement model is that there are four categories based upon two dimensions, namely dominant culture and native culture maintenance. If researchers found a strong negative relationship between the two dimensions, it would indicate that the uni-dimensional model is the most accurate (people lose one culture to gain another) and not the bi-dimensional model after all. However, if researchers found little relationship between the two dimensions, it would support the existence of the bi-dimensional model (people can maintain or reject either culture independently). Researchers have shown a negative relationship (rejection of one culture and acceptance of the other) indicating uni-dimensionality (Birman & Trickett, 2001), low relationship (acceptance or rejection of one culture had little to do with the other) indicating bi-dimensionality (Sánchez & Fernandez, 1993, Sayegh & Lasry, 1993), and positive relationship (acceptance/rejection of one culture meant the acceptance/rejection of the other) indicating a kind of dual-acceptance or dual-rejection model of acculturation (Ward & Kennedy, 1994). These divergent findings regarding the underlying structure of acculturation and the difficulty of describing a single category are the problems associated with the two-statement model.

The four-statement model is an attempt by researchers to measure each of the four categories of acculturation: assimilation, marginalization, separation, and integration. Participants are asked to rate statements reflecting their acceptance or rejection of the host culture and their culture of origin. The four-statement model does a good job of describing how the participant fits into each category. The real disadvantage of the four-statement model is that

it becomes verbally complex and item wording becomes more important. However, because each of the strategies is independently assessed, the degree of relationship between them can be assessed empirically.

Another consideration that has recently been given more attention is how to analyze various aspects of acculturation. Some current researchers (e.g., Arends-Tóth & van de Vijver, 2006) have begun to divide acculturation into three broad categories (i.e., conditions, orientations, outcomes) in order to help researchers quickly analyze and categorize variables at a conceptual level. Conditions include any characteristics or perceived characteristics of the receiving society, society of origin, immigrant group, inter-group relations, or personal characteristics. Orientations fall into the adoption or rejection of the mainstream or dominant culture and the maintenance or abandonment of the subculture or culture of heritage. Outcomes consist of psychological well-being, socio-cultural competence in the mainstream culture, and socio-cultural competence in the culture of origin. These conceptual divisions are based largely on the works of Berry (1990, 1997). In the current study, aspects of all three of these categories will be measured by assessing demographic variables related to the conditions, using an acculturation assessment to measure cultural orientations, and self-efficacy assessment to measure acculturation outcomes.

### **Summary**

Acculturation and self-efficacy studies have been conducted on various populations. In the current study, I utilized the bi-dimensional model of acculturation because the uni-dimensional model over-simplifies the rejection/acceptance of cultures and the fusion model puts the entirety of the responsibility for the acculturation process on the immigrant or sojourner. The bi-dimensional model seems to fit best with the theoretical understanding of the process of

acculturation most accepted among current researchers. Because there are distinct domains that are differently affected by acculturation, I have chosen to focus my research on personal, academic, and work domains.

Self-efficacy is regarded as how effective a person feels in the work with which he or she is involved. I assume that counselors can and have been effective when counseling people of cultures other than their native culture, and that this effectiveness may be reflected by their reported levels of self-efficacy as demonstrated by Bradley and Fiorini in 1999. Although these cross-cultural counselors may employ different theories in cross-cultural counseling, it is beyond the scope of this research to examine theory.

Acculturation and self-efficacy are both complex concepts with a great deal of theoretical power behind each; the key to the success of the current research is to utilize the parts that are most relevant theoretically.

## CHAPTER 3

### METHODOLOGY

#### **Participants**

The participants in this study were international students in counseling graduate training programs in the United States. Focusing on students instead of professionals helped to ensure that student experiences of the host culture (the training department, country, or both) were more easily measurable (e.g., they are still in the process of acculturating), and that the information obtained can be utilized by psychology programs to aid international students.

International students enrolled in either master's or doctoral programs in Counseling in the United States were solicited via e-mail with a basic explanation of the research (see Appendix A). These e-mail solicitations were generated through individual and mass e-mail contacts made possible through requests for participants sent to the 72 Counseling Psychology PhD departments in the United States that are accredited by the American Psychology Association (APA) and the 99 Mental Health Counseling MA and MS departments in the United States that are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). International graduate students at APA-accredited Counseling Psychology PhD programs and CACREP-accredited Mental Health Counseling programs are a small subset of the international counseling student population in the United States, but this subset can be used to begin the process of examining these phenomena.

E-mail solicitations were sent out to counseling programs over a ten-week period early in the spring semester of 2010. While 43 participants agreed to the conditions of participation, only 37 completed the demographics questionnaire, 34 completed the AMAS-ZABB, and 31 completed all the measures.

The optimal number of participants for the most complex multiple regression in this research study was 45 (Cohen, Cohen, West, & Aiken, 2003; Kraemer & Theimann, 1987). This optimal number was derived from an alpha level of .05, desired power level of .80, an estimated  $R^2$  of 0.21, and three independent variables (research question three). However, only 34 participants completed the measures related to the first and third research questions. Additionally, only 31 participants completed the measures related to the second research question. The participants were offered no incentive or compensation for their involvement.

The mean age of the participants who completed the demographics questionnaire and AMAS-ZABB was 30.12 years with a standard deviation of 5.02 years. Seven participants identified their sex as male and 27 identified as female.

Of the 34 AMAS-ZABB participants the most common ethnicity identified by the open-ended question was “Asian” ( $n = 11$ ). The other participants identified themselves as “Caucasian” ( $n = 3$ ), “White” ( $n = 3$ ), “Asian Indian” ( $n = 2$ ), “Taiwanese” ( $n = 2$ ), “African” ( $n = 1$ ), “Asian-Taiwanese” ( $n = 1$ ), “Black” ( $n = 1$ ), “Black European” ( $n = 1$ ), “Caucasian/Portuguese” ( $n = 1$ ), “Chinese” ( $n = 1$ ), “East Asian Indian” ( $n = 1$ ), “East Indian” ( $n = 1$ ), “European-Hispanic” ( $n = 1$ ), “Hispanic” ( $n = 1$ ), “Indian” ( $n = 1$ ), “Latina” ( $n = 1$ ), and “Pakistani” ( $n = 1$ ).

Of the 34 AMAS-ZABB participants the most common nationality or nation of origin identified by the open-ended question was “Korean” and “Taiwan” ( $n = 5$ ). The other

participants identified themselves as “Indian” ( $n = 4$ ), “Australian” ( $n = 2$ ), “Russian” ( $n = 2$ ), “South Korea” ( $n = 2$ ), “Spain” ( $n = 2$ ), “Belgium/Cameroon” ( $n = 1$ ), “Bengali a derivative of Sanskrit of an indoeuropean root” ( $n = 1$ ), “Canadian” ( $n = 1$ ), “Caribbean” ( $n = 1$ ), “China” ( $n = 1$ ), “Dominican” ( $n = 1$ ), “Israeli” ( $n = 1$ ), “Israeli (born in Ukraine)” ( $n = 1$ ), “Kenya” ( $n = 1$ ), “Now green card holder” ( $n = 1$ ), “Singapore” ( $n = 1$ ), “Turkish” ( $n = 1$ ), and “USA (southern American) ” ( $n = 1$ ).

Of the 34 AMAS-ZABB participants 10 identified their program of study as “Master’s” and 24 identified their program of study as “Doctoral.” The more common primary languages identified by the participants were “English” and “Korean” with seven participants each. Four participants identified their primary language as “Chinese” and one identified their language as “Mandarin,” a dialect of Chinese.

### **Informed Consent**

While all participants were both solicited and participated electronically an individual only received an in-depth explanation of the consent process (see Appendix B) if they decided to participate by visiting the survey website. Information about the purpose of the research, use of the data, protection of confidentiality, and how to submit requests for results once the research concluded was included in the informed consent process. A waiver of signed informed consent was obtained from the Institutional Review Board so that the participant only had to click on an “I agree” button to proceed to the data collection portion of the survey.

### **Measures**

Self-report surveys are the most widely used instruments to collect acculturation data. Likert-type items are used because acculturation strategies are theoretically explained as



developing between two (or more) orientations toward two (or more) cultures (Arends-Tóth & van de Vijver, 2006), thus giving participants a range to work with instead of requiring either/or (rejection/acceptance) answers.

### **Abbreviated Multidimensional Acculturation Scale (AMAS-ZABB)**

The AMAS-ZABB (Zea et al., 2003) is a bilinear and multi-dimensional measure of acculturation attitudes. The 42-item measure produces two dimensions: a “U.S.-American” dimension (host culture) and a “culture of origin” dimension. Within each dimension are three subscales: cultural identification, language, and cultural competence. The AMAS-ZABB utilizes a 4-point self-report, Likert-type response option ranging from 1 (*strongly disagree*) to 4 (*strongly agree*), for the cultural identity subscales and from 1 (*not at all*) to 4 (*extremely well/like a native*) for the language and cultural competence subscales. While these subscales are important distinctions in the AMAS-ZABB the subscales are not analyzed as part of the current research. The item scores are averaged as a whole to form a total dimension score potentially ranging from 1 to 4. The U.S. American dimension is calculated by averaging the three U.S. American subscales of cultural identity, language, and cultural competence. Likewise, the culture of origin dimension is calculated by averaging the equivalent three subscales.

Cronbach’s alpha coefficients ranged from .90 to .97, indicating strong internal consistencies of the AMAS-ZABB (Zea et al., 2003). Cronbach’s alphas for the AMAS-ZABB subscale results in the current study were .91 for the orientation to Origin scale and .92 for the orientation to Host scale, indicating relatively strong reliability. Concurrent validity of the AMAS-ZABB was examined by comparing the results of participants born in the United States and those born in Latin America. Zea et al. found in 2003 consistent and statistically significant differences. Participants from Latin America scored higher on the culture-of-origin subscales

and lower on the U.S. American subscales, and participants from the United States scored higher on U.S. American subscales and lower on culture-of-origin subscales. English language, U.S. American cultural competency, and U.S. American identity were significantly related to length of residence in the United States, whereas ethnic identity, Spanish language, and Latino cultural competence were inversely related to length of residence in the United States. This finding supports the concurrent validity of the AMAS-ZABB.

To determine discriminant and convergent validity of the AMAS-ZABB, the Bicultural Involvement Questionnaire ([BIQ-B] Birman, 1991, 1998), the Multigroup Ethnic Identity Measure ([MEIM] Phinney, 1992), and demographic information regarding country of origin and length of residence in the United States were used (Zea et al., 2003).

Zea et al. (2003) found that the U.S. American identity scale was significantly related to BIQ-B Americanism,  $r(43) = .40, p < .01$ , as were English language,  $r(43) = .48, p < .001$ ; U.S. American cultural competence,  $r(43) = .31, p < .05$ ; and overall AMAS-ZABB American dimension,  $r(43) = .48, p < .001$ . As expected, the following AMAS-ZABB Latino subscales were not related to the BIQ-B Americanism scale: Latino identity,  $r(40) = .01, p > .05$ ; Spanish language,  $r(43) = -.16, p > .05$ ; Latino cultural competence,  $r(43) = -.22, p > .05$ ; and overall AMAS-ZABB Latino dimension,  $r(43) = -.18, p > .05$ . These results seem to indicate convergent validity for the U.S. American identity, English language, and U.S. American cultural competence scales of the AMAS-ZABB due to their correlation with the Americanism scale of the BIQ-B. These results also seem to demonstrate discriminant validity through the lack of correlation of the Latino identity, Spanish language, Latino cultural competence, and the overall AMAS-ZABB Latino dimension for the Americanism scale of the BIQ-B (Zea et al., 2003).

The following AMAS-ZABB subscales were significantly positively related to the BIQ-B Hispanicism scale in the Zea et al. (2003) study: Latino ethnic identity,  $r(43) = .47, p < .01$ ; Spanish language,  $r(43) = .46, p < .01$ ; and overall AMAS-ZABB culture-of-origin dimension,  $r(43) = .41, p < .01$ . Latino cultural competence was not related to the BIQ-B Hispanicism scale,  $r(43) = .11, p > .05$ , nor were U.S. cultural competence,  $r(43) = -.17, p > .05$ , or English language,  $r(43) = .02, p > .05$ . Both the AMAS-ZABB U.S. American identity,  $r(43) = -.45, p < .01$ , and overall U.S. American dimension,  $r(43) = -.36, p < .05$ , were negatively related to the BIQ-B Hispanicism scale. U.S. American identity and the total AMAS-ZABB U.S. American dimension were significantly related to the length of residence in the United States. Conversely, Latino/Latina cultural identity, Latino/Latina cultural competence, and total Latino/Latina acculturation were negatively related to length of residence in the United States. These results seem to indicate convergent validity for the Latino and Spanish Language AMAS-ZABB scales because of their correlation with the Hispanicism scale of the BIQ-B. These results also seem to demonstrate discriminant validity through the lack of correlation of the English language and United States cultural competence for the Hispanicism scale of the BIQ-B (Zea et al., 2003).

Zea et al. (2003) found that ethnic identity as measured by the Phinney (1992) MEIM was positively related to Latino/Latina ethnic identity,  $r(90) = .37, p < .001$ . Higher levels of both United States and Latino cultural competence were also associated with higher MEIM ethnic identity scores,  $r(90) = .26, p < .01$  and  $r(90) = .31, p < .001$ . Orientation toward other ethnic groups as measured by the MEIM was related to English language competence  $r(90) = .47, p < .001$ ; U.S. American cultural competence,  $r(90) = .42, p < .001$ ; and United States total acculturation  $r(90) = .47, p < .001$ . Zea et al. believe the relationships between the MEIM and the AMAS-ZABB are indications of both convergent and discriminant validity.

Zea et al. (2003) conducted a maximum likelihood factor analysis with a varimax rotation using the 42-item AMAS-ZABB with both college and community samples ( $n = 246$ ) to determine whether the proposed subscales would emerge in the factor structure of the AMAS-ZABB. The rotation yielded six factors with eigenvalues greater than one, which accounted for 78% of the variance in the scale. Zea et al. stated that their findings indicated that the proposed six subscales emerged as six factors, but both language factors accounted for about half of the variance, with English language accounting for 37%, Spanish language for 15%, U.S. American identity for 9%, Latino cultural competence for 7%, Latino identity for 6%, and U.S. American cultural competence for 4% of the variance. The authors explained that items loaded unambiguously in expected factors, except for four U.S. American cultural competence items, which loaded strongly on that factor and weakly on the English language factor.

The bilinear (Latino/Latina and U.S.-American) three-dimension (identity, language, and cultural competence) model did emerge as six factors in the varimax rotation. Although some items in the U.S.-cultural competence subscale loaded in the English language competence subscale (all below .50), this may be explained as a reflection of the need to know English as a necessary function of acting competently in the United States (Zea et al., 2003).

Zea et al. (2003) explained that the AMAS-ZABB appears to display potential for aiding researchers to begin documenting the subtleties and nuances of acculturation. The AMAS-ZABB acculturation scores demonstrated reliability for both college and community samples and remained consistent across various levels of age and education ranges. The scale was able to discriminate between participants born in the United States and those born in Latin America. The authors explained that these results lend support to the use of the instrument with immigrants exclusively or with immigrants and their U.S.-born descendants. The AMAS-

ZABB, as a whole, seems to provide evidence of adequate concurrent, convergent, divergent, and construct validity.

During the data collection process, an error was discovered in the presentation of item 3 of the AMAS-ZABB. The word “life” was not included in the presentation of item 3 to participants. The item should have read “Being U.S. American plays an important part in my life,” but instead it read “Being a U.S. American plays an important part in my.” While item 3 had the highest standard deviation of any item of the AMAS-ZABB by 0.06 it is likely that many participants completed the item without realizing there was an omission due to the similarity in responses to other items in the subsection. None of the participants omitted the item from their responses and the item was not omitted from the analysis. The mistake was discovered when a participant advised the researcher to add clarification about the question.

### **Counseling Self-Estimate Inventory (COSE)**

The COSE (Larson et al., 1992) was developed to operationalize counseling self-efficacy, which has been defined as one’s belief or judgments about his or her ability to effectively treat a client in the near future (Larson & Daniels, 1998). The COSE measures the estimate of future performance, not the performance itself, although it has been shown to relate moderately to actual counseling performance (Larson et al., 1992). The COSE is a 37-item self-report six point Likert-type measure in which a 1 is scored as (*Strongly Disagree*) and a 6 is scored as (*Strongly Agree*). Scores can range from 37 to 222, with higher scores indicating greater counselor self-efficacy. Approximately one half the items (19) are reverse scored. Larson et al. reported an internal consistency of .93 and a three-week test-retest reliability of .87. Cronbach’s alpha for the COSE results of the current study were .94. The initial research studies regarding COSE validity indicated that: (a) the COSE and anxiety significantly predicted counselor performance; (b)

trainees' COSE scores increased about one standard deviation over the course of their practicum experience; (c) counselors and psychologists reported higher COSE scores than pre-practicum trainees; (d) people with at least one semester of supervision report higher COSE scores than people with no supervision; (e) the COSE was positively related to self-esteem, self evaluation, positive affect, and outcome expectations (Daniels & Larson, 2001; Larson et al., 1992; Larson, Cradwell, & Majors, 1996); (f) the COSE was negatively related to anxiety and negative affect (Alvarez, 1995; Daniels & Larson; Larson et al., 1992; Larson et al., 1996); and (g) the COSE minimally correlated with defensiveness, aptitude, achievement, age, personality type, and time spent as a client and does not appear to differ across sex or theoretical orientation (Alvarez, 1995; Larson et al., 1992).

### **Demographics Questionnaire**

The demographics questionnaire (see Appendix C) was constructed by examining the demographics questions that have been used with the AMAS-ZABB and COSE in previous research (Larson et al., 1992; Zea et al., 2003). Acculturation researchers have typically felt it important to focus demographic questions on language use and residency, while counseling self-efficacy researchers tend to focus demographic questions on time in training. I collected data on age, sex, ethnicity, nationality, type of program (Master's/Doctoral), languages, length of residence, previous U.S. education, predicted length of U.S. residence, and length in current program. While the demographics section was constructed in reference to other researchers' previous work, the COSE and AMAS-ZABB were used as written and with the authors' permission.

### **Research Design**

I utilized an ex post facto research methodology in order to examine the relationship of acculturation to self-efficacy and demographic variables. A demographic questionnaire (Appendix C), the AMAS-ZABB, and the COSE were used.

The research questions were answered using the following analyses:

1. What is the most common acculturation orientation (separation, assimilation, integration, or marginalization) present among international counseling students in U.S. counseling training programs?

I used the scores produced by the AMAS-ZABB to answer this question. The AMAS-ZABB may be scored along two dimensions: host culture and culture of origin. These scores range from 1 to 4. Individuals' scores along these two dimensions were examined to determine their probable stage of acculturation. Because the possible range of AMAS-ZAB scores are 1 to 4 a score of 2.50 would be the theoretical median value. More specifically, the 2.50 median value separates that higher half from the lower half of possible scores in the range. Once data was collected mean scores of 2.50 or higher for both AMAS-ZABB scales were categorized as integrated because this would indicate that answers were more loaded toward agreement than disagreement with both cultures. Mean scores of less than 2.50 for both AMAS-ZABB scales were categorized as marginalized because this would indicate that answers were more loaded toward disagreement than agreement with both cultures. Mean scores 2.50 or higher for host culture maintenance and less than 2.50 for culture of origin maintenance were categorized as assimilated because this would indicate that answers were more loaded toward disagreement than agreement with culture or origin and more loaded toward agreement than disagreement with the culture of the host. Finally, mean scores of less than 2.50 for host culture and scores of 2.50 or

higher for maintenance of culture of origin indicated separation because this would indicate that answers were more loaded toward disagreement than agreement with the host culture and more loaded toward agreement than disagreement with the culture of origin. Table 2 illustrates the AMAS-ZABB categorizations. The estimated category with the highest percentage of the total sample was considered the most prevalent.

Table 2

*Acculturation Category Discrimination Table*

Maintenance of Culture of Host Score	Maintenance of Culture of Origin Score	
	Low (< 2.50)	High ( $\geq$ 2.50)
Low (< 2.50)	Marginalization	Separation
High ( $\geq$ 2.50)	Assimilation	Integration

2. What relationship exists between the host culture and culture of origin dimensions of acculturation and feelings of effectiveness as a counselor within U.S. training programs?

Self-efficacy and acculturation data were collected using the COSE and AMAS-ZABB, respectively. The relationship between the two dimensions generated by the AMAS-ZABB (host culture, culture of origin) and the scale data from the COSE was examined using simultaneous multiple regression analysis. Specifically, AMAS-ZABB scale scores were used as independent variables and the COSE as the dependent variable.

3. Does a measurable relationship exist between international counseling students' acculturation orientation and the amount of time they: (a) have been in counselor training



in the United States, (b) have lived in the United States, and (c) estimate they will reside in the United States?

Two simultaneous multiple regressions were conducted. One regression used host culture scores as the dependent variable and the second regression used the country of origin scores as its dependent variable. The independent variables for both simultaneous multiple regressions were years of education in the United States, years of training in the United States, time in the United States, and projected time in the United States.

### **Procedures**

The demographics questionnaire, AMAS-ZABB, and COSE were reproduced in HTML format and uploaded to an Internet server. In order to complete these measures, a participant had to navigate to the website, enter a password provided through the request for participation (Appendix A) and informed consent (Appendix B) e-mail, and click the “I accept” option after a final review of the informed consent process. Participants were then able to complete the demographic questionnaire, COSE, and AMAS-ZABB and were given instructions regarding obtaining results of the study upon completion if they were interested.

### **Data Management**

The survey data were entered and analyzed using Statistical Package for the Social Sciences software (IBM SPSS Statistics 18.0). The data entry was conducted electronically by downloading the data from the website into Microsoft Excel and then into SPSS. Because identifying information such as names, schools, or specific degrees sought was not collected, it would be difficult to breach confidentiality. However, precautions were taken so that electronic website information was destroyed (i.e., IP address records), and survey data were kept and analyzed in a secure environment (i.e., no public computers or networks were used).

## CHAPTER 4

### RESULTS

#### **Student Acculturation Orientations**

The first research question asked what is the most common acculturation orientation present among international counseling students in United States counseling training programs. The relevant measure, the 42-item AMAS-ZABB, had 34 valid responses. The mean score for Orientation to Host was 2.72 ( $SD = .47$ ), and the mean score of Orientation to Origin was 3.50 ( $SD = .38$ ). Of the responses, 22, or 65%, were categorized into the Integrated acculturation group because they scored 2.5 or higher on both the culture of host and culture of origin scales. Twelve participants, or 35% scored in the Separated category by scoring less than 2.5 on the culture of host scale and 2.5 or higher on the culture of origin scale. None of the participants were scored into the Assimilated or Marginalized categories. Results of the categorization are displayed in Table 3. A graph of subscale score comparisons and categories can be found in Figure 1.

#### **Relationship Between Acculturation Scales and Self-Efficacy**

The second research question asked what relationship exists between the host culture and culture of origin dimensions of acculturation and feelings of effectiveness as a counselor within U.S. training programs. The relevant measures, the 37-item COSE and the 42-item AMAS-ZABB, had 31 valid responses. The overall mean score for the COSE was 175.12 ( $SD = 22.70$ ),

Table 3  
*Acculturation Category Results*

Maintenance of Culture of Host Score	Maintenance of Culture of Origin Score	
	Low ( $< 2.50$ )	High ( $\geq 2.50$ )
Low ( $< 2.50$ )	Marginalization $n = 0, 0\%$	Separation $n = 12, 35\%$
High ( $\geq 2.50$ )	Assimilation $n = 0, 0\%$	Integration $n = 22, 65\%$

Note.  $n = 34$ .

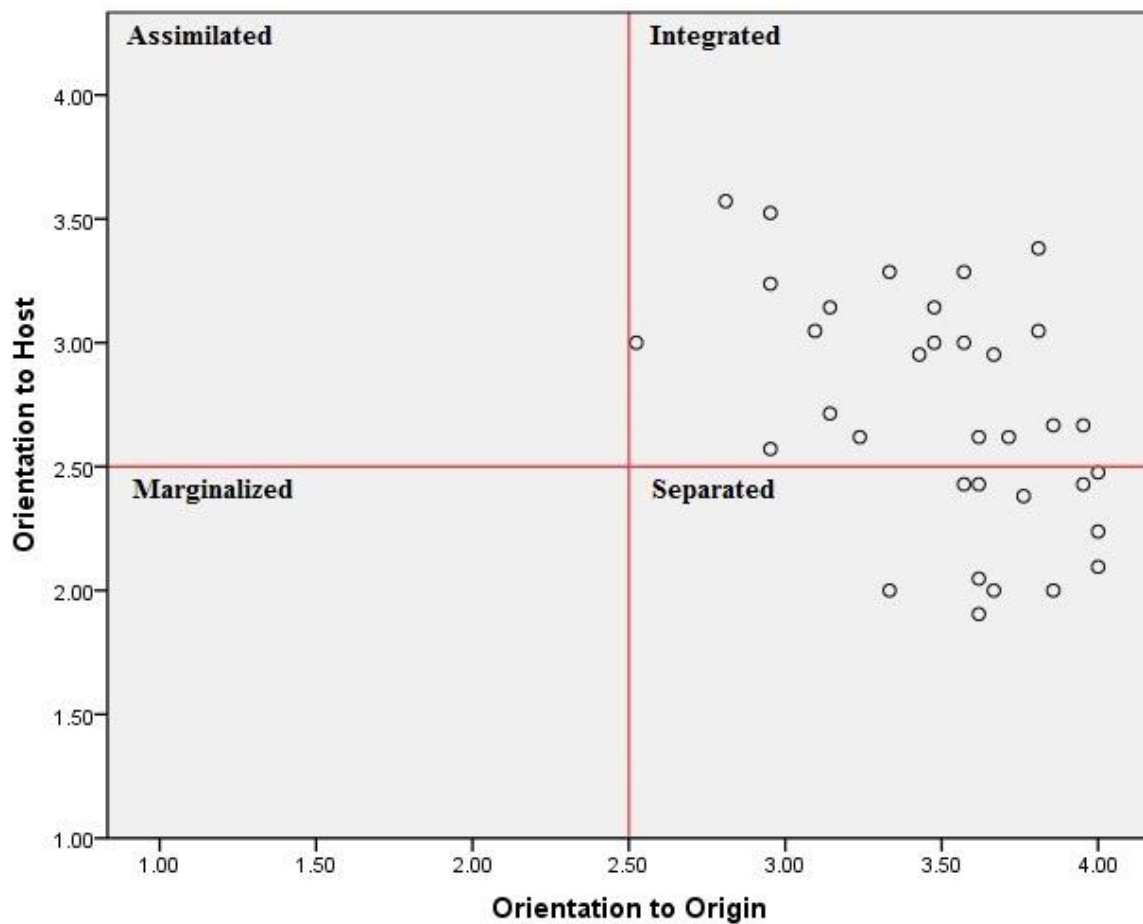


Figure 1. Graphical representation of each participants Orientation to Host and Orientation to Origin subscale score on the AMAS-ZABB. Categories used in the current research are indicated by the red lines and labels.

which were slightly higher scores than expected. The comparable means and standard deviations from the original Larson et al. (1992) COSE-SF validation study were separated by levels of training. The Bachelor, Master's, and Doctoral level participants of the COSE-SF study produced means and standard deviations of 121.70 ( $SD = 18.87$ ), 141.35 ( $SD = 14.08$ ), and 146.40 ( $SD = 14.54$ ), respectively. It is possible that the conditions of the study (i.e., determining self-efficacy levels in international students) led the students who participated to slightly inflate their responses on the COSE.

For research question two, a simultaneous multiple regression analysis was conducted to examine the relationship of international counseling student's COSE scores with the Orientation to Host and Origin subscales of the AMAS-ZABB. The Orientation to Host and Orientation to Origin scales produced by the AMAS-ZABB were used as the independent variables. The dependent variable was overall COSE scores. Participants who did not fully complete both measures were excluded from the analysis.

The regression assumptions include the following: independence (residuals not correlated to one another), homoscedasticity (same variance across scale), linearity, normality (normally distributed residuals with a mean of zero), and no multicollinearity. A visual analysis of the plot of residuals was conducted to investigate these assumptions. The plot of residuals appeared random and independent, meeting the assumption of independence. The residual plot also maintained a constant scatter from left to right across the plot suggesting the assumption of homoscedasticity was upheld. None of the residuals fell outside the +2.00 and -2.00 vertical and horizontal axes on the residual plot. A curvilinear relationship was not present in the residuals plot. This suggests that the variables, COSE and the two predictor indicators, are linearly related and thus upholds the assumption of linearity. To assess the assumption of normality, a histogram

and normal probability-plot were created. The histogram followed a bell-curve pattern. The normal probability plot followed a diagonal prediction line. The residuals had a mean of zero, and based on the histogram and normal probability plot, the assumption of normality was upheld.

Another assumption underlying multiple regression analyses is the assumption of no multicollinearity, or intercorrelations, among the independent variables (Orientation to Host and Orientation to Origin). To measure multicollinearity, the tolerance statistic was calculated. Tolerance indicates whether a predictor has a strong linear relationship with the other predictors. Tolerance ranges from 0 to 1. The closer to 1 the tolerance statistic is, the lower the risk of multicollinearity in the regression model. Values below .20 or lower are typically worthy of concern for multicolliniarity. The tolerance statistics for the multiple regression of the independent variables of research question two were .70 for both variables. The assumption of no multicolliniarity was upheld. Hence, all of the assumptions for multiple regression analysis were upheld.

Descriptive statistics for the two AMAS-ZABB subscales and the COSE scale are reported in Table 4. A standard regression method was used in the analysis. The regression model was statistically significant,  $R^2 = .27$ , Adjusted  $R^2 = .22$ ,  $F(2, 28) = 5.21$ ,  $p = .01$ .

Table 4

*Descriptive Statistics and Correlations Among Variables*

Variable	<i>M</i>	<i>SD</i>	Orientation to Host	Orientation to Origin	COSE
AMAS-ZABB Orientation to Host	2.73	0.46	-	-	-
AMAS-ZABB Orientation to Origin	3.47	0.38	-.55**	-	-
COSE	175.13	22.70	.52**	-.24	-

*Note.*  $n = 31$ . \*  $p < .05$ , \*\*  $p < .01$

A review of the partial regression coefficients (Table 5) for the AMAS-ZABB scales revealed that only Orientation to Host was a significant predictor of COSE scores in this model. The Orientation to Origin scale was not a significant predictor of COSE scores in this model. All tests for significance used in the current research were two-tailed.

Table 5

*Summary of Multiple Regression Analysis for AMAS-ZABB Predicting COSE*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Orientation to Host	27.12	9.50	.55	2.87	.008
Orientation to Origin	3.50	11.46	.06	.31	.762

*Note.*  $R^2 = .27$  for Model. Adjusted  $R^2 = .22$ .  $n = 31$ .

### **Relationship Between Acculturation Scales and Demographic Variables**

The third research question asked does a measurable relationship exist between international counseling students' acculturation orientation and the amount of time they: (a) have been in counselor training in the United States, (b) have lived in the United States, and (c) estimate they will reside in the United States. The means, standard deviations, and the range for each variable can be found in Table 6.

Table 6

*Means, Standard Deviations, and Minimum and Maximum Values of Variables Used in Research Question Three*

Item	<i>M</i>	<i>SD</i>	<i>Min.-Max.</i>
How long have you resided in the United States?	5.77	7.17	1 – 38
How long have you been in your Counseling training program?	2.53	1.54	1 – 7
How long do you predict you will live in the United States?	14.18	24.46	0 – 100
Orientation to Host subscale of the AMAS-ZABB	2.72	0.47	1 – 4
Orientation to Origin subscale of the AMAS-ZABB	3.50	0.38	1 – 4

*Note.*  $n = 34$ .

For the third research question, two simultaneous multiple regression analyses were conducted to examine the relationship between international counseling student's AMAS-ZABB

subscale scores for the Orientation to Host and Orientation to Origin subscales and demographic data. The Orientation to Host and Orientation to Origin scales produced by the AMAS-ZABB were used as the dependent variables in each multiple regression. The independent variables were the Time in United States, Time in Counselor Training, and Predicted Time in United States. Participants who did not fully complete all questions were excluded from the analyses. All of the assumptions for both multiple regression analyses were upheld.

A total of 34 participants were included in the regression of the three demographic variables on the AMAS-ZABB Orientation to Host subscale results. The regression model was statistically significant,  $R^2 = .30$ , Adjusted  $R^2 = .23$ ,  $F(3, 30) = 4.20$ ,  $p = .01$ . A correlation matrix of the demographic variables and Orientation to Host Scores can be found in Table 7. A review of the partial regression coefficients (Table 8) for the demographic data revealed that only Time in the U.S. was a significant predictor of the Orientation to Host subscale scores in this model. Neither predicted time in the U.S. nor time in counselor training were significant predictors of the Orientation to Host subscale scores in this model.

Table 7

*Correlation Matrix for Demographic Variables on Orientation to Host and Origin Subscales*

Variable	Time in the United States	Predicted Time in the United States	Time in Counselor Training
Time in the United States	-	-	-
Predicted Time in the United States	.41**	-	-
Time in Counselor Training	.29*	-.07	-
Orientation to Host	.48**	.43**	.04
Orientation to Origin	.34*	-.35*	-.02

*Note.*  $n = 34$ . \*  $p < .05$ , \*\*  $p < .01$

Table 8

*Summary of Multiple Regression Analysis for Demographic Variables Predicting Orientation to Host*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Time in the United States	.03	.01	.38	2.13	.041
Predicted Time in the United States	.01	.00	.27	1.58	.124
Time in Counselor Training	-.02	.05	-.05	-.31	.761

*Note.*  $R^2 = .30$  for Model. Adjusted  $R^2 = .23$ .  $n = 34$ .

The multiple regression focusing on the demographic data's relationship to the AMAS-ZABB Orientation to Origin subscale was conducted next. A total of 34 participants were included in the regression of the three demographic variables on the Orientation to Origin subscale results. Descriptive statistics for these responses are reported in Table 6. A correlation matrix of the demographic variables and Orientation to Origin Scores can be found in Table 7.

The model was not statistically significant,  $F(3, 30) = 2.05, p = .128$ .



## CHAPTER 5

### DISCUSSION

The purpose of this study was to begin illuminating the cultural adaptation processes at work in the lives of international counseling students as they become counselors and how that adaptation relates to their development as counselors. The results are important because few studies have been conducted on the acculturation process of international students in general and none focused on international counseling students' self-efficacy.

#### **Student Acculturation Orientations**

In answer to the first research question, *What is the most common acculturation orientation present among international counseling students in U.S. counseling training programs?*, the majority of the participants (22 of 34 responses, or 65%) fell into Berry's 1997 category of integrated acculturation strategy based on their scores on the Orientation to culture of Host and Orientation to culture of Origin scales of the AMAS-ZABB. While the AMAS-ZABB was not created to categorize participants into Berry's categories, the scale scores within certain ranges (1- 2.49 and 2.50- 4.00) were predefined to estimate the strategy each participant would likely use in his or her acculturative functioning. The 2.5 cut-off was selected for the categorizations because it was the theoretical median value of possible scores for the AMAS-ZABB results.

With 22 of the 34 participants being categorized into the integrated category, these results may indicate that students who are able to function at the level required for graduate studies are able to adapt to host culture expectations while retaining their connections to their culture of origins. However, while culture of origin scores were predominantly 3.00 and higher on the 4-point scale, host culture scores were consistently 2.00 and higher on the 4-point scale. Only one participant scored close (2.52 on the Orientation to Origin scale) to being classified into the assimilated category. In fact, because none of the participants scored into the Marginalized or Assimilated categories it seems to indicate that the students were able to maintain healthy relationships with their cultures of origin. These results seem to indicate that the students were not as adapted to the host culture as they were to their culture of origin, even though most were classified as Integrated. Eleven of the 12 participants who were categorized into the Separated category were within 0.50 of the cut-off for the integrated category.

The mean and standard deviation for the AMAS-ZABB results were more similar to the community participant sample of the original Zea et al. (2003) validation study than the college participant sample. The original AMAS-ZABB validation study separated the means and standard deviations of participants from both groups (e.g. college and community) into categories of Total U.S. acculturation (Orientation to Host) and Total Latino/Latina acculturation (Orientation to Origin). The means for the original study's college sample are about one standard deviation higher than the means for international counseling students in the current study regarding orientation to the host culture. However, the community participants' means for orientation to the host culture are less than one standard deviation different from the current study's sample (see Table 9).

Table 9

*AMAS-ZABB Validation Results Compared to Current Study*

<i>Participants</i>	Orientation to Host		Orientation to Origin	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
AMAS-ZABB Validation Study (College Students, <i>n</i> = 156)	3.44	0.41	3.18	0.59
AMAS-ZABB Validation Study (Community, <i>n</i> = 90)	2.56	0.55	3.44	0.41
AMAS-ZABB International Counseling Students, <i>n</i> = 34	2.72	0.47	3.50	0.38

*Note.* Some data from “The Abbreviated Multidimensional Acculturation Scale: Empirical validation with two Latino/Latina samples.” by Zea, M. C., Asner-Self, K. K., Birman, D., & Buki, L. P, 2003, *Cultural Diversity and Ethnic Minority Psychology*, 9(2), 107-126..

These differences are difficult to explain but it seems likely that international graduate students have different influences and cultural experiences than other college students which make them more similar to those who were in the community in the original AMAS-ZABB validation study. However, it is possible that Latino/Latina college students exhibit slightly more assimilation tendencies (acceptance of the host culture and rejection of the origin culture) than other acculturating groups. It is also possible that the age of the participants as graduate students, undergraduate students, or community members has a relationship to the maintenance, acceptance, or rejection of a culture.

Regarding the error in the presentation of item 3 from the AMAS-ZABB, the responses seemed consistent with the mean scores of responses in the other items in the section related to Orientation to Host culture. However, item 3 had the highest standard deviation of any item of the scale by 0.06. It is possible that many participants completed item 3 without realizing there was an omission while others who noticed the error rated the item with more variability.

### **Relationship Between Acculturation Scales and Self-Efficacy**

In answer to the second research question, *What relationship exists between the host culture and culture of origin dimensions of acculturation and feelings of effectiveness as a counselor within U.S. training programs?*, there were significant predictive relationships between students' acculturation scores and their self-efficacy. The significant regression model demonstrating a positive predictive relationship between Orientation to Host culture and Counselor Self-Efficacy scores seems to indicate that students who assimilate or integrate (i.e., those with higher Orientation to Host scores) have stronger feelings of self-efficacy, whereas those who are separated or marginalized (i.e., those with lower Orientation to Host scores) have lower self-efficacy scores. Specifically, for every unit of change in the Orientation to Host scale, a 27-point change in the same direction could be expected in COSE scores.

These results seem to indicate that when a counseling student is more oriented toward the host culture in which he or she is studying, the student will feel more efficacy toward her or his therapy skills. These results also seem to disconfirm the hypothesis developed from current theory that students who are in the integrated category of acculturation will have better performance due to having higher levels of resources to use as counseling students than other categories of acculturation (Berry, 1997; Berry & Sam, 1997). It would seem that the assimilated acculturation strategy and the integrated strategy are equally useful for international counseling students. It is possible that a student's orientation to their home culture and the resources derived from that orientation are mostly isolated from the academic environment of study within the United States.

The non-significant predictive relationship between Orientation to Origin subscales and the Counseling Self-Efficacy scores is interesting and unexpected. The review of literature

seemed to suggest that Orientation toward the culture of Origin would be important for bi-dimensional acculturation and more successful skill development of counselors in training through the avoidance of negative mental health outcomes and higher levels of well-being (LaFromboise et al., 1993; Berry, 1997; Berry & Sam, 1997). Involvement in two cultural systems was thought to provide the most supportive socio-cultural base for mental health (Berry & Kim, 1998). Although recent related findings have also demonstrated a lack of connection between two-culture hypotheses emphasizing engagement and research findings about the adaptive adjustment of Asian adolescents (Kim & Omizo, 2010)

Maybe the integration strategy does still provide those benefits; however, that would mean that avoiding negative mental health outcomes, gaining higher levels of well-being, and support does not promote counselor efficacy. Interpreting the current results seems to indicate that the integrated and assimilated acculturation strategies are equally beneficial to international counseling students because both strategies emphasize orientation to the host culture which produced a significant predictive relationship with COSE results.

Many possible explanations exist for the lack of a predictive relationship between the COSE scores and AMAS-ZABB Culture of Origin scale. It is possible that the number of participants was simply not large enough to detect a weaker but significant relationship that may exist between self-efficacy and orientation to culture of origin.

Another possible explanation for the lack of a predictive relationship for culture of origin is that familiarity or identification within a culture and a preference for that culture may be separate constructs that vary and that the variance of cultural preference could not be revealed by the AMAS-ZABB's Orientation to Host and Orientation to Origin subscales. While these subscales can be separated into cultural identification, language, and cultural competence, there

is no measure of cultural preference. It is possible that cultural preference could be another variable that would impact COSE scores in international counseling students. For example, a student might score comparably to other integrated international students on the Orientation to Origin and Orientation to Host scales on the AMAS-ZABB, but if that student is focused on utilizing resources from his Culture of Origin and ignoring or rejecting resources from the his host culture, it would likely impact that student's functioning while in training even though this is not reflected in the AMAS-ZABB scores.

While these results seem to indicate that a student's orientation to the host culture has the only meaningful relationship to self-efficacy beliefs as a counselor in training, it is possible that the integrated strategy and orientation to the culture of origin becomes more adaptive when a student leaves the host culture to practice the new profession in the culture of origin or a new culture.

Previous researchers have demonstrated that a counselor's self-efficacy beliefs have a direct relationship to actual counseling ability (Bradley & Fiorini, 1999; Larson et al., 1992; Tang et al., 2004). The current research has demonstrated a predictive relationship between the Orientation to Host subscale of the AMAS-ZABB and an international counseling student's self-efficacy beliefs. Therefore, it will likely be important for counseling training programs to implement strategies which foster Orientation to Host acculturation styles because these styles are associated with higher self-efficacy levels in international counseling students.

After reviewing the results of research question one, it is likely that an international counseling student's orientation to his or her host culture could be improved and that counseling self-efficacy would improve in kind. It could be that improving an international student's

Orientation to Host culture enables him or her to move more robustly into an integrated orientation in which host and origin culture orientations are equally positive.

### **Relationship Between Acculturation Scales and Demographic Variables**

In answer to the third research question, *Does a measurable relationship exist between international counseling students' acculturation orientation and the amount of time (a) they have been educated in the United States, (b) have lived in the United States, and (c) estimate they will reside in the United States?*, there was a significant predictive relationship between students' time in the United States and students' Orientation to Host culture scores. Specifically, for every change of one year of residence, a .03 increase or decrease could be expected in orientation to the host culture.

These results seem to indicate that when a student spends time in the host culture (United States in this case) it slightly but significantly increases their orientation to the host culture as measured by the AMAS-ZABB. It is possible that even though the amount of cross cultural contact varied by participant and individuals varied in their attitudes toward the host culture the net effect of each cumulative year in the United States continued to increase an individual's orientation toward the host culture. It is possible that this result is related to the findings of Lin and Betz (2009) which indicated that successive years in the US improved English ability. The AMAS-ZABB uses language ability as a component of the scale scores it produces. Time in the US may generally improve language ability and indirectly improve international student's orientation toward the host culture.

These results were also interesting because previous time in study or predicted time in United States did not seem to influence a student's orientation toward the host culture. It is possible that a student's time in training and thoughts about the future are too complex to have a

direct relationship with their orientation toward the host culture. It may be more beneficial in the future to create a scale for participants to select their attitude toward expected time in the United States. Creating a six or seven item scale with selections like “I plan to leave the United States at the end of my education” or “I plan to live in the United States indefinitely” may increase the detected relationship of this independent variable on a student’s orientations toward host and origin cultures.

Akhtar (1995) indicated that one of the most important factors affecting outcomes of cultural transitions is the permanence of the move. It has been postulated that as individuals cope with the new culture, knowledge of the permanence of the transition acts to support or undermine their attempts to adjust. However, counter to Akhtar’s theory, predicted time in the United States did not have a significant relationship to Orientation to Host culture. This is an interesting result because it seems to indicate that plans about the host culture do not necessarily improve or undermine student’s orientation to the culture. It may be that time in the host culture has a greater impact on a student’s orientation to the host culture and that there is a latent effect regarding the student’s plans for the future. For example, students who come to the United States specifically to train and then go back to their culture of origin may limit their efforts to adjust to the host culture. These students may see themselves as in the host culture only to gain insight into their area of study and not to live a considerable length of time or learn to function within the host culture. The urge to ignore the host culture and focus solely on training as a counselor would limit the development of an international counseling student’s faculty with the host culture.

It should also be noted that individuals and their social context must be understood simultaneously (Roccas et al., 2000). It is possible that the lack of relationship between time in



training and plans to live in the United States with Orientation to Host is a function of the culture these students find themselves in. It may be more adaptive for students to live segmented cultural lives where acculturation happens within domains. The domains of education and future planning may be more helpful if they remain independent from a student's orientation to the host culture. For example, it may be important that a student make plans for the future based on a number of factors such as family opinion, financial support, and opportunity in the host culture. These factors are all independent of the student's cultural identification, language, and cultural competence which are measured to create the Orientation to Host subscale of the AMAS-ZABB.

The three demographic variables (time in United States, time in training, and predicted time in United States) did not predict Orientation to Culture of Origin. This result is difficult to explain. It is possible that a student's relationship to his or her culture of origin is related to so many factors that isolating these three host culture-oriented demographics variables is not powerful enough to shed light on how a student feels toward the culture of origin. It might have been more helpful to include demographic variables that were origin culture-oriented, such as time in culture of origin, time in training in culture of origin, and predicted time in culture of origin. It is also possible that the sample was not large enough to show a significant relationship.

### **Limitations**

This research had a number of limitations. A major limitation was the lack of easy access to the population. The listing of sites on the APA and CACREP websites was outdated, with training sites or programs being presented as being accredited when they had been canceled. Some sites were also difficult to contact because phone and e-mail information on the websites was incorrect. Had there been an easier way to access this population, more participants might have been available and more robust results produced. It is also possible that international

student populations in the United States fluctuate based on economic adversity or prosperity. In December of 2007 the United States entered a recession that had a ripple effect upon the economies around the world. Even though this research was conducted in the early months of 2010, it is likely that the international student cohort in the United States was impacted in their educational planning by these events.

Another limitation of the current research was the assumption that Berry's (1990) four-stage model is an appropriate way of thinking about the acculturation of international students. While Berry's model is very important, it did not seem to differentiate well among participants from this specific population. For example, the classification system developed for this research using the AMAS-ZABB scales designated 22 of the 34 participants as integrated, 12 of the 34 as separated, and none of the participants as marginalized or assimilated. It may be that this type of classification is more problematic than helpful because labeling in this instance seemed to miss possibly important distinctions between categories. For example, individuals with very different orientations to host and origin cultures were still identified as integrated because both of their scale scores were above 2.5. It may be helpful in future research to accept scale scores of the AMAS-ZABB without attempting to interpret them by creating a labeling matrix.

### **Implications for Future Research**

While both students and faculty responded by e-mail to congratulate or thank me for conducting this research, several (36%) participants agreed to the informed consent but did not complete the research inventories. In future research, more incentive might be helpful to get higher participant completion rates.

In the current research the labeling matrix that was designed to answer research question one did not seem to accurately represent the acculturation process of the participants because

almost all of the students were categorized together. In future research it will likely be helpful to talk about trends in orientation instead of trying to create labels to describe acculturation. Using the AMAS-ZABB or other scales to describe the amount of orientation to the host culture or the culture of origin will likely give more measurable differences between participants.

Future researchers could further expand insight into the second research question by examining the relationship of the three aspects of the AMAS-ZABB subscales to COSE scores in order to expose more specific details about what aspects of acculturation (e.g., cultural identification, language, cultural competence) are related to COSE scores. Future research could also begin to examine the possible relationship of cultural preference to any of the AMAS-ZABB sub-scales.

When it was conceptualized, research question three seemed likely to produce a great variety of relationships for examination. The lack of significance for two of the three independent variables in the Orientation to Host regression and all three of the independent variables in the Orientation to Origin regression was surprising. It seems likely that the relationships between the demographic variables and orientations toward Host and Origin cultures are complex and more nuanced and insightful demographics questions will need to be developed to determine the important factors which may be related to acculturation.

### **Implications for Future Training and Practice**

The current research seems to indicate that the majority of international counseling graduate students are likely integrated in their acculturation approach. It is possible that higher levels of orientation toward the host culture were necessary to gain admission into counselor training in the United States. Some colleges and universities have begun implementing programs

at an institutional level to foster the adaptation of their international students. The current research seems to support those efforts.

The lack of a significant predictive relationship between Orientation to Origin scales of the AMAS-ZABB and COSE scores seems to indicate that a student's attitudes toward his or her home culture have no relationship to feelings of efficacy in the practice of counseling in the host culture. This result may prompt training programs to ignore an international student's connections to their culture of origin as unimportant to counselor self-efficacy. However, it is possible that future research will reveal that Orientation to Origin has a meaningful association to COSE scores in the professional work of counselors in the culture of origin. More specifically, it may be shown that orientation to host culture has a noteworthy relationship to self-efficacy while an international counseling student is being trained and learning to practice in the host culture, however culture of origin scale scores may play a much more pivotal role in feelings of self-efficacy once the student is trained and leaves the host culture.

Because orientation toward the host culture has a significant predictive relationship to a student's self-efficacy as a counselor, it may be important for students to become more oriented to their host culture in order to get the most out of their time in training. It might be helpful for training programs to implement activities through which students may develop familiarity with host culture history, customs, and norms by participating in events such as group recreation, attendance or participation in local events, or social meals focused on host culture familiarity. It will likely also be helpful for mentors, faculty, and counselors to encourage host culture participation as both training experiences and a means of improving personal resources. However, in spite of the lack of association between culture of origin and self-efficacy found in

this study, I believe it is important to acknowledge and value each student's culture of origin and to enrich the lives of the other students in training by the sharing of cultural experiences.

The lack of a significant predictive relationship between the demographic variables (time in the United States, predicted time in the United States, and time in counselor training) and orientation to culture of origin coupled with a significant predictive relationship of only time in the United States with orientation to host culture seem to indicate the complexity of the process of acculturation. It is possible that each student's cultural development is complex demographically and training programs need to recognize that each student's life situation and experience of acculturation are unique and valuable.

The current research was a step toward understanding the process of acculturation with international counseling students. While this research discovered a relatively small predictive relationship between orientation to host culture and time in host culture and a larger predictive relationship between orientation to host culture and counselor self-efficacy, much more research will be necessary in future years to continue to develop understanding of these processes and conceptualizations. As measures and procedures are refined this field of research is likely to benefit both counselor education and the international students who seek training in the United States.

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## APPENDIX A: ELECTRONIC LETTER OF INVITATION TO PARTICIPATE

Dear Counseling Graduate Students:

I would like to invite you to participate in a research study focused on the process of acculturation and its impact of self-efficacy as an international counselor in training. Understanding acculturation's influence on counselor self-efficacy is important, because it has been speculated that international students experience a great deal more acculturative stress than native students and that certain strategies of acculturation tend to reduce that stress. It is possible that by fostering certain strategies international students may experience more feelings of success in their counselor training. If you are an international student in counseling (master's or doctoral), I am very interested in your experiences as a counselor in training. As a result of this study, I hope to better understand the prevalence of various acculturation strategies among students enrolled in U.S. counseling training programs, the impact of acculturation strategies upon self-efficacy, and how time impacts the selection of acculturation strategy.

The study will require you to complete an online questionnaire regarding your experiences as a counselor in training and will take approximately 15 to 25 minutes of your time. You will not be asked for any personally identifying information (e.g., name, address, phone number). Your confidentiality is very important and will be protected. If you know of other international students in counseling training who might be interested in participating, please forward this research request to them. The following link contains further information about the study and will enable you to complete the questionnaire online.

Survey link:

[https://www.surveymonkey.com/s.aspx?sm=o6sfxLYwFyXdtyfP4HIAg\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=o6sfxLYwFyXdtyfP4HIAg_3d_3d)

Password: counseling

Thank you so much for your time and consideration!

Sincerely,

Jonathan Leggett M.S.  
Doctoral Candidate, Counseling Psychology  
Indiana State University, Terre Haute, IN  
812-239-3711  
[jonathan.leggett@gmail.com](mailto:jonathan.leggett@gmail.com)

## APPENDIX B: CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a research study conducted by Jonathan Leggett, who is a doctoral candidate from the Department of Communication Disorders and Counseling, School, and Educational Psychology at Indiana State University. Mr. Leggett is conducting this study for his doctoral dissertation. Dr. Eric M. Hampton is his faculty sponsor for this project.

Your participation in this study is entirely voluntary and will take approximately 15-20 minutes. Please read the information below and ask questions about anything you do not understand before deciding whether or not to participate. You are being asked to participate in this study because you are an international student studying counseling in the United States.

### PURPOSE OF THE STUDY

The purpose of this study is to gain insight into the process of acculturation and the relationship between the acculturation process and self-reported ratings of effectiveness by counselors in training.

### PROCEDURES

If you volunteer to participate in this study, we will ask you to do the following:

1. Fill out a brief confidential questionnaire.
2. Respond honestly to all questions.
3. Provide feedback to the researcher if you have any questions regarding the research or how the data will be used.

### POTENTIAL RISKS AND DISCOMFORTS

We expect that any risks, discomforts, or inconveniences will be minor, transient in nature, and not likely to occur. If any discomfort becomes an issue, please stop participating.

### POTENTIAL BENEFITS TO PARTICIPANTS AND/OR SOCIETY

It is not likely that you will benefit directly from participation in this study, but the research should help us learn how the process of acculturation impacts international students. This knowledge can help others improve services and programs offered to international students. If you would like information about the outcome of this study please e-mail [jonathan.leggett@gmail.com](mailto:jonathan.leggett@gmail.com) with your request.

### CONFIDENTIALITY

All information obtained in connection with this study will be confidential. The confidential data gathered through this study will be kept indefinitely and could possibly be used in later research.

**PARTICIPATION AND WITHDRAWAL**

You can choose whether or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study.

**IDENTIFICATION OF INVESTIGATORS**

Mr. Jonathan Leggett  
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**RIGHTS OF RESEARCH PARTICIPANTS**

If you have any questions about your rights as a research participant, you may contact the Indiana State University Institutional Review Board (IRB) by mail at 114 Erickson Hall, Terre Haute, IN 47809, by phone (812) 237-8217, or e-mail the IRB at [irb@indstate.edu](mailto:irb@indstate.edu). You will be given the opportunity to discuss any questions about your rights as a research participant with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has determined this study to be exempt from IRB oversight.

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I understand the procedures described above. Any questions I had have been answered to my satisfaction, and I agree to participate in this study. I know that I may print a copy of this form.

Electronic “Yes” given



## APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE

Approximation of the on-line demographics questionnaire

**Directions:** Please fill in the blanks below

1. What is your age? \_\_\_\_\_
2. What is your sex? Female\_\_\_\_\_ Male\_\_\_\_\_
3. What is your ethnicity? \_\_\_\_\_
4. What is your nationality? \_\_\_\_\_
5. What type of program are you currently enrolled? Masters\_\_\_\_\_ Doctoral\_\_\_\_\_
6. What is your first language? \_\_\_\_\_
7. What is your second language? \_\_\_\_\_
8. Please list any other languages you use: \_\_\_\_\_
9. How long have you resided in the U.S.? \_\_\_\_\_
10. Have you been educated in the U.S. previously?  
No\_\_\_\_\_, Yes\_\_\_\_\_, if 'yes', how long did you attend? \_\_\_\_\_
11. How long do you predict you will live in the U.S.? \_\_\_\_\_
12. How long have you been in your Counseling training program? \_\_\_\_\_