ABSTRACT

Title of Document: DOES THE ACCULTURATION OF INTERNATIONAL STUDENT THERAPISTS PREDICT THE PROCESS OF PSYCHOTHERAPY WITH U.S. CLIENTS?
AN EXPLORATORY STUDY.

Andrés Eduardo Pérez Rojas, Doctor of Philosophy, 2015

Directed By: Professor Charles J. Gelso
Department of Psychology

A large body of research highlights the salience of acculturation to the psychosocial functioning of international students, and a great deal of research suggests that the person of the therapist is important for the process of psychotherapy. Yet very little research has examined whether and how acculturation factors influence the person of the international student therapist and, in turn, his or her psychotherapy work with U.S. clients. In the present study, self-report data was gathered from 123 international student therapists enrolled in programs accredited by the American Psychological Association and the Council for Accreditation of Counseling and Related Educational Programs across the U.S. Two factors reflecting international student therapists’ acculturation
experiences (acculturative stress and cultural distance) were examined as potential predictors of four variables germane to the participants’ therapy work (real relationship, working alliance, session quality, and session depth) with their most recent U.S. client. Contrary to what was hypothesized, acculturative stress and cultural distance were unrelated to the psychotherapy process variables. Post-hoc analyses revealed one significant interaction, which suggested that acculturative stress interacted with self-reported English fluency to predict session depth among international student therapists for whom English is a second language (ESL). Specifically, when ESL student therapists were more fluent in English, their acculturative stress was positively related to their session depth ratings, whereas acculturative stress and depth were unrelated at lower levels of English fluency. Limitations and implications of the findings are discussed along with recommendations for future study.
DOES THE ACCULTURATION OF INTERNATIONAL STUDENT THERAPISTS PREDICT THE PROCESS OF PSYCHOTHERAPY WITH U.S. CLIENTS? AN EXPLORATORY STUDY.

By

Andrés Eduardo Pérez Rojas

Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Philosophy 2015

Advisory Committee:
Professor Charles J. Gelso, Chair
Professor Derek Iwamoto
Professor Dennis M. Kivlighan, Jr.
Professor Matthew J. Miller
Professor Barry D. Smith
Dedication

To my family, who still doesn’t know what this dissertation is about, but without whose questions like, “So, what’s your dissertation about, again?” I wouldn’t really know, myself.
Acknowledgements

In writing this dissertation I have enjoyed the advice and support of many people, beginning with my advisor and mentor, Charlie Gelso. He read every word, thoughtfully commented on every section, and occasionally allowed a sentence to end in a preposition. His insights on everything from culture, psychotherapy, and research are all over this dissertation—and are practically woven into my professional DNA. It’s been a true privilege to learn how to be a scientist-practitioner while watching (and laughing) over his shoulder; as an apprentice, I couldn’t have asked for more.

I benefited greatly from the wisdom of my dissertation committee—Derek Iwamoto, Dennis Kivlighan, Matt Miller, and Barry Smith. I’m grateful for their feedback and recommendations, and for the stimulating conversations on how to advance knowledge in multicultural psychotherapy.

Jon Mohr deserves a special mention here. As I worked on the dissertation and throughout our mutual time at the University of Maryland, he always took the time to answer my questions, both small and great, on topics ranging from statistics to professional development. His guidance and encouragement have meant a lot. (And if you like babies, Jon’s the perfect dad to ask to show you pictures!)

Finally, I’m so thankful for the love and support of many friends—in particular, the Cool Kids (Amy, Avantika, Ellen, Elissa, and Margo), Minji, Harold, and my CCSD cohort (Leia, Stephanie, and Val). Through all the mass texting, funny GIFs, delicious treats, and many, many conversations, they got me through the lows and helped me celebrate the highs of this process. I thank you all!
## Table of Contents

Dedication ................................................................................................................................. ii  
Acknowledgements .................................................................................................................. iii  
Table of Contents ..................................................................................................................... iv  
List of Tables ............................................................................................................................. vi  
List of Figures ............................................................................................................................ vii  

**Chapter 1: Introduction** ....................................................................................................... 8  
  The Acculturation Experience of International Students ...................................................... 10  
  Acculturation Experiences of International Student Therapists ........................................ 12  
  Acculturation and Psychotherapy Process and Outcome ..................................................... 13  
  The Therapeutic Relationship: Personal and Working Elements ........................................ 14  
  Session Outcome: Quality and Depth .................................................................................... 16  
  More Complex Relationships Among Study Variables ....................................................... 17  
  The Present Study .................................................................................................................. 18  

**Chapter 2: Literature Review** ............................................................................................. 19  
  Acculturation and Acculturative Stress .................................................................................. 19  
    Acculturative Stress and International Students ................................................................. 22  
    Cognitive Load: How Acculturative Stress Can Affect Functioning .................................... 26  
    Acculturative Stress and Cultural Distance ....................................................................... 28  
    Summary of Acculturative Stress and Cultural Distance Literature Review .................... 33  
  Acculturation Experiences of International Student Therapists ........................................ 33  
  Psychotherapy Process and Outcome .................................................................................... 42  
    The Therapeutic Relationship .............................................................................................. 44  
    Session Quality .................................................................................................................. 49  
  General Summary ................................................................................................................... 50  

**Chapter 3: Statement of the Problem** ............................................................................... 52  
  Acculturative Stress, Cultural Distance, and the Therapeutic Relationship ......................... 53  
  Acculturative Stress, Cultural Distance, and Session Outcome .......................................... 57  
  Acculturative Stress X Cultural Distance Interaction .......................................................... 58  
  Alternate Models of the Relations Between Acculturation and Psychotherapy Variables ...... 59  

**Chapter 4: Method** .............................................................................................................. 63  
  Power Considerations ............................................................................................................ 63  
  Participants ............................................................................................................................... 63  
  Measures .................................................................................................................................. 67  
  Procedures ............................................................................................................................... 73
<table>
<thead>
<tr>
<th>Chapter 5: Results ..........................................................</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Analyses ..................................................</td>
<td>78</td>
</tr>
<tr>
<td>Missing Data .....................................................................</td>
<td>78</td>
</tr>
<tr>
<td>Outlier Analyses, Covariate Analyses, and Descriptive Statistics</td>
<td>78</td>
</tr>
<tr>
<td>Main Analyses ...................................................................</td>
<td>80</td>
</tr>
<tr>
<td>Acculturative Stress, Cultural Distance, and the Therapeutic Relationship</td>
<td>82</td>
</tr>
<tr>
<td>Acculturative Stress, Cultural Distance, and Session Outcome</td>
<td>85</td>
</tr>
<tr>
<td>Acculturative Stress X Cultural Distance Interaction ..........</td>
<td>85</td>
</tr>
<tr>
<td>Alternate Models of the Relation between Acculturation and Psychotherapy Variables</td>
<td>87</td>
</tr>
<tr>
<td>Additional Analyses .......................................................</td>
<td>90</td>
</tr>
<tr>
<td>English Proficiency .........................................................</td>
<td>90</td>
</tr>
<tr>
<td>Real Relationship and Working Alliance .............................</td>
<td>98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 6: Discussion ........................................................</th>
<th>104</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination of the Hypotheses and Research Questions ......</td>
<td>105</td>
</tr>
<tr>
<td>Limitations ......................................................................</td>
<td>110</td>
</tr>
<tr>
<td>Implications for Future Research ..................................</td>
<td>114</td>
</tr>
<tr>
<td>Conclusion ......................................................................</td>
<td>117</td>
</tr>
</tbody>
</table>

| Appendix A - Demographic Questionnaire ............................ | 119 |
| Appendix B - Acculturative Stress Scale for International Students | 121 |
| Appendix C - Brief Perceived Cultural Distance Scale ........ | 123 |
| Appendix D - The Real Relationship Inventory—Therapist Form | 124 |
| Appendix E - Working Alliance Inventory – Short Form (Therapist Version) | 125 |
| Appendix F – Session Evaluation Scale and Session Evaluation Questionnaire-Depth | 127 |
| Appendix G – Sample Letters of Recruitment ...................... | 128 |
| Appendix H – Additional Tables ....................................... | 131 |

| References ..................................................................... | 134 |
List of Tables

1. Correlations, Means, and Standard Deviations among Main Variables……… 81
2. Results of Hierarchical Regression Analyses on Real Relationship and Working Alliance…………………………………………………………… 83
3. Results of Hierarchical Regression Analyses on Session Outcomes………… 84
4. Results of Hierarchical Regression Analyses Testing Real Relationship and Working Alliance as Moderators of Acculturative Stress and Cultural Distance……………………………………………………………………… 89
5. Correlations, Means, and Standard Deviations among Main Variables in ESL Sample………………………………………………………………………… 92
6. Hierarchical Regression Analysis Testing Interactions of Acculturative Stress, Cultural Distance, and English Proficiency in Predicting Session Depth………………………………………………………………………… 94
7. Regression Models of Session Depth Testing for the Presence of Suppression Effect………………………………………………………………………… 96
8. Hierarchical Regression Models with Working Alliance and Real Relationship Predicting Session Quality and Session Depth………………… 102
List of Figures

1. Interaction between Perceived English Proficiency and Acculturative Stress on Session Depth ................................................................. 99
Chapter 1: Introduction

Immigration has increased drastically over the past century, so naturally there has been a corresponding increase in interest in the psychological experiences of people who enter and settle into new societies. “What happens to individuals, who have developed in one cultural context,” wrote Berry (1997), “when they attempt to live in a new cultural context?” (p. 6). That question is at the heart of the study of acculturation, the changes that people go through as they adapt to a new culture.

International students are a subset of people who undergo acculturation (Sandhu & Johnson, 2007). These students face unique challenges and stressors that place them at greater risk for social, academic, and mental health difficulties (Smith & Khawaja, 2011). But although we know much about how these students’ lives are affected by acculturation, we know comparatively little about how it affects the increasing number of foreign-born students training to become therapists in the United States, and less still about how it may affect their therapy work. This is problematic because the talking cure places special burdens on international student therapists that mirror those they face in adapting to U.S. culture. These burdens include, for example, understanding nuances of verbal and nonverbal communication, the values and norms that govern behavior in U.S. society, and how these and other cultural factors interact with intrapsychic factors to shape client development. A better understanding of how acculturation contributes to therapist functioning may thus be helpful.

Understanding how acculturation factors contribute to international student therapist functioning also fits within the larger study of therapist effects in psychotherapy. A great deal of evidence suggests that the person of the therapist is
important to successful treatment, accounting for substantial variance in therapy process and outcome (Kim, Wampold, & Bolt, 2006). Although many therapist factors have been considered (e.g., gender, race, well-being, etc.), and their relations to process and outcome examined (see Beutler et al., 2004), factors most relevant to international student therapist have largely been ignored. Incorporating acculturation factors into the study of therapist effects could thus advance this body of work in meaningful ways.

These two lines of scholarship—acculturation of international students, and therapist effects—served as the bedrock of the present study. Considering them in tandem raised questions about whether and how acculturation factors might affect international student therapists’ work with U.S. clients. To paraphrase Berry (1997): What happens to people who develop in one cultural context when they attempt to practice therapy in a new cultural context? And what role does their acculturation play in therapy? These questions have important implications for the theory and practice of psychotherapy, but they have not been suitably studied.

An overall goal of the present study was to address this deficit. Using a correlational field study design, data was gathered on the acculturative stress of international students in counseling psychology and related training programs in the U.S.; these students’ perceptions of the degree of difference or distance between their original cultures and that of the U.S.; and their ratings of the real relationship, the working alliance, and outcomes of a recent session with a U.S. client. It was expected that acculturative stress and cultural distance would be negatively related to international student therapist ratings of the real relationship, the working alliance, and session outcomes. It was also expected that acculturative stress and cultural distance would have
a joint negative effect on the therapy variables. Finally, it was considered whether the real relationship and the working alliance would mediate and/or moderate the associations between acculturative stress and cultural distance, on the one hand, and session outcome, on the other.

In this chapter, there will be a preview of the ideas underlying the present study and the relevant literature—namely on the acculturation experiences of international students, the acculturation-related challenges faced by international student therapists, and therapy process and outcome. That literature is reviewed in greater detail in the second chapter, and in the third chapter, it will be brought to bear to articulate the study’s hypotheses and research questions.

*The Acculturation Experience of International Students*

As noted before, almost every international student, including those in professional psychology programs, must adjust to the culture of his or her host country following immigration (Lee, 2013; Smith & Khawaja, 2011). The resulting acculturation can manifest in many aspects of daily life, including language use, cultural identity, and social customs. One of the possible consequences of acculturation is what is known as *acculturative stress*, which occurs when people appraise the demands and pressures of acculturation as exceeding their coping ability (William & Berry, 1991). This type of stress has been related to many outcomes for international students, such as depression, social and academic adjustment, and well-being (Johnson & Sandhu, 2007). A few common sources of acculturative stress for international students include language barriers, culture shock, and prejudice and discrimination (Sandhu & Asrabadi, 1994).
Many factors can moderate the experience of acculturative stress, but one of the most important may be the degree of difference that exists between a person’s culture of origin and the host culture, or cultural distance (Ward, Bochner, and Furnham, 2001). In theory, adjusting to a culture highly dissimilar to one’s original culture may be more stressful and/or difficult than adjusting to a more similar culture, and that is precisely what is found in many studies (e.g., Demes & Geeraert, 2012; Redmond, 2000; Suanet & van De Vijver, 2009). But recent evidence (Kashima & Abu-Rayya, 2014) suggests only mixed support for this cultural distance hypothesis. The mixed findings may be due to the various dimensions on which cultures have been found to differ (e.g., individualism vs. collectivism), and/or to the use of self-report vs. so-called objective measures. Nonetheless, most evidence points to a positive relationship between cultural distance and acculturation difficulties, such as acculturative stress.

In the current study, a relatively global measure of cultural distance was used. Due to the lack of research on cultural distance in therapy with international student therapists, it seemed best to assess its relation to process and outcome more broadly before delving into specific aspects of cultural distance. It also seemed best to use a measure of perceived cultural distance rather than a more objective index. Objective indices may circumvent some limitations of the self-report method (such as participant under- or overestimating the degree of cultural distance), but they also suffer from important disadvantages. For instance, these indices are often constructed from data that may not be current or available for every nation, and their use assumes that the experience of distance is the same for every acculturating person. Assessing international
student therapists’ subjective sense of cultural distance thus seemed more relevant and proximally related to student therapists’ experiences in psychotherapy with U.S. clients.

**Acculturation Experiences of International Student Therapists**

Most literature on international student therapists has not overtly adopted an acculturation conceptual framework. Still, some authors have posited that challenges commonly faced by international students as they experience acculturation can spill over into treatment. For example, Lee (2013) posited that student therapists for whom English is a second language might struggle to understand and be understood by U.S. clients, which could affect their counseling relationship. Moreover, recent evidence suggests that challenges related to acculturation may affect certain aspects of international student therapists’ clinical training. For example, Nilsson and Anderson (2004) found that international students in professional psychology programs who felt less accepted by Americans, were less accepting of Americans and U.S. culture, and who preferred using their native language over English, had less counseling self-efficacy and weaker supervisory working alliances. Other studies suggest that acculturation-related difficulties like language barriers, prejudice, and conflicts related to cultural differences may hurt international student therapists’ relationships with faculty and peers and their placement in practicum sites (Chen, 2004; Knox et al., 2013; Ng, 2006; Ng & Smith, 2009).

An important limitation of this literature is that it consists mostly of qualitative studies and surveys that focus more on international student therapists’ overall clinical training, and not so directly on the psychotherapy process. Indeed, until now, no study had examined whether or how acculturation factors (such as acculturative stress and cultural distance) actually relate to the process of psychotherapy.
Acculturation and Psychotherapy Process and Outcome

So how may acculturative stress and cultural distance relate to therapy process? These acculturation factors, as noted before, have been related to international students’ academic and social functioning (e.g., Smith & Khawaja, 2011; Suanet & Van de Vijver, 2009). The literature on international student therapists further suggests that acculturation-related challenges can affect their clinical training (e.g., Lee, 2013; Ng & Smith, 2006). Pooling all of these findings, it may be theorized that acculturative stress and cultural distance affect how international students function as therapists. That is, if acculturative stress and cultural distance spill over into the therapy work of international student therapists (as they seem to do in other areas of international students’ lives), they might be negatively related—as main effects and in interaction—to important aspects of the therapeutic process. Two psychotherapy constructs seemed highly salient to consider: the therapeutic relationship and session outcome. Below we will briefly review each construct and their possible relations to acculturative stress and cultural distance.

Before doing so, it is important to consider the issue of participant perspective in psychotherapy research. Theory and research suggest that therapists and clients attend to different aspects of the therapeutic process (e.g., Markin, Kivlighan, Gelso, Hummel, & Spiegel, 2014; Sullivan, 1954). When studying psychotherapy, one can thus focus on either or both therapist and client perspectives, and/or on their interplay. The focus in the present study was on the perspective of the therapist, given that the study was designed to be an initial test of whether and how the acculturative stress of foreign-born student therapists, and their perceptions of cultural distance, contribute to the therapist’s ability to engage in psychotherapy work. Having said that, efforts were made to assess
international student therapists’ perspectives of their clients’ experience in the therapeutic relationship and in session. Doing so seemed to offer a useful, albeit imperfect way to index the client view and its effect on the therapist, even though the primary focus remained on the international student therapist.

The Therapeutic Relationship: Personal and Working Elements

The therapeutic relationship is essential to the success of psychotherapy of all theoretical orientations (Gelso, 2014; Norcross, 2002, 2011; Nocross & Lambert, 2011; Wampold, 2010). Gelso and Carter (1985) defined the therapeutic relationship broadly as “the feelings and attitudes that the counseling participants have toward one another, and the manner in which these are expressed” (p. 159). More specifically, many therapists view the real or personal relationship between therapists and their clients and their working alliance as vital elements of the relationship. These relational constructs (real relationship and working alliance) capture related yet distinct aspects of the therapy relationship. According to Gelso (2014), the real relationship reflects the personal, non-working aspects of the relationship—how genuine each person is, and how realistically they perceive and experience each other. The working alliance reflects the working aspects of the relationship—the dyad’s experience of a working bond, and their agreement on the goals and tasks of therapy (Bordin, 1979).

As these definitions suggest, factors that interfere with therapists’ ability to be genuine, perceive and experience others realistically, form a working bond, and collaborate on therapeutic goals and tasks will likely reduce the quality of the real relationship and the working alliance. For international student therapists, such factors could include acculturative stress and cultural distance. Indeed, we shall see in the next
chapters that international student therapists may experience reactions due to acculturative stress and cultural distance (e.g., language anxiety, stereotype threat, difficulties understanding and interacting with U.S. people, etc.; Altarriba & Heredia, 2008; Beilock & Ramirez, 2011; Redmond, 2000) that could detract from their ability to form strong real relationships and working alliances with U.S. clients. And given that cultural distance often moderates the experience of acculturative stress, the interaction of cultural stress and distance could also have a negative effect on the real relationship and working alliance.

Therapists’ reactions to clients that stem from their unresolved emotional conflicts also form part of the therapeutic relationship and contribute to the work of therapy. Such therapist reactions, termed countertransference (Gelso, 2014; Gelso & Hayes, 2007), have their genesis in multiple sources, which may include cross-cultural factors (Comas-Diaz & Jacobsen, 1991). International student therapists’ reactions that are induced by acculturative stress and cultural distance could thus be instances of cultural countertransference, which Gelso and Mohr (2001) defined as “the therapist’s culture-related distortions of the patient or rigid, interpersonal behaviors rooted in his or her direct or vicarious experiences with members of the patient’s [cultural] group” (p. 59). That is, the acculturative stress of international student therapists, and their perception of cultural distance, may contribute to countertransference-based reactions.

The literature is clear, however, that not all therapist reactions are countertransferential, even in cross-cultural therapy (Gelso, 2014; Gelso & Mohr, 2001). Indeed, viewing all therapist reactions as countertransference stretches the construct beyond its scientific utility (see Gelso, 2014, for a look at the debate surrounding the
various conceptions of countertransference). So although acculturative stress and cultural
distance may well serve as sources of countertransference, they are part of the typical
unfolding of the acculturation process. As such, they may induce reactions that do not
bespeak unresolved conflicts existing prior to the cultural stress and distance in question
and, by definition, may not be countertransference.

Given these theoretical considerations and the current state of the literature, at this
point it seemed best to conceptualize the potential effects of acculturative stress and
cultural distance as reactions broadly defined, leaving the matter of whether they are
sources of countertransference to future scholarship. So while acknowledging that
acculturative stress and cultural distance may be implicated in international student
therapists’ reactions that are rooted in unresolved emotional conflicts, the present study
adopted the broader concept of therapist reactions rather than the more specific concept
of countertransference.

Session Outcome: Quality and Depth

Another important aspect of the psychotherapy process is session quality. Many
authors (Boswell, Castonguay, and Wasserman, 2010; Lingiardi, Colli, Gentile, and
Tanzilli, 2011; Stiles, 1980) have argued that examining session quality allows one to
assess the effectiveness of an ongoing treatment—in essence, by clarifying how process
(what happens in session) is translated into outcome (what results from a series of
sessions or a complete course of treatment). How therapists and clients experience a
therapy session, and what they think and feel afterward, can thus tell us something
important about how psychotherapy unfolds and what comes of it. In general, research on
session quality can be divided into two stages, the first relating process to session quality,
and the second relating session quality to outcome (Lingiardi et al., 2011; Stiles, 1980). The present study addressed the first of these two stages.

Session quality can be assessed at different levels of analysis. On a relatively broader level, sessions can be judged on the basis of how helpful, satisfying, valuable, or effective they were (e.g., Hill & Kellem, 2002). On a more specific level, the most commonly studied dimension of session quality is session depth. A deep session is one that is experienced as especially valuable, powerful, full, and special (Stiles & Snow, 1984). Regardless of how globally or specifically it is assessed, session quality has been consistently related to positive therapeutic outcomes, including the real relationship and the working alliance (e.g., Bhatia & Gelso, 2013; Lingiardi et al., 2011; Stiles, Gordon, & Lani, 2002).

If, as theorized, acculturative stress and cultural distance interfere with foreign-born student therapists’ ability to engage in therapy work with U.S. clients, then they might also prevent these student therapists from fostering quality sessions. Thus, international student therapists who experience higher levels of acculturative stress, and who perceive more cultural distance, may also experience sessions with U.S. clients as being less helpful, satisfying, valuable, effective, and deep. Moreover, and similar to the previous hypotheses, the interaction of acculturative stress and cultural distance could also yield a negative effect on session quality.

More Complex Relationships Among Study Variables

As was noted above, the real relationship and the working alliance have each been related to positive session and treatment outcomes (Gelso, 2014). It thus seemed worth exploring whether the expected links of acculturative stress and cultural distance to
session quality depended on the real relationship and/or the working alliance. For example, the real relationship and the alliance might be mediators, the internal mechanisms by which acculturative stress and cultural distance influence session quality. Alternatively, they could interact with acculturative stress and cultural distance in such a way to moderate (i.e., intensify or attenuate) their impact on session quality. Given the lack of theory and research on this subject, both of these possibilities (mediation and moderation) were assessed in the present study.

The Present Study

Until now, no study had examined whether or how factors such as acculturative stress and cultural distance spill over into the therapy work of international student therapists. In the present correlational field study, the theory was tested that international student therapists’ acculturative stress and their perceptions of cultural distance could interfere with their ability to form sound real relationships and working alliances, and foster quality and depth in a therapy session, with U.S. clients. That theory is based on the observation that acculturation difficulties are related to impairments in some international students’ psychosocial functioning (Smith & Khawaja, 2011) and in the graduate training of some international student therapists (e.g., Knox et al., 2013). Understanding the role that acculturation factors play in the therapy process will helpfully add to our understanding of the experiences of international student therapists and, at the same time, it will help us refine what we know about therapist effects.
Chapter 2: Literature Review

International student therapists face the challenge of learning to become therapists while adjusting to a new culture. How do they do it? And how does their cross-cultural adjustment influence their psychotherapy work? In order to address these questions, it is helpful to review the concepts of acculturation, acculturative stress, and cultural distance, as they offer a useful framework for understanding the adjustment experience of international students, including international student therapists. Given that international student therapists have their own set of experiences as they undergo this adjustment process, it also helps to review the literature in counseling and psychotherapy that bears upon them, and whether they indeed affect therapy work. Finally, in considering specific aspects of psychotherapy that may be affected by acculturative stress and cultural distance, it also helps to review some of the process and outcome literature—in particular, on therapist effects, the therapeutic relationship, and session quality.

Acculturation and Acculturative Stress

What can international students expect when they move to a new country? Much research suggests that they might experience changes in aspects of their lives such as how they see themselves, how they behave, what food and music they like, how they interact with others, and many other aspects of everyday life (Yoon, Langrehr, & Ong, 2010). Historically, this process of change was thought to be unilinear: immigrants had to abandon their cultural heritage in order to adopt the host society’s culture. Nowadays, the process is theorized to be bilinear, wherein entering into and adapting to a new culture does not mean discarding one’s culture of origin (Miller, 2007; Smith & Khawaja, 2011).
The most widely used bilinear model of acculturation (and the one adopted in the present study) was proposed by Berry and his collaborators (e.g., Berry, 1980, 1997, 2006; Berry, Kim, Minde, & Mok, 1987; Berry, Phinney, Sam, and Vedder, 2006; Williams & Berry, 1991). This model has received a great deal of empirical support (Birman & Simon, 2014; Miller et al., 2013; Yoon et al., 2010). According to the model, acculturation refers to processes of cultural and psychological changes that take place when two or more groups and their members come into contact. As people adapt to a new culture, they can adopt certain strategies or attitudes to help them navigate the changes they experience. These strategies are based on the degree of involvement or adherence to the original and/or to the host culture. The integration (or bicultural) strategy involves adhering to one’s culture and to the host culture. The assimilation strategy involves adhering to the host culture but not to one’s culture. The inverse strategy is separation: adhering to one’s culture of origin but not to the host culture. Finally, the marginalization strategy refers to a lack of adherence to either culture.

The implications of Berry’s acculturation model are varied. For example, people who use an integration strategy generally seem to have better mental health than those who use other strategies (Chen, Benet-Martínez, & Bond, 2008; David, Okazaki, & Saw, 2009; Miller et al., 2013). Other studies, however, have found that greater acculturation to the host culture is associated with less psychological distress; greater identification with the original culture, in turn, is slightly or not significantly related to distress (Ryder, Alden, & Paulhus, 2000; Wang & Mallinckrodt, 2006). Other research has also shown that people who use an assimilation strategy have more positive attitudes toward therapy.
and seeking psychological help (e.g., Gim, Atkinson, & Whitley, 1990; Kim & Omizo, 2003; Miller et al., 2013; Panganamala and Plummer, 1998; Zhang & Dixon, 2003).

Another implication of acculturation has to do with the stress of adjusting to a new culture (Berry et al., 1987, Williams & Berry, 1991). At first glance, this type of stress may recall the idea of culture shock, but Berry (2006) has argued that the former term is preferable to the latter. First, Berry argues, shock has a negative connotation that belies that people can react positively to cross-cultural contact. The notion of shock also lacks clear conceptual and empirical bases. Acculturative stress, in turn, draws on literatures of stress and adaptation (e.g., Lazarus & Folkman, 1984), which suggest that people can respond to stressors in many ways. Finally, Berry (2006) argues that the term culture shock is rather vague: it implies that the difficulties of adapting to a new culture arise from a single culture. Inclusion of the term acculturative in acculturative stress, on the other hand, is an attempt to make it clear that two or more cultures are involved, which brings the concept more in line with existing theory and research.

Acculturative stress can thus be defined as physiological and psychological reactions to acculturation-related stressors (Berry et al., 1987). When people appraise changes as non-threatening or as opportunities, they are likely not to experience them as stressors. But when changes are appraised as difficulties, people must assess whether they have the coping resources and capabilities to combat them. It is when the coping strategies are inadequate, or when maladaptive strategies are used, that people may experience acculturative stress, which carries a higher risk for depression, anxiety, isolation, and distress for many acculturating people (e.g., Johnson & Sandhu, 2007; Miller et al., 2013; Mori, 2000; Sandhu & Asrabadi, 1994).
Acculturative Stress and International Students

But how does acculturative stress affect the lives of international students in particular? In an extensive review of the literature, Smith and Khawaja (2011) identified some common acculturative stressors of this population: language barriers, sociocultural stressors, academic stressors, discrimination, and lifestyle stressors. Let us first see each of these stressors and some of their consequences, as doing so will elucidate what international students, both in general and in our field, may experience as they adapt to a new culture. It will then be easier to consider some psychological mechanisms by which acculturative stress may in theory influence international student therapists’ ability to engage in therapy work.

Perhaps unsurprisingly, language barriers are some of the most oft-cited stressors for international students. According to Smith & Khawaja (2011), language barriers, such as second-language anxiety and low proficiency, are related to a host of emotional-social and academic functioning difficulties. For example, for international students attending university in English-speaking countries, lower English proficiency has been found to predict mental health outcomes, such as general stress and depression (e.g., Dao, Lee, & Chang, 2007; Sümer, Poyrazli, & Grahame, 2008; Yeh & Inose, 2003; Zhang & Goodson, 2011). In turn, greater competence in English has been linked to more and better interpersonal relationships with people from the host society, and to increased self-esteem (e.g., Barrat & Huba, 1994; Poyrazli, Arbona, Nora, McPherson, & Pisecco, 2002). Finally, international students who do not perform well academically tend to report lower levels of English proficiency, as well (e.g., Poyrazli, Arbona, Bullington, & Pisecco, 2001; Poyrazli & Kavanaugh, 2006; Zhang & Brunton, 2007).
Smith and Khawaja (2011) noted that international students often have to establish a new social network in the host culture, and thus they often encounter sociocultural stressors. For instance, international students are likelier to suffer from loneliness, isolation, and homesickness (e.g., Townsend & Poh, 2008; Rajapaksa & Dundes, 2002; Zhang & Brunton, 2007) and appear to feel less social support than their domestic counterparts (Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002; Khawaja & Dempsey, 2008). Differing cultural norms and expectations, language obstacles, and the nature of friendships in the host country can influence students’ ability to form new friendships. Smith and Khawaja (2011) also noted that Asian international students in particular have increased difficulties forming friendships with locals than international students from Europe. They speculated that, per Berry’s (2006) model, this increased difficulty may stem from conflicting acculturation attitudes between international students and host universities, but no research to date has tested this idea.

Educational or academic stressors were also noted by Smith and Khawaja (2011) as potential acculturative stressors for international students. Academic stress is not unique to international students, but it may be intensified for them. Some studies suggest, for instance, that international students have greater reactions to academic stressors as they adjust to university life in the host society, and also experience greater levels of life stress and psychological distress (e.g., Misra, Crist, & Burant, 2003). Other research, however, has not found significant differences between international and domestic students when it comes to academic stress or reactions to other stressors (Misra & Castillo, 2004; Khawaja & Dempsey, 2008). International students do seem to perceive lower quality of services offered to them by their host institutions compared to the
services offered to domestic students, and this has been associated with poorer adaptation to stressors and higher incidences of depression (Khawaja & Dempsey, 2008).

Negative experiences related to discrimination are also sources of acculturative stress (Smith & Khawaja, 2011). Many international students are victims of overt and covert forms of discrimination both on and off campus, including verbal insults, physical attacks, and bias when looking for work (e.g., Lee & Rice, 2007; Poyrazli & Grahame, 2007). Perceived discrimination also predicts homesickness and discourages students from reaching out to locals and domestic students (Chen, 1999; Mori, 2000; Poyrazli & Lopez, 2007). Moreover, students from Africa, Asia, India, the Middle East, and Latin America typically report more discrimination than domestic students and European international students (Johnson & Sandhu, 2007; Lee & Rice, 2007; Poyrazli & Lopez, 2007). Johnson and Sandhu (2007) noted that students from such nations could be subject to anti-immigrant attitudes and xenophobia, and often feel judged because of their origins, language or accent, and skin color.

International students may also experience what Smith and Khawaja (2011) termed practical or lifestyle stressors. Frequently these include financial restrictions and other practical issues. Experiencing an interruption in terms of financial resources, for example, may threaten a student’s ability to afford their educational pursuits or even stay in the host country (Chen, 1999). Several studies suggest that financial concerns (e.g., greater tuition, study and work restrictions, etc.), and other issues (e.g., finding accommodation and transportation) are significant problems faced by a majority of international students (e.g., Bradley, 2000; Chen, 1999; Li & Kaye, 1998; Mori, 2000; Poyrazli & Grahame, 2007).
Stressors listed so far (language, sociocultural, academic, discrimination, and practical) are, according to Smith and Khawaja (2011), some of the most common among international students. Accordingly, these stressors have found their way into most instruments aimed at measuring the acculturative stress of international students. One of the most widely used of these measures, the Acculturative Stress Scale of International Students (ASSIS; Sandhu and Asrabadi, 1994), features several stressors that Smith and Khawaja (2011) considered in their review, but includes additional ones as well. The stressors captured in the ASSIS are perceived discrimination, homesickness, perceived hate and rejection, fear, culture shock and stress due to change, and guilt related to being away from home. High levels of acculturative stress as measured by the ASSIS have been found to be negatively linked with overall life satisfaction and social connectedness (Ye, 2005; Yeh & Inose, 2003), and positively linked with depressive symptoms among international students in the U.S. (Constantine, Kindaichi, & Okazaki, 2005).

In sum, international students encounter many acculturative stressors. Some of the most common include language barriers, loneliness and isolation, fear and anxiety, educational concerns, difficulties forming relationships in the host culture, perceived discrimination, and financial and practical issues (Sandhu & Asrabadi, 1994; Smith & Khawaja, 2011). These acculturative stressors, as we have seen so far in this review, are often significantly related to students’ academic and socio-emotional functioning. What have yet to be considered are the psychological mechanisms by which acculturative stress may impair functioning.
How may acculturative stress impair functioning? One conception that seems particularly apt to answer this question comes from cognitive load theory (Sweller, Ayres, & Kalyuga, 2011). Broadly speaking, the theory stipulates that we can only hold a limited amount of material in our working memory, a part of the mind that helps us process information, regulate attention, and coordinate actions necessary to perform a task. As a result, performance on any given task may suffer when working memory is taxed—or, in the parlance of the theory, when cognitive load increases. Factors that deplete mental resources and increase cognitive load may include absorbing too much new information or multi-tasking. Certain affective states, such as anxiety and stress, can also hamper our processing ability, since they too congest our limited mental bandwidth (Eysenck & Calvo, 1992).

Cognitive load theory thus suggests that acculturative stress may impede international students’ functioning by consuming the mental resources necessary to perform cognitively demanding tasks. Indeed, take for example language barriers, which as we saw in the previous section are among the most common stressors afflicting international students (Smith & Khawaja, 2011). Research suggests that suffering from foreign-language anxiety can increase cognitive load, which hurts performance on tasks such as listening comprehension (Chen & Chang, 2009). Other barriers to learning and speaking a second language well have also been related to lower performance on cognitive and emotional processing tasks among bilingual and multilingual people of varying ages (Altarriba & Heredia, 2008; Chen & Chang, 2009; MacIntyre & Gardner, 1994; Sparks & Patton, 2013).
Cognitive load theory also helps explain why functioning may be hurt by discrimination, another common source of acculturative stress (Smith & Khawaja, 2011). People who perceive and experience discrimination are more susceptible to the effects of stereotype threat, the fear of confirming a negative stereotype about one’s group (Steele & Aronson, 1995; Thames et al., 2013). Some of the most often-reported consequences of stereotype threat include lower performance on academic and neurological tests, but also tasks that are more social in nature, like maintaining a fluid social interaction (Schmader, Johns, & Forbes, 2008). These negative consequences are thought to arise because stereotype threat undermines people’s personal and social identities, and because it induces stressful, distracting reactions and anxiety that overwhelm working memory (Beilock & Ramirez 2011). This notion has been borne out in many studies, including recent meta-analyses (Pascoe & Smart Richman, 2009; Schmitt, Branscombe, Postmes, & Garcia, 2014) showing that perceived discrimination increases stress, diminishes self-control and engagement in healthy behaviors, and threatens well-being.

In sum, cognitive load theory suggests that acculturative stress may hinder international students’ functioning by depleting the mental resources necessary to perform cognitively demanding tasks. It is thus not difficult to imagine how acculturative stress may impede an international student therapists’ ability to engage in psychotherapy work. After all, psychotherapy is a cognitively demanding task that requires the therapist, among many other things, to listen carefully to the client; to integrate new information with prior knowledge about the client; and to devise and decide upon clinical interventions during session—all while attending to the client-therapist relationship and monitoring both the client’s and his or her own emotional responses. The international
student therapist who experiences acculturative stress—who worries about speaking English well, who has difficulties navigating social interactions, who experiences discrimination, etc.—may thus step into the psychotherapy room with a diminished capacity to engage in the demands of therapy work. As a result, the quality of his or her therapeutic relationships and of a therapy session with a U.S. client may suffer.

Whether acculturative stress indeed relates in such ways to the quality of the therapy relationship or a session has not been the subject of any research to date. Indeed, the present study is the first to address these notions. We will see in later sections, though, that some research has examined how acculturation-related challenges, which overlap with the acculturative stressors so far considered, influence international student therapists’ therapeutic training and work. For now, one takeaway from the literature reviewed so far is that international students may find acculturation to be a stressful and cognitively taxing process that is related to many difficulties in psychosocial functioning.

**Acculturative Stress and Cultural Distance**

Although adjusting to a new culture may be cognitively taxing, in itself the process may not be stressful. Among the most important factors theorized to mitigate acculturative stress is *cultural distance*: the degree of difference between home culture and host culture. Babiker, Cox, and Miller (1980) introduced the concept to account for the distress that international students and other sojourners may experience as they adapt to a new culture, arguing that such distress may be a result of cultural distance. This is sometimes referred to as the cultural distance hypothesis. To test this hypothesis, Babiker et al. (1980) developed an index of the perceived differences between social and physical attributes of home and host culture environments, and found that with it they could
predict anxiety and number of medical consultations among international students. Later theorists refined the concept further. Gudykunst and Hammer (1988), for example, proposed that a short cultural distance in terms of uncertainty avoidance (i.e., attempts to cope with anxiety by reducing ambiguity) makes it easier for acculturating people to accurately predict and explain host behavior. Thus, more cultural similarity in terms of uncertainty avoidance allows one to form and maintain relationships in the host society with more ease. It also reduces stress and anxiety in social situations.

One way to make sense of the cultural distance hypothesis, according to Ward, Bochner, and Furnham (2001), is to use a stress and coping framework. People who perceive and experience greater cultural distance also experience more intense, disruptive changes in their lives, and thus more stress. Moreover, cultural distance affects sociocultural adaptation (i.e., how easy or hard it is to adjust to a new climate, food, way of approaching social interactions, etc.) and the acquisition of culture-specific skills. The idea that cultural distance is associated with stress and adaptation is supported by numerous studies of acculturating people in many countries (including the U.S.). Demes and Geeraert (2014), for example, found that international students and staff at a university in the United Kingdom who perceived more cultural distance reported lower well-being, sociocultural adaptation, and psychological adaptation (i.e., homesickness, loneliness, feeling of out place, etc.). Suanet & van de Vijver (2009) found similar results among exchange students in Russia from 11 countries (see also Chirkov, Lynch, & Niwa, 2005; Galchenko & van de Vijver, 2007; Rientes and Tempelaar; 2013).

Cultural distance has also been related to immigrants’ interpersonal relationships and sense of self in the host country. International students who see their native cultures
as highly dissimilar to that of the U.S. struggle more to communicate and form relationships with U.S. people (Redmond, 2000). Along similar lines, van Osch and Breugelmans (2012) found that cultural distance predicts attitudes toward intergroup interactions. Immigrants from ethnic minority groups in the Netherlands were rated by Dutch citizens as being more threatening, less warm and competent, and not as well-adjusted when they were perceived to be more different from the mainstream culture. These immigrants were also seen as being more strongly oriented to their ethnic groups. From the minority immigrants’ perspective, minorities who perceived greater cultural distance from Dutch culture had more favorable attitudes toward multiculturalism, stronger ethnic identities, and were more oriented toward their ethnic culture. Nesdale and Mak (2003) similarly found that greater perceived cultural distance among immigrants in Australia predicted a stronger ethnic identity, more involvement in ethnic community, and the extent to which immigrants felt accepted by Australian society.

Although there is much support for the cultural distance hypothesis, there is also some negative evidence. Nesdale and Mak (2003), for example, found no relationship between cultural distance and psychological well-being. Similar results have been reported in other studies (e.g., Ward & Kennedy, 1993). More recently, Kashima and Abu-Rayya (2014) conducted a longitudinal study of over 4000 immigrants from 49 countries/regions living in Australia. The authors used normative data to construct indices of cultural distance for many dimensions on which cultures have been found to differ (e.g., uncertainty avoidance, whether one finds meaning in relationships or in individual pursuits, egalitarianism, etc.; Hofstede, 2001; Schwartz, 1994; Smith et al., 1996). Results offered limited support for the cultural distance hypothesis. Immigrants seemed
to face more psychological difficulties in earlier phases of settlement (within the first 3.5 years), but only if they differed more from Australians in terms of uncertainty avoidance and “masculinity” (i.e., the extent to which achievement and competition are emphasized relative to relational issues). These associations disappeared at later phases of settlement (after 3.5 years), and the strength of the effects was fairly small.

What could account for the mixed support for the cultural distance hypothesis? One factor may be the type of outcome that is examined. As we saw from the studies reviewed above, cultural distance may predict acculturative stress and sociocultural adaptation—but its relation to other types of outcomes, such as well-being, may not be as straightforward. More work thus seems needed to clarify which types of outcome are associated with cultural distance, and when and why such associations exist. Another factor might be the dimensions on which cultures differ. Such dimensions may include, for example, how people cope with ambiguity (uncertainty avoidance); whether people prefer to form loose ties with others and care for themselves and immediate family, or prefer to form strong, interrelated groups (individualism vs. collectivism); and the extent to which people are oriented towards the future versus the present (Hofstede, 2001). Whether cultural distance is measured in terms of such specific dimensions, or whether it is measured more globally, may yield different results.

A third factor that may account for the mixed support for the cultural distance hypothesis has to do with the use of measures of perceived versus objective cultural distance. A benefit to using perceived measures is that they directly assess the subjective experience of cultural distance (Oyserman, Coon, & Kemmelmeier, 2002). On the other hand, people may under- or overestimate the degree of cultural distance that may exist, or
may otherwise inaccurately report the distance (Kashima and Abu-Rayya, 2014).

Objective measures of cultural distance overcome this limitation by relying on country-level ratings of cultural dimensions, which can be used to construct indices of cultural distance. Some scholars have even proposed using economic data (like Gross Domestic Product), or the UN’s Human Development Index (which measures standards of health and quality of life around the world) as proxies for cultural distance (Geerat & Demoulin, 2013). One disadvantage of these types of measures is that they are proxies of cultural distance rather than direct measurements of the construct (Oyserman et al., 2002).

Moreover, the use of these indices implies that the experience of distance is the same for every acculturating person. Finally, these indices are often constructed from data that may not be current or available for every nation from which study participants immigrate.

In sum, there is much support for the theory that adjusting to cultures highly dissimilar to one’s original culture may be more stressful and difficult than adjusting to more similar cultures. More work is needed, however, to clarify (a) the type of outcomes that might be affected by cultural distance, (b) the conditions under which cultural distance relates to such outcomes, and (c) how best to assess cultural distance: globally versus specifically, and whether to assess perceptions of cultural distance or rely on more objective proxies of the construct.

What can the literature on cultural distance tell us about international student therapists, especially their therapy work? First, as we will consider in more detail in the next chapter, a case can be made that cultural distance can relate to how international student therapists feel toward and understand people from the U.S, which could in turn relate to the quality of their therapy relationships and sessions with U.S. clients. Second,
since cultural distance mitigates acculturative stress, it could also moderate the possible associations between acculturative stress and the therapeutic relationship and session quality. With regard to the measurement of cultural distance, since no studies so far have examined the links between cultural distance and therapy outcomes, it may be best for now to use a global measure of cultural differences across many life domains (e.g., food, norms, language, etc.; Demes and Geeraert, 2014). Finally, it also seems most appropriate for now to use a measure of international trainees’ perceptions of cultural distance, given that trainees’ subjective experience of this distance may be more relevant and proximally related to their experience conducting psychotherapy with U.S. clients.

**Summary of Acculturative Stress and Cultural Distance Literature Review**

The literature on acculturation, acculturative stress, and cultural distance offers an elegant and useful framework for understanding the experiences of international students. The process of adapting to a new culture may induce stress in international students, which may affect many areas of everyday functioning. One mechanism by which acculturative stress could affect functioning is cognitive load. That is, acculturative stress may rob international students of the mental resources necessary to function effectively. Whether acculturation is stressful, however, and by how much, may well depend on the degree of distance that exists between the culture of origin and the new culture.

**Acculturation Experiences of International Student Therapists**

An important limitation of the literature reviewed so far, at least as it concerns the current study, is that it is solely focused on international students outside the field of counseling and psychotherapy. Do international students in our field also face difficulties
associated with acculturation? If so, do these difficulties in fact affect their therapy work, as it has been suggested throughout the present study? With these questions in mind, let us turn to the literature that bears on the experiences and unique challenges of international student therapists.

Lee (2013) reviewed the literature on the cultural adjustment of international students in general, and from it extrapolated some challenges that could affect the training of international students in professional psychology programs (e.g., counseling, clinical, school, etc.). The challenges he identified are: financial difficulties, career concerns, language barriers, and cultural differences. Financial difficulties are those that limit the funding options to support international students’ educational pursuits. Similarly, career concerns involve the visa regulations around study and work permits that limit the choices that international students can make for their internships and post-doctoral careers. Although relevant to the experiences of international students in our field, neither Lee nor anyone has suggested how challenges related to financial difficulties or to career concerns could specifically affect the psychotherapy work of international student therapists.

In turn, language barriers and cultural differences, according to Lee (2013), could affect the therapy work of international student therapists in particular ways. Language barriers, such as low English fluency and having a foreign accent, may inhibit international students from speaking in their courses and may also hinder these students’ interactions with some of their clients. Lee illustrated this latter point with a hypothetical scenario: a White male client tells his international therapist-trainee that he could not connect with her because of her accent. No matter how hard the trainee tried to engage
him, the client dropped out after three sessions. Cultural differences can also affect the training and work of international trainees. For example, Lee suggested that some international students might find it countercultural to disclose personal information during their training in order to demonstrate qualities that are seen as vital to their professional development (e.g., personal growth and self-awareness). Cultural differences may also shape how comfortable students are with certain theoretical orientations and techniques. Lee offered the example of a Chinese student who struggles using the rational emotive behavior therapy technique of challenging distorted beliefs. The student saw it as too confrontational, and thus at odds with her cultural values.

Overall, Lee’s (2013) speculations suggest that international students may find their ability to engage in therapy training and work with clients hindered by difficulties related to language barriers and cultural differences. That view is certainly consistent with the literature on acculturative stress and cultural distance that we reviewed before. Lee’s suggestions, however, are not based on studies of international students in professional psychology or related disciplines; instead, they are based on his reading of the literature on the adjustment difficulties of international students in general. It is thus best to consider Lee’s suggestions as hypotheses regarding the therapeutic training and work of international students in our field that need to be tested empirically.

What then does the empirical literature say about Lee’s (2013) speculations? Knox et al. (2013) studied the views of ten international students regarding their counseling psychology doctoral programs. Most participants were women, originally from Asian nations, and their self-reported English fluency was deemed to be good to excellent. Data were examined using consensual qualitative research. Overall, students
reported more difficulties than benefits due to their international status. Between six and eight students had difficulties in the following areas: academic (e.g., adjusting to a new educational system), acculturation (e.g., adapting to interactions with U.S. people), and language (e.g., fear of being mocked for having bad English). Only two to five students experienced financial concerns or discrimination. The few benefits that international students attributed to their doctoral programs had to do with the programs fostering professional and/or personal growth.

Every international student in Knox et al. (2013) also considered their doctoral program to be culturally unreceptive more often than not. For example, between six and eight students found that the faculty in their program obviated differences between international and domestic students and only paid lip service to the value of multiculturalism. Furthermore, two to five students said that their domestic peers were not genuinely interested in making friends or interacting with international students. As many participants saw their doctoral program as lacking in cultural diversity. There were, however, aspects of the doctoral program that were seen as culturally receptive. Six to eight students, for example, said that their program offered an orientation to help them process issues of stereotype and diversity. Finally, the most helpful aspect of the counseling psychology doctoral program, according to all of the participants, was the predominantly positive relationship they had with their doctoral advisors.

In all, Knox et al. (2013) suggests that difficulties related to acculturation can affect the training of international students. Similar findings have been reported in the field of counselor education. Ng (2006) surveyed 36 counseling educators from programs accredited by the Council for Accreditation of Counseling and Related Educational
Programs (CACREP) about their views of and experiences with international counseling trainees. Results showed that counselor educators thought that non-Western international counseling trainees had more problems than their Western and American peers with English fluency, cultural adjustment, clinical courses, communicating with clients, and conflicts with Western ideas of and approaches to treating mental illness. In turn, counselor educators considered that all three groups (i.e., non-Western and Western international counseling trainees, and American trainees) did not differ with regard to academic problems, mental/emotional distress, social/relational problems with peers, problems fitting into clinical sites, or mentoring by faculty.

Ng’s (2006) findings were partially replicated by Ng & Smith (2009). In that study, 56 international and 82 domestic counseling trainees were surveyed about their training and stay in the U.S. Most respondents were enrolled in master’s counseling programs; a handful were doctoral trainees. Consistent with Ng (2006), Ng and Smith (2009) found that, compared to domestic trainees, international trainees reported more difficulties with English fluency and cultural adjustment, problems in clinical courses, issues communicating with clients, and conflicts with Western understandings of and approaches to mental health problems. In contrast to the views of counseling educators in Ng (2006), Ng and Smith found that international trainees reported more academic and social/relational problems with peers, difficulties fitting into practicum or clinical sites, and discrimination by faculty members and American trainees.

Other studies support the notion that cross-cultural difficulties affect the therapy training and work of international students. Chen (2004) studied the experiences of eight non-Western counselors in Canada. Five were recent migrants, while the rest wished to
return to their native countries upon graduating. The students had either completed training in the last year or neared the end of their training. Participants were interviewed using a semi-structured format. Interview transcripts were analyzed using an ethnographic fieldwork approach in which Chen wrote third-person narratives for each participant. From these, he then extracted themes to form a composite narrative.

Difficulty with English emerged as a major source of anxiety, even for those whose fluency was high. Participants also struggled to adapt to the values of the host country and the training program (e.g., personal sharing during skills training). No one felt explicitly discriminated against, but some noted a lack of cultural sensitivity from instructors and fellow students. Factors that enabled coping included making new friends and reaching out to professors, supervisors, and peers.

Mittal and Wieling (2006) also conducted a qualitative study of the experiences of international doctoral students in marriage and family therapy programs. Eight students and five graduates were recruited from seven accredited Ph.D. programs using a nonrandom, purposive sampling method. Almost half of the participants said that a language other than English was their first, about five reported being bi- or trilingual, and two said English was their first language. Participants’ countries of origin were: India (4), Mexico (2), Malaysia (2), Germany (1), Canada (1), Japan (1), Iran (1), and South Africa (1). Participants were interviewed using a semi-structured format, and were asked about their training experiences in terms of theory, research, clinical practice, and supervision.

Mittal and Wieling (2006) found that four main categories emerged from their data. One category was about participants’ experiences related to aspects of the self. At least three participants reported that they struggled with being outsiders to the U.S. As
many said that they felt inferior to U.S. people and worried about their cultural differences. Similarly, at least three people expressed concern about how clients might react to them for being outsiders. Finally, eight participants reported anxiety due to a lack of English fluency, and six struggled with speaking English and participating in classes.

The second category was about relationships with systems external to the self (Mittal & Weiling, 2006). Four participants of color said they felt pressure to assimilate to the mainstream culture, while three White/European participants talked about being uncomfortable with having racial privilege in American culture. Most participants also felt like their cultural differences went unrecognized or like they were held against them. Moreover, seven participants shared experiences with covert and overt forms of discrimination in therapy. Two of these participants, for example, had clients demand to be seen by American therapists, which made at least one participant feel like she had to be watchful of what she did or said in sessions with all of her American clients. Finally, every participant said that being connected to and receiving support from U.S. and other international students was important to them.

The third category had to do with how a shift in cultural context and educational system changed international trainees. Seven participants reported difficulties learning new ways of being and interacting with people in the new culture, while five talked about how difficult it was to think in one language and have to express themselves in English. Specific frustrations with curricula and classroom discussions were reported: six of the 13 trainees complained about a lack of discussion around diversity issues in their classes and with supervisors, and five students were frustrated that efforts to conduct research
internationally were not supported. Nine participants, however, reported that they were satisfied with their program’s curricula.

The final category concerned strategies that helped trainees cope. The first strategy, which emerged from the responses of seven out of 13 participants, involved learning to be more confident about one’s differences. That may include learning to speak to clients about cultural differences. The second strategy involved learning to stand up for oneself: five trainees described having to be more forthright with faculty or supervisors about their needs and differences. The final strategy that helped trainees cope involved having a non-quitting attitude. Indeed, two people discussed persevering even after faculty recommended that they discontinue their studies in light of the difficulties faculty felt the students were facing or were likely to face.

Finally, Nilsson and Anderson (2004) examined how acculturation factors relate to counseling self-efficacy, the supervisory working alliance, role ambiguity in supervision, and discussion of cultural issues with supervisors. Forty-two international students in APA-accredited professional psychology programs participated in the study. Most students (62%) were in clinical psychology, followed by counseling (31%) and school psychology (7%). The majority of students were women, and 40% were from Asian countries. Results showed that when participants felt less assimilated into American culture (i.e., felt less accepted by Americans, felt less accepting of Americans, and preferred using their native language to using English), they reported less counseling self-efficacy. Participants’ levels of assimilation were also negatively related to (a) the extent to which they discussed cultural issues in supervision and (b) the strength of rapport that they established with their supervisors. (The other aspect of the supervisory
working alliance that was measured in the study—a focus on clients—was unrelated to assimilation). Finally, students who felt less accepted by Americans and who preferred using their native language to English reported more role ambiguity in supervision.

What is the story that this emerging body of literature tells about international students in counseling psychology and related disciplines? First, the training and therapy work of some of these students could be affected by acculturation difficulties. Such difficulties include language barriers, like second-language disfluency and anxiety; having to adjust to new cultural norms and a new educational system; conflicts between the values of the original culture and the leading approaches to understanding and treating mental health in North America; and a lack of cultural receptivity that may exist in training programs. Some international students’ self-efficacy and confidence as therapists may also be shaken by acculturation difficulties. Notably, there is less of a consensus regarding the impact of discrimination. Lee (2013) warned that discrimination could hurt the training and therapy work of international student therapists. Supporting that claim are the results of Ng & Smith (2009) and Mittal and Weiling (2006), who found that some students do worry about and perceive discrimination from instructors, supervisors, and even clients. But Knox et al. (2013) and Chen (2004) found that discrimination has minimal to no impact. Finally, some of the research findings suggest that some international student therapists are able to cope with the acculturation difficulties they encounter. They do so by seeking social support, standing up for themselves, and speaking with clients and supervisors about cultural issues.

There are notable limitations to this literature. First, most of the samples gathered so far consist of small numbers of international students from a handful of training
programs. This begs the question of whether they are representative of the population of international student therapists. Assessing the question of representativeness, however, is difficult to begin with, since there is nothing akin to a census of international student therapists to compare those samples against. The small samples also raise questions about the generalizability and transferability of the findings in this literature. At the same time, findings so far have been fairly consistent across studies, suggesting that there may be a good degree of generalizability and transferability after all. Another limitation is that the lion’s share of the literature consists of qualitative and survey studies (cf. Nilsson & Anderson, 2004). We should thus interpret these studies’ findings cautiously, pending more research that replicates and extends the findings using more varied methodologies. Finally, the literature is mostly focused on the therapeutic training of international students. Although some of the findings pertain to psychotherapy work, the focus on psychotherapy proper has been slight, at best. We are still left to ponder whether, how, and why the acculturation difficulties that international student therapists seem to encounter relate to important psychotherapy process and outcome criteria.

*Psychotherapy Process and Outcome*

As was noted in the introductory chapter, the person of the therapist is important to the success of a treatment. Indeed, studies show that therapist factors account for a sizable amount of variance in therapy process and outcome (Benish, Imel, & Wampold, 2008; Kim, Wampold, & Bolt, 2006). So as we ponder how acculturative stress and cultural distance could affect the therapy work of international student therapists, it may help to consider which therapist characteristics may or may not foster treatment success.
A number of therapist characteristics have been examined and related to the process and outcome of therapy. Professional qualifications of therapists, such as level of experience, theoretical orientation, type of training, and so forth, seem to have little to no effect on therapeutic outcomes (e.g., Beutler et al., 2004; Skovholt & Jennings, 2004). Similarly, characteristics such as therapist gender and race/ethnicity are virtually unrelated to outcomes (Beutler et al., 2004). Therapists’ characteristics such as empathy, attachment style, and interpersonal functioning, on the other hand, have been found to predict positive therapy outcomes (e.g., Elliott, Bohart, Watson, & Greenberg, 2011; Hersoug, Høglend, Havik, von der Lippe, & Monsen, 2009; Mikulincer, Shaver, & Berant, 2013).

Of particular relevance to the present study are findings that pertain to therapist personal distress and quality of life. Therapist’s emotional well-being, for instance, has been related to treatment benefits, as judged by both therapists and clients (Beutler et al., 2004; but cf. Wolff & Hayes, 2009). Similarly, in survey studies, many therapists not only report that they often experience distress in their personal lives, but also that the distress can spill over into and interfere with the quality of their work (e.g., Guy, Poelstra, & Stark, 1989; Schröder, Wiseman, & Orlinsky, 2009; Sherman & Thelen, 1998). The relation between therapist functioning and therapy work, however, may be complex. Nissen-Lie, Havik, Høglend, Monsen, and Rønnestad (2013) examined how therapists’ reports of personal stresses and life satisfaction were related to the quality of their collaboration or working alliance with their clients. Personal stresses were strongly and inversely related to clients’ perceptions of the growth of the alliance overtime, but were
unrelated to therapist-rated alliance. In turn, personal satisfaction was related to the growth of the alliance from the therapist’s view, but unrelated to client-rated alliance.

In all, it seems that therapists’ professional qualifications are less important than their personal characteristics in shaping their therapeutic capabilities. But what goes on in therapists’ personal lives—burdens and stressors, but also joys and pleasures—may sometimes spill over into their work and influence interactions with clients. That aligns with the literature reviewed in the previous section. And it suggests that difficulties associated with acculturative stress and cultural distance could similarly affect the work of international student therapists. Of course, research is needed to support that notion.

So far in this review, we have seen that acculturative stress and cultural distance may play a role in international student therapists’ functioning and, in line with research in the larger field of counseling and psychotherapy, that the personal and emotional lives of these student therapists may well affect their therapy work. In considering which variables could serve as the criteria to evaluate the ideas set forth in the present study, two important constructs came to mind: the therapeutic relationship and session quality.

The Therapeutic Relationship

One of the most important aspects of the psychotherapy process is the therapeutic relationship. Gelso and Carter (1985) defined this relationship as “the feelings and attitudes that the counseling participants have toward one another, and the manner in which these are expressed” (p. 159). An extensive body of work has shown that the therapeutic relationship contributes to successful outcomes above and beyond other factors, such as therapeutic techniques (e.g., Lambert & Barley, 2002; Norcross, 2002, 2011; Nocross & Lambert, 2011; Wampold, 2010). Indeed, Norcross and Lambert
(2011), synthesizing extant research, found that about 20% of total outcome variance is attributable solely to the relationship.

Although such a global understanding of the therapeutic relationship has proven useful, some authors (Horvath, 2009; Gelso, 2014) have argued that a fuller understanding of the relationship must go beyond such global definitions; the construct must be examined in more nuanced ways. Gelso’s tripartite model (e.g., Gelso, 2014; Gelso & Carter, 1985, 1994; Gelso & Samstag, 2008) allows for that kind of nuanced examination. According to this model, the therapeutic relationship is composed of three related but discernible parts: a real relationship, a working alliance, and a transference configuration that itself consists of therapist countertransference and client transference.

The transference configuration, though central to the overall architecture of the therapy relationship, was not a focus in the present study. In the introductory chapter, we briefly discussed why countertransference was excluded: acculturative stress and cultural distance were conceptualized as therapist reactions broadly defined, rather than as ones stemming from unresolved emotional conflicts. As for transference, this element of the relationship has to do with the feelings and reactions that clients have toward their therapists (and that thus tend to distort perceptions of the therapists) that are shaped by clients’ experiences in early relationships (Gelso, 2014). As such, the concept also fell outside the scope of the present study; as was explained in the introductory chapter, the focus here was on the perspective of the international therapist-trainee. We shall thus review the remaining components of Gelso’s tripartite model: the real relationship and the working alliance.
Gelso (2011, 2014) has argued that the *real relationship* is the foundation of the therapy relationship. This component of the overall relationship reflects the personal connection that forms between therapists and their clients. In order to have a strong real relationship, both therapists and clients must be genuine toward one another, and must also experience and perceive each other realistically, or relatively free of distortions. Influencing the strength of the real relationship as well is the extent to which that genuineness and realism is positive versus negative. The more genuineness and realism, and the more positively each person in the therapeutic relationship feels toward these elements, the stronger we can expect the real relationship to be (Gelso, 2014; Gelso, Kelley, Fuertes, Marmarosh, Holmes, Costa, & Hancock, 2005; Kelley, Gelso, Fuertes, Marmarosh, & Lanier, 2010).

A strong real relationship seems to contribute to the success of therapy. Therapists’ and clients’ ratings of the real relationship predict session outcome (Bhatia & Gelso, 2013; Eugster & Wampold, 1996; Gelso et al., 2005; Markin, Kivlighan, Gelso, Hummel, & Spiegel, 2014) and treatment progress and outcome (Ain & Gelso, 2008, 2011; Fuertes, Mislowack, Brown, Gur-Arie, Wilkinson, & Gelso, 2007; Gelso et al., 2012; LoCoco, Gullo, Prestano, and Gelso, 2011; Marmarosh, Gelso, Markin, Majors, Mallery, & Choi, 2009; Owen, Tao, Leach, & Rodolfa, 2011). Not all findings, however, have been consistent. Marmarosh et al. (2009) found no relation between client ratings of the real relationship and treatment outcome. Similarly, LoCoco et al. (2011) and Gelso et al. (2012) failed to find a link between therapist ratings of the real relationship and treatment outcome. Gelso et al. (2012), however, did find that an increase in therapist ratings of the real relationship over the course of therapy predicted outcomes. Thus,
notwithstanding the conflicting findings, the weight of the evidence suggests that the real relationship relates as theorized to outcomes.

If the real relationship is the foundation of the therapeutic relationship, the *working alliance* is what allows the work of therapy to get done (Gelso, 2014). The working alliance was defined by Gelso and Carter (1994) as “the alignment or joining of the reasonable self or ego of the client and the therapist’s analyzing or ‘therapizing’ self or ego for the purpose of the work” (p. 297). Said differently, the working alliance is what allows clients and their therapists to collaborate in observing, understanding, and addressing the problems that bring clients to therapy. For that to occur, Bordin (1979) theorized that clients and therapists must agree on the goals of therapy and the tasks that will help meet those goals. Bordin further argued that clients and therapists must form an emotional bond to support the often-arduous work of therapy. An extensive literature has demonstrated that the working alliance is among the most robust predictors of outcomes. In the most recent meta-analysis, Horvath, Del Re, Flückiger, & Symonds (2011) identified 190 independent studies on the relationship between working alliance and outcome, and reported a moderate aggregate correlation of .275.

Gelso (2011) argued that the real relationship and the working alliance are related but distinct constructs. They are primarily distinguished by the personal nature of the real relationship and the more functional purpose of the alliance. In other words, the real relationship has to do with the personal aspects of the therapy relationship; in turn, the working alliance represents the collaboration between therapists and their clients.

One of the first kinds of evidence adduced for this distinction was the finding that the real relationship and the working alliance each contribute unique variance to the
prediction of therapeutic outcomes, despite their close relation. Indeed, therapist ratings of the real relationship and the working alliance tend to be moderately correlated; however, each accounts for unique variance in the prediction of outcomes (Bhatia & Gelso, 2013; Fuertes et al., 2007; Gelso et al., 2005; LoCoco et al., 2011; Marmarosh et al., 2009). Similar findings have emerged when clients are the ones rating the real relationship and the alliance (Fuertes et al., 2007; Marmarosh et al., 2009; LoCoco et al., 2011). In those cases, however, the correlation has typically been high (between .70 and .80). That could mean that the real relationship and the alliance are indistinguishable in clients’ minds. On the other hand, the high overlap could instead reflect that the measures used to assess the working alliance—and in particular the bond of the working alliance—confound the working alliance with the real relationship (Gelso, 2014). On the whole, however, the evidence points to the conclusion that the real relationship and the working alliance are in fact overlapping but distinct constructs.

Recently, Kivlighan, Marmarosh, and Hilsenroth (2014) urged researchers to offer other kinds of evidence to support the conceptual distinction between the real relationship and the working alliance. Specifically, they suggested that the real relationship and the working alliance be related to different types of outcomes. In theory, the real relationship should show stronger relations to outcomes that have to do with the personal aspects of therapy, and weaker relations to work-oriented outcomes. The alliance should in turn show the opposite pattern of associations. Although these differential outcomes hypotheses have not received much scrutiny, a few studies have started to provide some supportive evidence (e.g., Kivlighan et al., 2014; Owen, Quirk, Hilsenroth, & Rodolga, 2012). The literature on this subject however, remains inconclusive.
Session Quality

Another important aspect of the psychotherapy process is session quality. How do clients and/or therapists experience a therapy session? Afterward, what do they think and how do they feel about it? And what sorts of reactions do they have toward it? Answers to these types of questions give us an idea of the quality of a session, which in turn informs us about the progress and eventual success (or failure) of a treatment (Boswell, Castonguay, & Wasserman, 2010; Lingiardi, Colli, Gentile, & Tanzilli, 2011; Stiles, 1980). Research on session quality is usually divided into two stages. The first stage relates therapeutic process to session quality, and the second stage relates session quality to longer-term outcome (Lingiardi et al., 2011; Stiles, 1980). The present study addressed the first of these two stages.

Session quality can be assessed in a number of ways. Markin et al. (2014), for example, had therapists and their clients at two university counseling centers use one item to rate the overall quality of a session on a five-point scale (1 = very poor, 5 = very good). Another example of a more-global measure of session quality is the Session Evaluation Scale (SES; Hill and Kellem, 2002; Lent et al., 2006). This measure was designed for therapists and clients to evaluate a session in terms of how helpful, satisfying, valuable, and effective it was. Both of these measures are prototypical of how to get at a rather global conception of session quality, which has been related to many outcomes, such as different impacts of a therapy session, the real relationship, the working alliance, and the overall outcomes of various treatments (e.g., Bhatia & Gelso, 2013; Lent et al., 2006; Markin et al., 2014).
In contrast to a more global approach, quality can also be assessed by examining more specific aspects of a session. Along these lines, one of the most widely used measures is the Session Evaluation Questionnaire (SEQ; Stiles, 1980), which was designed to assess a session’s emotional tone and its participants’ feelings after the session. More specifically, the SEQ is comprised of four scales that assess whether a therapy session is perceived as deep vs. superficial, and smooth vs. rough. Of these particular dimensions, the depth of a session has received the most attention in the literature. Session depth is a task-oriented dimension that speaks to whether a session was experienced as powerful/weak, valuable/worthless, deep/shallow, full/empty, and special/ordinary (Stiles & Snow, 1984; Stiles et al., 1994). Session depth has been found to predict a host of positive therapeutic outcomes, including the working alliance and the real relationship, among others (e.g., Bhatia & Gelso, 2013; Kivlighan et al., 2014; Lingiardi et al., 2011; Pesale & Hilsenroth, 2009; Stiles, Gordin, & Lani, 2002).

**General Summary**

Many international student therapists encounter difficulties as they adapt to life in a new cultural environment—some of which may stem from acculturative stress and cultural distance. As we have seen in this chapter, such difficulties could threaten these student therapists’ functioning in many life domains—including, perhaps, their ability to engage in therapy work with U.S clients. Much of the literature here reviewed offers some measure of support for that assertion. It must be noted again, however, that virtually no studies have actually linked any acculturation factors to psychotherapy process and outcome data. The present study sought to address this gap in the literature. The overall purpose of the present study was to examine whether any effects of acculturative stress
and cultural distance could spill over into the therapeutic work of international student therapists—in particular, their ability to form sound real relationships and working alliances, and foster quality and depth in a psychotherapy session, with U.S. clients. In the next chapter, these ideas are formalized into the hypotheses and research questions that underlie this study.
Chapter 3: Statement of the Problem

Cross-cultural scholars have raised the question of “[what] happens to individuals who have developed in one cultural context, when they attempt to live in a new cultural context?” (Berry, 1997, p. 6). In the present study we raised a similar question. What happens to international student therapists—to their ability to engage in therapy work with U.S. clients—when they attempt to live in a new cultural context?

As we saw in the previous chapter, international student therapists, like international students in other fields, have reported difficulties related to adjusting to mainstream U.S. culture, such as language barriers and difficulties adapting to social interactions in the U.S. (among others). Such difficulties have been negatively related to, for example, international student therapists’ self-confidence (Chen, 2004), and to their relationships with supervisors (Nilsson & Anderson, 2004), faculty, and peers (Chen, 2004; Knox et al., 2013; Ng & Smith, 2009). Counselor educators have reported that international student therapists have more difficulties across many areas of clinical training than their domestic counterparts due to their international status (Ng, 2006). And some authors (e.g., Lee, 2013) have argued that such cultural adjustment difficulties could discourage international student therapists from fully participating in their training and interfere with their understanding of models of client change and treatment.

Questions remain as to whether acculturation phenomena go beyond affecting the clinical training of international student therapists and also affect therapy process and outcome. The literatures on therapist effects would suggest that therapist characteristics, including cultural factors and therapists’ burdens or stressors, do in fact relate to psychotherapy process and outcome (Beutler et al., 2004; Nissen-Lie, Havik, Høglend,
Monsen, and Rønnestad, 2013). The lion’s share of this scholarship, however, omits examination of acculturation variables, which are very relevant to the experiences of international student therapists.

How then may acculturation enter the psychotherapy room? Acculturative stress and cultural distance predict outcomes in many areas of international students’ daily life, such as academic and interpersonal functioning (e.g., Smith & Khawaja, 2011; Suanet & Van de Vijver, 2009). We can thus theorize that they could similarly affect how international student therapists function as therapists. If there is spillover of acculturative stress and cultural distance on the therapy work of international student therapists (similar to what has been observed in other areas of international students’ lives and international student therapists’ clinical training), then these variables may be negatively related—as main effects and in interaction—to important process variables, such as the real relationship, the working alliance, and session quality. And given the well-established links among these psychotherapy constructs, it seemed fruitful to consider, as well, whether the real relationship and the working alliance mediate and/or moderate the possible relations of acculturative stress and cultural distance to session quality.

In the current chapter, the ideas presented above are formalized into the hypotheses and research questions that drive the present study.

**Acculturative Stress, Cultural Distance, and the Therapeutic Relationship**

Many psychotherapists view the real or personal relationship between therapists and their clients as a central element of the therapeutic relationship. This element refers to the personal connection that forms between two or more people that is marked by the presence of genuineness (the extent to which each person is authentic or non-phony) and
realism (mutual perceptions that are realistic or accurate) (Gelso, 2011; 2014). Anything that interferes with one’s ability to be who one truly is and to perceive another accurately thus likely weakens the real relationship.

Acculturative stress may be such a factor that weakens the real relationship. International student therapists who experience higher acculturative stress may experience greater cognitive load too (Sweller, Ayres, & Kalyuga, 2011), which could then detract from their ability to be genuine and perceive their U.S. clients realistically. This idea is consistent with evidence that perceiving stereotype threat and discrimination (common sources of acculturative stress) increase cognitive load and impair attention, self-control, and information processing (Schmader, Johns, & Forbes, 2008; Pascoe & Smart Richman, 2009). Language barriers, also a common source of acculturative stress, may likewise interfere with cognitive and emotional processing (Altarriba & Heredia, 2008). Overall, then, acculturative stress could make international student therapists susceptible to certain internal reactions that detract from their engagement in a personal relationship with U.S. clients. Hence, the following hypothesis was offered:

**Hypothesis 1a:** *Acculturative stress will be negatively related to international student therapist-rated real relationship.*

Acculturative stress may relate similarly to the working alliance, the collaborative aspect of the relationship wherein therapists and clients form a working bond, and agree on the goals and tasks of treatment (Bordin, 1979). The extent to which international student therapists can form a working bond with U.S. clients may partly depend on acculturative stress. For instance, acculturative stress has been linked to interpersonal functioning and engagement in the host society (Smith & Khawaja, 2011; Redmond,
Acculturative stress thus may predict how much international student therapists respect, appreciate, and engage with their U.S. clients—features of the bond that contribute to the creation and maintenance of the alliance, and which may also promote agreement on the goals and tasks of therapy (Gelso, 2014). Given that acculturative stress could make international student therapists prone to anxiety and other performance-reducing reactions (Schmader, Johns, & Forbes, 2008; Pascoe & Smart Richman, 2009), it is also possible that it could interfere with their ability to attend to their U.S. clients’ goals, and the tasks they could work on together to reach them. Hence, the following hypothesis was offered:

**Hypothesis 1b:** Acculturative stress will be negatively related to international student therapist-rated working alliance.

With regard to the link between cultural distance and the real relationship, international student therapists who perceive a higher degree of dissimilarity between their native cultures and that of the U.S. may expect a similar gulf to exist between them and their U.S. clients. Thus, these student therapists may have a mental template for how to interact with others that does not befit their interactions with U.S. clients, thus lowering realism in the real relationship. They may also hold back in their interactions with U.S. clients for fear of saying something that may be seen as culturally wrong or as making a cultural *faux pas*, which would decrease genuineness. These propositions accord with research showing that cultural distance is negatively related to the attitudes that international and domestic people hold about each other and their social interactions (van Osch & Breugelmans, 2012), as well as acculturating people’s relationships and
engagement in the host society (Redmond, 2000; Suanet & van de Vijver, 2009). Hence, the following hypothesis was offered:

**Hypothesis 2a:** Perceived cultural distance will be negatively related to international student therapist-rated real relationship.

Cultural distance may also relate negatively to the working alliance. As we saw before, international students who see U.S. culture as highly dissimilar to their native cultures may struggle to communicate and keep relationships with people from the U.S. (Redmond, 2000). International student therapists may experience similar difficulties communicating with and relating to U.S. clients, which would weaken their working bond. Cultural distance is also said to affect how one predicts and explains a host person’s behavior (Gudykunst and Hammer, 1988). That might mean that cultural distance could affect how international student therapists understand the behavior of their U.S. clients, which could then affect how well they can reach agreement on the goals and tasks of the therapy. This notion may relate to Lee’s (2013) proposition that international student therapists could feel conflicted if there are great differences between their cultural beliefs and more Western-based notions of client development, change, and treatment. Overall, the lens of international student therapists may be tinted with cultural distance, which could affect how well they relate to (Bond) and can reach agreement with U.S. clients on how they can change (Goals), and what can be done collaboratively in therapy to facilitate that change (Tasks). Hence, the following hypothesis was offered:

**Hypothesis 2b:** Perceived cultural distance will be negatively related to international student therapist-rated working alliance.
We have considered how international student therapists’ acculturative stress may interfere with the therapy process by, for example, affecting the quality of the real relationships and working alliances with U.S. clients. We have also considered how cultural distance could interfere with forming sound personal and working relationships with U.S. clients, given its role in acculturating people’s understanding of and ability to interact with members of host societies. Let us now turn to how these acculturation variables may relate to session outcome, an important aspect of psychotherapy process that is linked to overall treatment success (Boswell, Castonguay, & Wasserman, 2010; Lingiardi, Colli, Gentile, & Tanzilli, 2011).

The present study was focused on two aspects of session outcome: quality and depth. As reviewed before, session quality is a broader concept that can be assessed with measures that capture the extent to which a session is helpful, satisfying, valuable, and effective (e.g., Session Evaluation Scale; Hill & Kellems, 2002). Session depth, in turn, is a more specific aspect of session quality that indicates whether sessions are experienced as powerful/weak, valuable/worthless, deep/shallow, full/empty, and special/ordinary (Stiles & Snow, 1984). If acculturative stress and cultural distance indeed hinder the ability of international student therapists to engage in therapy work with U.S. clients, then they might predict less helpful, satisfying, valuable, effective, and deep sessions. Hence, the following hypotheses were offered:

**Hypotheses 3a**: Acculturative stress will be negatively related to international student therapist-rated session quality.
Hypothesis 3b: Acculturative stress will be negatively related to international student therapist-rated session depth.

Hypothesis 4a: Perceived cultural distance will be negatively related to international student therapist-rated session quality.

Hypothesis 4b: Perceived cultural distance will be negatively related to international student therapist-rated session depth.

Acculturative Stress X Cultural Distance Interaction

As we saw in chapter 2, perceived cultural distance can moderate the experience of acculturative stress (e.g., Demes & Geeraert, 2012). Thus, it was expected that as international student therapists perceive greater cultural distance, the negative relationship between their acculturative stress and their ratings of the real relationship, working alliance, and session quality and depth would strengthen. This type of effect is considered an enhancing interaction, in which both a predictor and a moderator relate to outcomes in the same direction and have a stronger than additive effect when considered together (Frazier, Tix, & Baron, 2004). Hence, the following hypotheses were put forth:

Hypothesis 5a: There will be a significant interaction between international student therapist acculturative stress and perceived cultural distance (Acculturative Stress X Perceived Cultural Distance) on the real relationship, such that acculturative stress will be more strongly negatively related to international student therapist-rated real relationship for participants who perceive greater cultural distance.

Hypothesis 5b: There will be a significant interaction between international student therapist acculturative stress and perceived cultural distance (Acculturative Stress X Perceived Cultural Distance) on the working alliance, such that acculturative stress will
be more strongly negatively related to international student therapist-rated working alliance for participants who perceive greater cultural distance.

**Hypothesis 6a:** There will be a significant interaction between international student therapist acculturative stress and perceived cultural distance (Acculturative Stress X Perceived Cultural Distance) on ratings of session quality, such that acculturative stress will be more strongly negatively associated with session quality for those who perceive greater cultural distance.

**Hypothesis 6b:** There will be a significant interaction between international student therapist acculturative stress and perceived cultural distance (Acculturative Stress X Perceived Cultural Distance) on ratings of session depth, such that acculturative stress will be more strongly negatively related to session depth for those who perceive greater cultural distance (i.e., Acculturative Stress X Perceived Cultural Distance).

**Alternate Models of the Relations Between Acculturation and Psychotherapy Variables**

The real relationship and the working alliance have each been found to contribute to successful session and overall treatment outcomes in psychotherapy (e.g., Gelso, 2014; Horvath, Del Re, Flückiger, & Symonds, 2011). Such findings are largely consistent with a body of literature suggesting that treatment success depends largely on the therapeutic relationship (e.g., Norcross & Lambert, 2011; Wampold, 2010). We can thus wonder whether the expected negative relations of acculturative stress and cultural distance to session outcome (see Hypotheses 3 and 4) may depend on the real relationship and/or working alliance. For example, the real relationship and the working alliance might serve as mediators, that is, the internal mechanisms by which acculturative stress and cultural distance affect session outcomes. At the same time, as moderators, the real relationship
and the alliance could interact with acculturative stress and cultural distance in such a way to alter (i.e., intensify or attenuate) their impact on session quality and depth. Let us consider each of these possibilities separately.

One possibility is that the relations of acculturative stress and cultural distance to session outcomes are at least partially mediated by the real relationship and/or working alliance. For example, although international student therapists’ sense of alienation from U.S. people and culture may contribute to their experience of a session as lacking depth or quality, it may contribute even more to how close or alienated they feel toward the client, which might translate to stronger associations to the real relationship and/or alliance. In this way, acculturative stress and cultural distance might affect the real relationship and/or working alliance (the mediators) such that their strength decreases, which would further affect session quality and depth (the outcome variables). Student therapists who experience more acculturative stress and who perceive more cultural distance may thus perceive the quality and depth of a session with a U.S. client to be low in part because their real relationship and/or working alliance are weaker. So once the relations of acculturative stress and cultural distance to the real relationship and/or the working alliance are each accounted for, the relations of the acculturation variables to session outcomes may be weaker, suggesting partial mediation.

An alternate possibility is that the real relationship and/or working alliance buffer the potentially deleterious effects of acculturative stress and cultural distance on the treatment. That is, the links between acculturative stress and perceived cultural distance each to session outcomes may be moderated by the strength of one or both relational variables. As argued above, it may be that acculturative stress and perceived cultural
distance interferes with international student therapists’ ability to engage in therapeutic work, but perhaps they are most harmful to the outcome of a session among international student therapists who report weaker real relationships and/or working alliances with U.S. clients. In turn, for international student therapists who report stronger real relationships and/or working alliances with U.S. clients, acculturative stress and cultural distance may be unrelated or minimally related with session outcomes. In this way, the strength of the real relationship and/or working alliance would modify the magnitude, but not necessarily the direction, of the link between the acculturation variables and session outcomes.

The current literature does not offer enough information to evaluate which of these possibilities (mediation or moderation) is more likely to be supported by the present study’s data, or whether such complex relations exist. Hence, in keeping with the exploratory nature of the study, the following research questions were offered.

First, the questions regarding mediation:

**Research question 1a:** Are the associations between acculturative stress and session outcomes mediated by international student therapist-rated real relationship?

**Research question 1b:** Are the associations between perceived cultural distance and session outcomes mediated by international student therapist-rated real relationship?

**Research question 1c:** Are the associations between acculturative stress and session outcomes mediated by international student therapist-rated working alliance?

**Research question 1d:** Are the associations between acculturative stress and session outcomes mediated by international student therapist-rated working alliance?

Below are now the questions regarding moderation:
**Research question 2a:** Are the associations between acculturative stress and session outcomes moderated by international student therapist-rated real relationship?

**Research question 2b:** Are the associations between perceived cultural distance and session outcomes moderated by international student therapist-rated real relationship?

**Research question 2c:** Are the associations between acculturative stress and session outcomes moderated by international student therapist-rated working alliance?

**Research question 2d:** Are the associations between perceived cultural distance and session outcomes moderated by international student therapist-rated working alliance?
Chapter 4: Method

Power Considerations

A couple of sources were consulted in an effort to estimate the sample size necessary to detect the indirect and moderation effects of interest in the present study. Fritz and MacKinnon (2007) estimated that sample sizes ranging from 462 to 71 would serve to detect a small to medium indirect effect and achieve power of .80 using a bias-corrected bootstrap test of mediation. To estimate the sample size necessary for the moderation analyses, an a priori power analysis was conducted using G*Power 3.1.7 (Faul, Erdfelder, Lang, & Buchner, 2007). A sample size of 395, 55, and 26 was needed to detect a small ($f^2 = .02$), medium ($f^2 = .15$), and large ($f^2 = .35$) effect size, respectively. Given these consideration, it was determined that a sample size between 123 and 138 would detect an indirect effect and a three-way interaction effect with small to medium effect sizes and power of .80.

Participants

Participants were international students enrolled in counseling psychology and related programs (clinical psychology, counselor education and supervision, and combined professional scientific programs) in the U.S. The final sample consisted of 123 participants with complete data, and 15 participants with partial data. Participants consisted of 80% women ($n = 99$), 18% men ($n = 23$), and one transgender person. Ages ranged from 22 to 57 years ($M = 30.5$, $SD = 5.56$). In terms of immigration status, 73% of participants ($n = 90$) had an F-1 student visa, 18% ($n = 18$) were permanent residents, 6% ($n = 7$) were naturalized citizens, 5% ($n = 6$) had some other visa (J-1, H-4, or P-1), and
two were dual citizens of the U.S. and another country. The length of residence in the U.S. ranged from 1 to 30 years, with a mean of 7.33 years ($SD = 5.21$).

Participants identified their race as Asian/Pacific Islander ($n = 63, 51\%$), Caucasian/European/White ($n = 34, 28\%$), Hispanic/Latino ($n = 8, 7\%$), Arab ($n = 6, 5\%$), African/Black ($n = 6, 5\%$), and Multiracial ($n = 4, 3\%$). One participant identified as Turkish, and one as Brazilian. The predominant countries of origin were China/Hong Kong ($n = 16$) and South Korea ($n = 15$), followed by India ($n = 9$), Canada ($n = 8$), Taiwan ($n = 8$), Japan ($n = 6$), France ($n = 4$), Ghana ($n = 3$), Iceland ($n = 3$), Lebanon ($n = 3$), Malaysia ($n = 3$), Mexico ($n = 3$), Turkey ($n = 3$), Brazil ($n = 2$), Germany ($n = 2$), Italy ($n = 2$), Russia ($n = 2$), Singapore ($n = 2$), and Sweden ($n = 2$). One participant each reported being from Albania, Argentina, Austria, Bulgaria, Cayman Islands, Chile, Czech Republic, England, Georgia, Hungary, Iraq, Israel, Jamaica, Kuwait, Malta, Nepal, Netherlands, Paraguay, Peru, Romania, Saint Kitts and Nevis, United Kingdom, and Venezuela. One participant reported both Poland and the United Arab Emirates and his/her countries of origin. Three participants did not indicate a country of origin.

Chinese or a Chinese dialect (Mandarin or Cantonese) was the most frequent native language ($n = 27$), followed by Korean ($n = 15$), English ($n = 14$), Spanish ($n = 7$), Japanese ($n = 6$), French ($n = 5$), Arabic ($n = 4$), Fanti ($n = 3$), German ($n = 3$), Icelandic ($n = 3$), Russian ($n = 3$), Turkish ($n = 3$), Hindi ($n = 2$), Marathi ($n = 2$), Portuguese ($n = 2$), and Swedish ($n = 2$). One participant each reported the following languages as their native language: Albanian, Bulgarian, Czech, Limburgish, Nepalese, Romanian, and Tamil. Six participants reported learning two or more languages simultaneously growing up. Three participants did not indicate a native language. In total, about 83\% of
Participants reported a language other than English as their native tongue. Participants rated their proficiency in reading and writing, their speaking fluency, and their listening ability in English using a 7-point scale (1 = very poor and 7 = native-like). The following mean ratings emerged: reading proficiency 6.33 (SD = .70; range = 4-7), writing proficiency 5.94 (SD = .96; range = 4-7), speaking fluency 6.05 (SD = .95; range = 2-7), and listening ability 6.20 (SD = .79; range = 3-7). Overall English proficiency (the sum of English proficiency on listening, speaking, reading, writing; see more details below) was 6.13 (SD = .76).

Most of the sample (n = 96, 78%) consisted of students enrolled in various doctoral programs: counseling psychology (n = 46), clinical psychology (n = 22), counselor education and supervision (n = 11), Psy.D. in clinical psychology (n = 5), and combined professional scientific programs (n = 2). Ten doctoral students (seven Psy.D., three Ph.D.) did not specify type of program. Doctoral-level participants’ years in their program were: first year (n = 13), second year (n = 11), third year (n = 20), fourth year (n = 19), fifth year (n = 10), and internship (n = 15). Five participants were beyond their fifth year and pre-internship, and two had recently completed internship. Twenty-seven participants (27%) were master’s students from various programs: counseling (n = 11), clinical mental health counseling (n = 6), counseling psychology (n = 5), addiction/rehabilitation counseling (n = 2), career counseling (n = 1), forensic mental health counseling (n = 1), and clinical social work (n = 1). Most (n = 16) indicated being in their second year, six reported being in their first year, and five reported being in their third year.
Participants indicated the extent to which four major theoretical orientation clusters were representative of their psychotherapy work in general on a five-point scale (5 = strongly representative, 1 = not at all). The following mean ratings emerged:
humanistic/experiential = 4.01 (SD= 1.07), psychodynamic/psychoanalytic = 3.27 (SD = 1.44), cognitive/behavioral= 3.60 (SD=1.22), and multicultural/feminist = 3.56 (SD = 1.24). Forty-nine participants indicated other theoretical orientations (Interpersonal, Family Systems, Solution Focused, ACT, and mindfulness approaches); the mean rating for this item was 3.65 (SD = 1.17). Participants also indicated the extent to which the abovementioned orientation clusters were representative of their work with the U.S.-born client they had in mind when participating in the study. The following mean ratings emerged: humanistic/experiential = 3.98 (SD= 1.17), psychodynamic/psychoanalytic = 3.07 (SD = 1.53), cognitive/behavioral= 3.48 (SD = 1.39), multicultural/feminist = 3.08 (SD = 1.45). Forty-three participants indicated using other theoretical orientations with their client (Family Systems, Interpersonal, Solution Focused, and mindfulness approaches); the mean rating for this item was 3.28 (SD = 1.50).

Participants were asked to report, to the best of their knowledge, the race/ethnicity of the U.S.-born client they had in mind when they responded to the study questions. Sixty-eight percent of participants indicated that their client was European American/White; 11% African American/Black; 7% Asian/Asian American/Pacific Islander; 7% Hispanic/Latino; 4% multiracial; and one participant reported that his or her client was Arab. Three participants did not specify the race of their client. Participants also reported seeing their selected client for a median number of 10 sessions (median
absolute deviation = 4; range = 5-200) and a mean of 17.6 sessions (SD = 24.23). The modal number of sessions was eight.

Measures

Demographics. The demographics questionnaire can be found in Appendix A. Participants were asked to report their age, gender, ethnicity, national origin, length of residence in the U.S, and residency/visa status. They were also asked to report the type of training program in which they were enrolled, their year in the program, and their belief in and adherence to four major theoretical orientation clusters on a 5-point scale (1 = low and 5 = high), both in general and in the approach they used with the client they had in mind as they participated in the study. They were also asked to report, to the best of their knowledge, the race/ethnicity of their client, and to estimate the number of sessions they had with this client.

In addition to being asked which language(s) other than English they speak, participants were asked to report their proficiency in English in terms of writing, listening, reading, and speaking. Theoretically, these four aspects of language proficiency can be combined to obtain an overall language proficiency score (Altarriba & Heredia, 2008). Items tapping into these four aspects of language were summed to create an overall English proficiency index. In a principal axis factor analysis (varimax rotation) of the four proficiency items, the KMO index was satisfactory (.78) and the Bartlett chi-square ($df = 6, 359.03$) was significant at $p < .001$. There was also only one eigenvalue $> 1$ and a scree plot suggested a single factor accounting for about 72% of the variance. The internal consistency alpha of this overall English proficiency index was .90; removing any of the four proficiency items resulted in a lower alpha. These results suggested an
underlying single factor of overall English proficiency, and supported summing the four items to create an overall index.

**Acculturative stress.** The Acculturative Stress Scale for International Students (ASSIS) Sandhu & Asrabadi, 1994) was used to assess international student therapists’ level of acculturative stress. The ASSIS measures several manifestations of acculturative stress that have been found to contribute to international students’ cross-cultural adjustment difficulties. These manifestations include: perceived discrimination, homesickness, perceived hate and rejection, fear, culture shock, stress due to change, guilt related to being away from home, and miscellaneous other factors. The ASSIS is comprised of 36 items rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Total scores can range from 36 to 180, with higher scores indicating higher levels of acculturative stress. Validity of ASSIS scores is supported by positive associations with depressive symptoms (Constantine, Okazaki, & Utsey, 2004), and negative associations with social connectedness (Yeh & Inose, 2003) and overall life satisfaction (Yeh, 2005) among international students. The coefficient alpha of the scale has been estimated to be in the .92 and .94 among international students (Constantine et al., 2004; Yeh & Inose, 2003). The internal consistency coefficient alpha of the ASSIS for the present study was .92. The ASSIS can be found in Appendix B.

**Perceived cultural distance.** The Brief Perceived Cultural Distance Scale (BPCDS; Demes & Geeraert, 2014) was used to assess perceptions of cultural distance. The BPCDS consists of 12 items rated on a 7-point scale (1 = very similar, 7 = very different), which are used to indicate how different or similar one perceives one’s country of origin and the U.S. to be in terms of climate, natural environment, social environment,
living (e.g., safety), practicalities (e.g., public transportation), food and eating, family life, social norms, values and beliefs, people, friends, and language. Demes and Geeraert (2014) developed BPCDS items by examining prior measures of cultural distance and conducting interviews with 23 people from 12 different countries who had either relocated abroad in the past or were currently living abroad. In line with prior literature, and supporting the BPCDS concurrent validity, Demes and Geeraert found BPCDS scores were negatively related to general wellbeing, sociocultural adaptation, and psychological adaptation among international students and international staff at the University of Essex in the UK. Internal consistency alphas ranged from .79 and .87 in samples of international students, migrants, and native English and foreign language speakers. For the present study, the internal consistency alpha was .86. The BPCDS can be found in Appendix C.

Real relationship. The Real Relationship Inventory-Therapist Form (RRI-T; Gelso et al., 2005) was used in the present study to assess the strength of the real relationship. The RRI-T consists of 24 items that are rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The inventory is divided into two 12-item subscales: Genuineness and Realism. Each item assesses the therapists’ ratings of self, client, and their relationship in terms of how much (magnitude) genuineness and realism exists, as well as how positive or negative (valence) are the therapists’ perceptions of genuineness and realism. Higher scores indicate stronger real relationships in terms of realism and genuineness. Coefficient alphas of the RRI-T have been found to range from about .80 to .94 in various studies (Bhatia & Gelso, 2013; Fuertes et al., 2006; Gelso et al., 2005; Gelso et al., 2012; Marmarsoh et al., 2009). Convergent and
discriminant validity is supported by studies that have found RRI-T scores to relate in theoretically consistent ways to therapist ratings of working alliance, session outcome, negative transference, client insight, therapist and client attachment patterns, and social desirability (Bhatia & Gelso, 2013; Fuertes et al., 2007; Gelso et al., 2005; Marmarosh et al., 2009). The internal consistency coefficient alpha of the RRI-T for the present study was .87. The RRI-T can be found in Appendix D.

**Working alliance.** The Working Alliance Inventory—Short Form (WAIS-S; Tracey and Kokotovic, 1989) was used to assess the working alliance. The WAIS-S is an abbreviated 12-item version of the original 36-item Working Alliance Inventory (WAI; Horvath & Greenberg, 1986, 1989). Following Bordin’s (1979) conceptualization of the working alliance, both measures assess the extent to which therapists perceive agreement with clients on the goals and tasks of therapy, and the strength of their relational bond. Items are rated on a 7-point scale ranging from 1 (*never*) to 7 (*always*). Tracey and Kokotovic (1989) developed the WAIS-S by selecting 4 items from each WAI subscale with the highest factor loadings on the respective factors. Analyses showed that the factor structure of the abbreviated scale was similar to the full-scale WAI, supporting the WAIS-S’s initial validity. The WAIS-S has also been found to relate as expected to therapy outcome ratings (Kivlighan & Shaughnessy, 1995; Weerasekera, Linder, Greenberg, Watson, 2001) and client termination from therapy (Samstag, Batchelder, Muran, & Winston, 1998; Tryon & Kane, 1995). Busseri and Tyler (2003) offered support for the interchangeability of the WAIS-S and the full-scale WAI for both client and therapist versions of these scales. Coefficient alphas for the WAIS-S were originally found to range from .83 to .98 (Tracey & Kokotovic, 1989); more recent studies place the measure’s
reliability in a similarly good to excellent range (Busseri & Tyler, 2003). The internal consistency coefficient alpha of the WAI-S in the present study was .90. The WAI-S can be found in Appendix E.

**Session outcomes.** Two related but distinct outcomes of a psychotherapy session were used in the present study: session quality and session depth. To assess session quality, the Session Evaluation Scale (SES; Hill & Kellems, 2002) was used in the present study. The SES is a subscale of Hill and Kellems’ (2002) Helping Skills Measure, and has four items rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree). SES items ask participants to rate the extent to which they think their client was glad they attended their most recent session, was satisfied with the outcome of the session, and thought the session was helpful and valuable. The SES has been found to relate as expected with client ratings of session impact, including session depth, understanding, problem solving, and quality of the counselor-client relationship. Lent et al. (2006) modified the wording of the SES items to obtain therapists’ perceptions of a counseling session, and added an item to the SES to assess overall session effectiveness on a 5-point scale (1 = not effective, 5 = highly effective). This item correlated strongly with the original SES items and increased the measures’ variance. The coefficient alpha of the modified 5-item SES has been found to range from .75 to .87 depending on the sample and the number of sessions (Bhatia & Gelso, 2013; Lent et al., 2006). For the present study, the coefficient alpha of the SES was .87. The SES can be found in Appendix E.

To assess session depth, the Depth subscale of the Session Evaluation Questionnaire (SEQ-D; Stiles & Snow, 1984) was used. The SEQ is comprised of 24 bipolar adjective pairs that are rated on a 7-point semantic differential scale. Higher
scores on the SEQ-D indicate greater therapist perceptions of sessions as deep, powerful, valuable, full, and special. Ratings of session depth have been widely used in the literature, and the validity of the SEQ-D is supported by its relation to several counseling process and outcome ratings (Stiles et al., 1990), including various components of the therapeutic relationship (Bhatia & Gelso, 2013; Gelso et al., 2005). The coefficient alphas of the SEQ-D have been found to be in the .82 to .91 range (Bhatia & Gelso, 2013; Gelso et al., 2005; Stiles & Snow, 1984). For the present study, the coefficient alpha of the SEQ-D was .90. The SEQ-D can be found in Appendix E.

Bhatia and Gelso (2013) recently used the SES and the SEQ-D to assess session outcome, and found that scores from these measures were moderately correlated ($r = .41$). In the present study, the correlation was similarly moderate ($r = .43$). These findings suggest there is meaningful overlap in the measurement of session outcome. Theoretically this makes sense, given that session depth is a more specific dimension of session quality, and the SES captures this broader conception. For that reason, it was decided that scores from these two measures would be treated as distinct yet overlapping conceptions of session quality. Moreover, as explained above, the SES purports to capture therapists’ perceptions of their clients’ perceptions of the session, whereas the SEQ-D captures more directly therapists’ own perceptions of the session. Treating SES and SEQ-D scores thus also allowed the client perspective to be assessed—albeit imperfectly—via its influence on the therapist. Both measures of session quality can be found in Appendix F.
Procedures

Two approaches were pursued to recruit international students enrolled in counseling psychology and related clinical and mental health training programs in the U.S. First, the training directors of all APA-accredited counseling, clinical, and combined professional-scientific psychology doctoral programs in the U.S., as well as the directors of all full-time CACREP-accredited programs (excluding online-only programs) were contacted. These training directors were asked to forward a recruitment letter to students enrolled in their programs. Second, participants were recruited from relevant online listservs and professional organizations. All recruitment efforts took place between late March and early June of 2014. The two recruitment approaches are described in greater detail below.

The first approach involved creating contact lists of training directors of APA-accredited counseling, clinical, and combined professional-scientific psychology programs in the U.S. (www.apa.org/ed/accreditation/programs/), and training director of full-time CACREP-accredited programs (www.cacrep.org/directory/). Nine APA-accredited programs and six CACREP-accredited programs did not list contact information of training directors on their website, and declined to provide this information when contacted via email or phone. These 15 training directors were thus not included in the contact lists.

Emails were then sent to the training directors on the contact lists, which addressed them by name and were signed by my research advisor (Charles J. Gelso) and me (Andrés Pérez Rojas). (For sample emails to training directors, see Appendix G.) In the email, directors were asked to forward to their student listservs a letter inviting
international student therapists to participate in the present study. In addition, they were asked to (a) say whether they passed along the recruitment letter and (b) provide an estimate of the number of international student therapists enrolled in their program. A week after the initial email, a follow-up reminder was sent to training directors who had not yet responded. A week after sending this reminder, a second and final follow-up reminder to directors who did not respond to either of the previous emails was sent. Thus, three emails were sent in total: an initial email followed by two reminder emails.

In total, training directors of 69 counseling psychology doctoral programs, 220 clinical psychology doctoral programs, and six combined professional-scientific doctoral programs were contacted, for a total of 295 training directors of APA-accredited programs. Sixty training directors confirmed that they sent the recruitment letter to their students, 48 declined to forward the letter (either because their program policy forbid them from doing so or because they did not currently have any international students), and the rest did not respond to the initial email or the follow-up reminders. Of the 60 training directors who confirmed sending the recruitment letter, 48 provided an estimate of the number of international students enrolled in their programs. According to these directors, approximately 185 international students ($M = 3.85, SD = 3.49$) were enrolled in their programs at the time of recruitment.

In terms of CACREP-accredited programs, training directors of 242 programs were contacted. Thirty-five training directors confirmed that they sent the recruitment letter to their students, 50 declined to forward the letter, and the rest did not respond to the initial email or the follow-up reminders. Of the 35 training directors who confirmed sending the recruitment letter, 20 provided an estimate of the number of international
students enrolled in their programs. According to these directors, approximately 78 international students ($M = 3.90$, $SD = 2.90$) were enrolled in their programs at the time of recruitment.

The second recruitment approach consisted of posting an invitation to participate in the present study on three online listservs that cater to the needs and interests of international student therapists in counseling psychology and related training programs: APA Division 17 (Society of Counseling Psychology) International Section, the American Counseling Association International Interest Network, and Counseling Graduate Students (COUNSGRADS). Permission was obtained from the directors and moderators of these networks to email the study recruitment letter to their listservs. A total of three recruitment emails were posted on these listservs: an initial recruitment announcement, one follow-up reminder a week after the initial announcement, and a final follow-up a week after the first reminder. Unfortunately, none of the directors and moderators of these listservs had information on how many of their members identified as international graduate students.

The recruitment letter that all potential participants saw (irrespective of recruitment method) included a description of the present study, the eligibility criteria, and a link to access the study online. (See Appendix G for samples of this letter.) The letter specified that the aim of the present study was to explore some of the experiences of international counseling/clinical student therapists in providing therapy in the U.S. The paucity of work in this area was emphasized, and participation was framed as important to our efforts to broaden our understanding of international student therapists’ needs and experiences conducting therapy in the U.S. The eligibility criteria specified that student
therapists needed to identify as international students and that they needed to be seeing or have recently seen (within last two weeks) a U.S.-born client over 18 years of age whom they treated for at least five sessions. Participants were also informed that they could enter a raffle for one of five $25 gift cards to Amazon.com as a token of appreciation for participating in the study.

Student therapists who decided to participate in the study were able to follow the online link, at which point they were asked to fill out a consent form and to complete the study measures. Participants were instructed to think of the last adult U.S.-born client they saw prior to participating in the study, and with whom they had had at least five therapy sessions. They were asked to indicate to the best of their knowledge the race/ethnicity of their selected client, as well as the number of sessions they had had with this client. Participants were informed that they would need to keep this client in mind as they answered the psychotherapy measures (real relationship, working alliance, session quality, and session depth). After completing the psychotherapy measures, which were counterbalanced to minimize order effects, participants were presented with the measures of acculturative stress and cultural distance. Following these cultural measures, which were also counterbalanced to minimize order effects, participants completed the demographics questionnaire. At the culmination of the study, participants were given a summary of the aims of the study, and were asked to indicate whether they wished to receive a summary of the results and to enter into the gift cards raffle.

One hundred and seventy people began the study online. Of these, 21 indicated their agreement to participate in the study via the informed consent page but subsequently did not complete any of the study measures, four did not meet participation criteria, and
data from three individuals showed evidence of random responding. These 37 participants were therefore excluded from the final sample.
Chapter 5: Results

Preliminary Analyses

Missing Data

Following Schlomer, Bauman, and Card’s (2010) recommendations, reported here are the amount, type, and pattern of missing data in the present study. Approximately 3.8% of the data (apart from demographic variables) was missing, and results of Little’s (1988) test indicated that these data were missing completely at random, $\chi^2(368) = 335.86$, $p < .88$. Most missing data were from measures that came at the end of the online survey, which most affected those of acculturative stress and cultural distance. To further assess the pattern of missing data for these measures, a dummy variable with two values (missing and nonmissing) was created to test the relation between this missing-data indicator and the other main variables. Independent sample $t$ tests suggested that the missing-data indicator did not relate to any of the other variables of interest in the present study. It thus seemed that (1) the dataset did not have a great deal of missing data, (2) data were missing completely at random, and (3) missing data was most likely due to the ordering of the measures in the survey. Hence, missing data was handled by complete case analysis (i.e., listwise deletion), in which only cases without missing data were retained for analysis.

Outlier Analyses, Covariate Analyses, and Descriptive Statistics

The data were first inspected for the presence of univariate outliers. Two variables contained values that could be considered outliers: length of residence in the U.S. ($n = 2$) and number of sessions ($n = 3$). All analyses reported below were conducted with and
without data from the cases that contained these outliers. The same pattern of results emerged regardless of whether those cases were included. Thus, reported results reflect analyses that retained these outlying values.

The data were then examined to see whether the main study variables (real relationship, working alliance, session quality, session depth, acculturative stress, and cultural distance) varied according to demographic variables. Results of multivariate and correlational analyses showed that participants’ race/ethnicity, age, sex, immigration status, length of residence in the U.S., the type of training program in which participants were enrolled, and the year in their training program were not significantly related to any of the psychotherapy variables. There were also no significant differences on the main therapy variables according to client race, and no significant relationships between the main therapy variables and participants’ theoretical orientation (general and the one used with the selected U.S.-born client) or number of sessions.

Similar non-significant results emerged when assessing the relations of the demographic variables to acculturative stress and perceived cultural distance. However, analyses of variance revealed significant differences in participant race/ethnicity on acculturative stress, $F(6, 116) = 3.94, p = .001$, and perceived cultural distance, $F(6, 116) = 3.82, p = .002$. Tukey post-hoc tests showed statistically significant differences between Asian/Pacific islander (hereafter “Asian”) and Caucasian/European/White (hereafter “White”) participants. Asian international student therapists had higher levels of acculturative stress ($M = 2.70, SD = .51$) and perceived more cultural distance ($M = 5.41, SD = .94$) than their White counterparts ($M = 2.17, SD = .53$ for acculturative stress, $M = 4.47, SD = 1.30$ for perceived cultural distance).
Although potential racial/ethnic differences among international therapists-in-training are worthy of further scrutiny, they were not a major focus of the present study. Furthermore, the small sample size relative to the great diversity in terms of nationality within each racial category (e.g., the Asian/Pacific Islander category included a handful of people from Canada, China, South Korea, Japan, India, Malaysia, Nepal, Singapore, and Taiwan) limits the number and kinds of analyses that could be done to establish trends associated with students from different national and cultural backgrounds. Collapsing people from various backgrounds into a single racial/ethnic category would also make interpretation of results difficult, and would obviate important within-culture or within-regional differences. Nonetheless, given that race/ethnicity differences were found, dummy-coded variables for race/ethnicity (Asian/Pacific Islander vs. non-Asian/Pacific Islander, and White vs. non-White) were used in all initial analyses involving predictor variables. This race/ethnicity variable did not emerge as significant when included in the first step of the regressions, and was not included in final analyses.

Finally, acculturative stress correlated significantly with a multicultural/feminist theoretical orientation, both in general ($r = .22$, $p = .008$) and in the approach that student therapists used with the client they had in mind as they participated ($r = .19$, $p = .021$).

Table 1 displays the means, standard deviations, and intercorrelations of the main study variables. The skewness and kurtosis of these variables were close to zero, suggesting a relatively normal distribution across all variables.

**Main Analyses**

Prior to conducting the main analyses, Type I and Type II error factors were considered. On the one hand, the small sample size relative to the overall number of
Table 1

*Correlations, Means, and Standard Deviations among Study Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acculturative Stress</td>
<td>2.49</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cultural Distance</td>
<td>5.04</td>
<td>1.15</td>
<td>.44*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Real Relationship</td>
<td>3.90</td>
<td>.39</td>
<td>.05</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Working Alliance</td>
<td>5.44</td>
<td>.68</td>
<td>.06</td>
<td>.05</td>
<td>.67**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Session Quality</td>
<td>4.24</td>
<td>.66</td>
<td>.01</td>
<td>.15*</td>
<td>.49**</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>6. Session Depth</td>
<td>5.55</td>
<td>.95</td>
<td>.12</td>
<td>.09</td>
<td>.38**</td>
<td>.47**</td>
<td>.40**</td>
</tr>
</tbody>
</table>

*Note. N = 123.*

* p = .05 ** p < .001
analyses stimulated concerns about Type I error. On the other hand, there were also concerns about Type II error, given that the target population (international students in counseling psychology and related training programs) is not very large, is difficult to sample, and has not been adequately studied in the past. Ultimately, given that the aim of the present study was exploratory, a $p$ value of .05 for the significance level of all subsequent analyses was used without any correction for familywise error rate (e.g., Bonferroni). Doing so seemed to strike the most appropriate balance between the Type I and Type II error concerns relevant to the study.

**Acculturative Stress, Cultural Distance, and the Therapeutic Relationship**

To test the present study’s hypotheses, statistical procedures outlined by Frazier, Tix, and Baron (2004) were followed. A series of hierarchical regression analyses were conducted, which are described and summarized below. As shown in Tables 2 and 3, for all outcome variables, acculturative stress was entered in Step 1, cultural distance was entered in Step 2, and the two-way interaction term (Acculturative Stress X Cultural Distance) was entered in Step 3. The increment in $R^2$ from Step 2 to Step 3 provided the significance test for the interaction effects. Continuous predictors were centered when conducting analyses of interaction effects.

**Real relationship.** Hypotheses 1a and 2a stated that acculturative stress and cultural distance would each be negatively related to the real relationship. Results of the regression analyses, summarized in Table 2, provided no support for these hypotheses. The main effects of acculturative stress, $R^2 = .003$, $F(1, 121) = .31$, $p = .57$, and of cultural distance, $R^2 = .009$, $F(1, 120) = .74$, $p = .38$, were not statistically significant.
Table 2

Results of Hierarchical Regression Analyses on Real Relationship and Working Alliance

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>(R^2)</th>
<th>Adjusted (R^2)</th>
<th>(\Delta R^2)</th>
<th>(\Delta F)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome variable: Real Relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.03</td>
<td>.05</td>
<td>.05</td>
<td>.55</td>
<td>.003</td>
<td>-.006</td>
<td>.003</td>
<td>.31</td>
<td>.57</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.03</td>
<td>.03</td>
<td>.08</td>
<td>.86</td>
<td>.09</td>
<td>-.008</td>
<td>.006</td>
<td>.74</td>
<td>.38</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.01</td>
<td>.05</td>
<td>-.03</td>
<td>-.32</td>
<td>.01</td>
<td>-.02</td>
<td>.001</td>
<td>.10</td>
<td>.74</td>
</tr>
<tr>
<td><strong>Outcome variable: Working alliance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.06</td>
<td>.10</td>
<td>.06</td>
<td>.65</td>
<td>.004</td>
<td>-.005</td>
<td>.004</td>
<td>.43</td>
<td>.51</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.01</td>
<td>.06</td>
<td>.03</td>
<td>.29</td>
<td>.001</td>
<td>-.01</td>
<td>.001</td>
<td>.08</td>
<td>.76</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>.01</td>
<td>-.009</td>
<td>.01</td>
<td>1.34</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 123.*
Table 3

*Results of Hierarchical Regression Analyses on Session Outcomes*

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable: Session quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.01</td>
<td>.09</td>
<td>.01</td>
<td>.18</td>
<td>.00</td>
<td>-.008</td>
<td>.00</td>
<td>.03</td>
<td>.85</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.10</td>
<td>.05</td>
<td>.17</td>
<td>1.75</td>
<td>.025</td>
<td>.009</td>
<td>.03</td>
<td>3.08</td>
<td>.08</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.04</td>
<td>.08</td>
<td>-.04</td>
<td>-.43</td>
<td>.027</td>
<td>.002</td>
<td>.002</td>
<td>.19</td>
<td>.66</td>
</tr>
<tr>
<td>Outcome variable: Session depth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.20</td>
<td>.14</td>
<td>.12</td>
<td>1.43</td>
<td>.01</td>
<td>.008</td>
<td>.01</td>
<td>2.04</td>
<td>.15</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.03</td>
<td>.08</td>
<td>.04</td>
<td>.40</td>
<td>.01</td>
<td>.002</td>
<td>.001</td>
<td>.16</td>
<td>.68</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.15</td>
<td>.12</td>
<td>-.11</td>
<td>.23</td>
<td>.03</td>
<td>.005</td>
<td>.01</td>
<td>1.45</td>
<td>.23</td>
</tr>
</tbody>
</table>

*Note.* N = 123.
Working alliance. Hypotheses 1b and 2b stated that acculturative stress and cultural distance would each be negatively related to the working alliance. Results of the regression analyses, summarized in Table 2, provided no support for these hypotheses. The main effects of acculturative stress $R^2 = .004, F(1, 121) = .43, p = .51$, and of cultural distance, $R^2 = .004, F(1, 120) = .08, p = .76$, were not statistically significant.

Acculturative Stress, Cultural Distance, and Session Outcome

Session quality. Hypotheses 3a and 4a stated that acculturative stress and cultural distance would each be negatively related to session quality. Results of the regression analyses, summarized in Table 3, provided no support for these hypotheses. The main effects of acculturative stress, $R^2 = .00, F(1, 121) = .03, p = .85$, and of cultural distance, $R^2 = .009, F(1, 120) = 3.08, p = .082$, were not statistically significant.

Session depth. Hypotheses 3b and 4b stated that acculturative stress and cultural distance would each be negatively related to session depth. Results of the regression analyses, summarized in Table 3, provided no support for these hypotheses. The main effect of acculturative stress, $R^2 = .01, F(1, 121) = 2.04, p = .15$, and of cultural distance, $R^2 = .01, F(1, 120) = .16, p = .68$, were not statistically significant.

Acculturative Stress X Cultural Distance Interaction

The hierarchical regression analyses described above allowed for testing the present study’s interaction hypotheses. As stated before, for all outcome variables, acculturative stress was entered in Step 1, cultural distance was entered in Step 2, and the two-way interaction term (Acculturative Stress X Cultural Distance) was entered in Step 3. The increment in $R^2$ from Step 2 to Step 3 provided the significance test for the interaction effects.


**Real relationship.** Hypothesis 5a stated that there will be a significant interaction between international student therapist acculturative stress and cultural distance (Acculturative Stress X Cultural Distance) on the real relationship, such that acculturative stress will be more strongly negatively related to international student therapist-rated real relationship for participants who perceive greater cultural distance. The hierarchical regression analysis (Table 2) provided no support for this hypothesis. As described above, the main effects of acculturative stress and cultural distance were not significant. The two-way interaction of acculturative stress and cultural distance was also not statistically significant, $\Delta R^2 = .001$, $F(1, 119) = .10$, $p = .74$.

**Working alliance.** Hypothesis 5b stated that there will be a significant interaction between international student therapist acculturative stress and cultural distance (Acculturative Stress X Cultural Distance) on the working alliance, such that acculturative stress will be more strongly negatively related to international student therapist-rated working alliance for participants who perceive greater cultural distance. The hierarchical regression analysis (see Table 2) provided no support for this hypothesis. As described above, the main effects of acculturative stress and cultural distance were not significant. The two-way interaction of acculturative stress and cultural distance was also not statistically significant, $\Delta R^2 = .01$, $F(1, 119) = 1.34$, $p = .24$.

**Session quality.** Hypothesis 6a stated that there will be a significant interaction between international student therapist acculturative stress and cultural distance (Acculturative Stress X Perceived Cultural Distance) on ratings of session quality, such that acculturative stress will be more strongly negatively associated with session quality for those who perceive greater cultural distance. The hierarchical regression analysis (see
Table 3) provided no support for this hypothesis. As described above, the main effects of acculturative stress and cultural distance were not significant. The two-way interaction of acculturative stress and cultural distance was also not statistically significant, $\Delta R^2 = .002$, $F(1, 119) = .19, p = .66$.

**Session depth.** Hypothesis 6b stated that there will be a significant interaction between international student therapist acculturative stress and cultural distance (Acculturative Stress X Cultural Distance) on ratings of session depth, such that acculturative stress will be more strongly negatively related to session depth for those who perceive greater cultural distance (i.e., Acculturative Stress X Perceived Cultural Distance). The hierarchical regression analysis (see Table 3) provided no support for this hypothesis. As described above, the main effects of acculturative stress and cultural distance were not significant. The two-way interaction of acculturative stress and cultural distance was also not statistically significant, $\Delta R^2 = .01$, $F(1, 119) = 1.45, p = .23$.

Alternate Models of the Relation between Acculturation and Psychotherapy Variables

**Research question 1: Mediation.** This research question had to do with the possibility that the real relationship and working alliance would partially mediate the links of acculturative stress and cultural distance to session outcomes. For the present study, no mediation effects were detected. Specifically, acculturative stress and cultural distance (the predictor variables) were unrelated to the real relationship and working alliance (the mediators) and to session quality and session depth (the outcome variables). As such, the criteria for conducting mediation analyses (Frazier et al., 2004) were not met, so no such analyses were conducted.
Research question 2: Moderation. Again, the statistical procedures outlined by Frazier et al., 2004, and summarized in Table 4, were conducted to test whether the real relationship and the working alliance each moderated the relations of acculturative stress and cultural distance (predictors) to session quality and depth (outcomes). For both session quality and session depth, the predictor variables (acculturative stress and cultural distance) were entered in Step 1. In Step 2, the moderators (real relationship and working alliance) were entered. And in Step 3, the interaction effects were entered. The increment in $R^2$ from Step 2 to Step 3 provided the significance test for the interaction effects.

Results showed that neither the real relationship nor the working alliance functioned as moderators. For session quality, the overall main effect of acculturative stress and cultural distance was not statistically significant, $R^2 = .02, F(2, 120) = 1.55, p = .21$. In Step 2, the overall main effect of real relationship and working alliance was statistically significant, $R^2 = .28, F(2, 118) = 21.21, p < .001$. Specifically, the real relationship uniquely predicted session quality, $\beta = .61, p = .001$. In Step 3, the two-way interactions (Acculturative Stress X Real Relationship, Cultural Distance X Real Relationship, Acculturative Stress X Working Alliance, Cultural Distance X Working Alliance) did not add additional variance, $\Delta R^2 = .04, F(3, 114) = 1.86, p = .12$).

An overall similar pattern of results emerged for session depth. In Step 1, the overall main effect of acculturative stress and cultural distance was not statistically significant, $R^2 = .01, F(2, 120) = 1.09, p = .33$. In Step 2, the overall main effect of real relationship and working alliance was statistically significant, $R^2 = .24, F(2, 118) = 17.38, p < .001$. Specifically, the working alliance uniquely predicted session depth, $\beta = .52, p = .001$. In Step 3, the two-way interactions (Acculturative Stress X Real
Table 4

Results of Hierarchical Regression Analyses Testing Real Relationship and Working Alliance as Moderators of Acculturative Stress and Cultural Distance

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome variable: Session quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>-.06</td>
<td>.11</td>
<td>-.06</td>
<td>-6.16</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.10</td>
<td>.05</td>
<td>.17</td>
<td>1.75</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Relationship (RR)</td>
<td>.61</td>
<td>.18</td>
<td>.35</td>
<td>3.38</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Alliance (WA)</td>
<td>.19</td>
<td>.10</td>
<td>.19</td>
<td>1.87</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X RR</td>
<td>.04</td>
<td>.37</td>
<td>.01</td>
<td>0.11</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X RR</td>
<td>-.36</td>
<td>.19</td>
<td>-.26</td>
<td>-1.18</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X WA</td>
<td>.23</td>
<td>.19</td>
<td>.14</td>
<td>1.18</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X WA</td>
<td>.07</td>
<td>.10</td>
<td>.09</td>
<td>.70</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome variable: Session depth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.17</td>
<td>.15</td>
<td>.11</td>
<td>1.09</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.03</td>
<td>.08</td>
<td>.04</td>
<td>.40</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Relationship (RR)</td>
<td>.31</td>
<td>.26</td>
<td>.12</td>
<td>1.17</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Alliance (WA)</td>
<td>.52</td>
<td>.15</td>
<td>.37</td>
<td>3.51</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X RR</td>
<td>-.37</td>
<td>.55</td>
<td>-.09</td>
<td>-.67</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X RR</td>
<td>-.36</td>
<td>.28</td>
<td>-.18</td>
<td>-1.28</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X WA</td>
<td>.43</td>
<td>.29</td>
<td>.19</td>
<td>1.46</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X WA</td>
<td>.08</td>
<td>.15</td>
<td>.07</td>
<td>.52</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Relationship, Cultural Distance X Real Relationship, Acculturative Stress X Working Alliance, Cultural Distance X Working Alliance) did not add additional significant variance, $\Delta R^2 = .03$, $F(3, 114) = 1.5$, $p = .20$).

**Additional Analyses**

**English Proficiency**

Results described so far suggested that, contrary to hypotheses, there are no associations between international student therapists’ acculturative stress and cultural distance and their ratings of the real relationship, the working alliance, and session outcomes. It may be useful, however, to examine another variable that might bear upon these relationships: English proficiency. Indeed, language barriers are cited as a major factor that could impact outcomes such as international student therapists’ self-confidence (e.g., Chen, 2004; Lee, 2013; Mittal & Weiling, 2006). As such, the hypothesized associations among the acculturation variables and the psychotherapy variables may emerge when examined in the context of participants’ English proficiency. Said differently, acculturative stress and cultural distance may only interfere with the therapy work of international student therapists for whom English is a second language and who report lower proficiency in this language.

To test this notion, data from students for whom English is a second language (ESL; $n = 102$) was used. The rest of the sample consisted of 18 people whose first language is English or who learned English simultaneously with another language when growing up, and three participants who did not specify a native language. These 21 people were thus excluded from these additional analyses.
For the ESL student therapists, the following mean English proficiency ratings emerged: reading proficiency 6.23 ($SD = .72$; range = 4-7), writing proficiency 5.80 ($SD = .98$; range = 4-7), speaking fluency 5.91 ($SD = .97$; range = 2-7), and listening ability 6.08 ($SD = .81$; range = 3-7). The overall English proficiency was 6.00 ($SD = .76$; range = 2-7). Table 5 displays means, standard deviations, and intercorrelations of the main study variables, as well as the overall English proficiency index, for ESL participants. As these means suggest, the sample had an overall high level of English proficiency. The skewness and kurtosis of all measured variables were close to zero—suggesting a relatively normal distribution across all variables. Overall English proficiency was significantly negatively correlated with acculturative stress, and was not significantly correlated with any other variable.

Statistical procedures outlined by Frazier et al. (2004) were followed. That is, separate hierarchical regression analyses were conducted to examine the possible three-way interactions of acculturative stress, cultural distance, and English proficiency (Acculturative Stress X Cultural Distance X English Proficiency) in predicting real relationship, working alliance, session quality, and session depth. For each analysis, the predictor variables (acculturative stress, cultural distance, English proficiency) were entered in Step 1; in Step 2, all possible two-way interactions were entered; and in Step 3, the three-way interaction (Acculturative Stress X Cultural Distance X English Proficiency) was entered. The results of these analyses are summarized in Tables H1, H2, H3, and 6. Results indicated that for the most part the two-way interaction effects did not add significant incremental variance to the prediction of the criterion variables. The
Table 5  

_Correlations, Means, and Standard Deviations among Study Variables in ESL Sample_

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acculturative Stress</td>
<td>2.51</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cultural Distance</td>
<td>5.21</td>
<td>1.02</td>
<td>.39**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Real Relationship</td>
<td>3.89</td>
<td>.37</td>
<td>.08**</td>
<td>.07**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Working Alliance</td>
<td>5.41</td>
<td>.67</td>
<td>.04**</td>
<td>.02**</td>
<td>.68**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Session Quality</td>
<td>4.25</td>
<td>.62</td>
<td>-.01**</td>
<td>.06**</td>
<td>.38**</td>
<td>.40**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Session Depth</td>
<td>5.49</td>
<td>.94</td>
<td>.11**</td>
<td>.04**</td>
<td>.34**</td>
<td>.45**</td>
<td>.45**</td>
<td></td>
</tr>
<tr>
<td>7. English Proficiency</td>
<td>6.00</td>
<td>.76</td>
<td>-.25**</td>
<td>-.04**</td>
<td>.04**</td>
<td>.08**</td>
<td>.09**</td>
<td>.03</td>
</tr>
</tbody>
</table>

_Note._ N = 102.

* p < .01 ** p < .001
three-way interaction effects also did not add significant incremental variance to the prediction of any of the criterion variables.

However, as can be seen in Table 6, results indicated that two two-way interactions (Acculturative Stress X English Proficiency, and Cultural Distance X English Proficiency) together added significant incremental variance (8%) in predicting session depth. Furthermore, both interaction effects seemed to uniquely predict session depth.

To assess the nature of these interactions, it was first necessary to determine whether the interaction effects were conditional on other variable being present in the regression equation—which could indicate the possibility of a suppression effect (Pandey & Elliot, 2010).

To this end, a series of regression analyses were conducted. The first involved testing the two-way interactions of Acculturative Stress X English Proficiency, and Cultural Distance X English Proficiency, with separate hierarchical regression analyses. Main effects were entered in Step 1 (acculturative stress and English proficiency for the first model, and cultural distance and English proficiency for the second model). The corresponding interaction term was entered in Step 2 (Acculturative Stress X English Proficiency for the first model, and Cultural Distance X English Proficiency for the second model). Results indicated that the Acculturative Stress X English Proficiency interaction added 3% of additional variance to the prediction of session depth at $p = .09$, $\Delta R^2 = .03$, $F(1, 98) = 2.86$, $p = .09$. In turn, the Cultural Distance X English Proficiency interaction did not add significant incremental variance, $\Delta R^2 = .01$, $F(1, 98) = .96$, $p = .33$. Results were similar in analyses that included all main effects of interest
Table 6

Hierarchical Regression Analysis Testing Interactions of Acculturative Stress, Cultural Distance, and English Proficiency in Predicting Session Depth

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.01</td>
<td>-.01</td>
<td>.01</td>
<td>.57</td>
<td>.63</td>
</tr>
<tr>
<td>Acculturate Stress (AS)</td>
<td>.21</td>
<td>.17</td>
<td>.13</td>
<td>1.19</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.00</td>
<td>.10</td>
<td>.00</td>
<td>-0.8</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (EP)</td>
<td>.08</td>
<td>.12</td>
<td>.06</td>
<td>.63</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.09</td>
<td>.04</td>
<td>.08</td>
<td>2.79</td>
<td>.04</td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.22</td>
<td>.16</td>
<td>-.14</td>
<td>-1.37</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X EP</td>
<td>.55</td>
<td>.23</td>
<td>.25</td>
<td>2.39</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X EP</td>
<td>-.32</td>
<td>.14</td>
<td>-.25</td>
<td>-2.23</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.11</td>
<td>.05</td>
<td>.02</td>
<td>1.55</td>
<td>.21</td>
</tr>
<tr>
<td>AS X CD X EP</td>
<td>.34</td>
<td>.27</td>
<td>.15</td>
<td>1.24</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 102.
(acculturative stress, cultural distance, and English proficiency) entered in Step 1, followed by either the Acculturative Stress X English Proficiency interaction or the Cultural Distance X English Proficiency interaction entered in Step 2. It thus seemed that Acculturative Stress X English Proficiency was the more robust of the two-way interactions, and its predictive weight was being enhanced by other variables.

In order to ascertain which variable(s) were acting as suppressors, separate regression analyses were conducted three times, each time entering a different pair of two-way interactions in the final steps of the regressions. As can be seen in Table 7, results for Model 3 suggested that the Cultural Distance X English Proficiency interaction term acted as the suppressor, as it seemed to enhance the predictive weight of the Acculturative Stress X English Proficiency interaction. That is, the parameter estimates associated with the Acculturative Stress X English Proficiency interaction were not only larger in the presence of the suppressor term, but became significant at \( p = .02 \) (Pandey & Eliot, 2010).

In sum, the above analyses indicated that the addition of the Cultural Distance X English Proficiency interaction to the regression model improved the prediction of Acculturative Stress X English Proficiency on session depth, which suggested the presence of a suppression effect (Pandey & Eliot, 2010). But although some type of suppression effect indeed seems to be at play here, the fact that the Acculturative Stress X English Proficiency interaction explains unique variance in the prediction of session depth at \( p = .09 \) suggests the effect is more robust, and thus worthy of further scrutiny.

Simple slopes analyses (Frazier et al., 2004) were conducted to understand the nature of the Acculturative Stress X English Proficiency interaction. Results indicated
Table 7

*Regression Models of Session Depth Testing for the Presence of Suppression Effect*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>( \Delta R^2 )</th>
<th>( \Delta F )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.21</td>
<td>.17</td>
<td>.13</td>
<td>1.19</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>-.01</td>
<td>.10</td>
<td>-.01</td>
<td>-.08</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (EP)</td>
<td>.08</td>
<td>.12</td>
<td>.06</td>
<td>.63</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.10</td>
<td>.15</td>
<td>-.06</td>
<td>-.64</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X EP</td>
<td>.35</td>
<td>.21</td>
<td>.16</td>
<td>1.61</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.21</td>
<td>.17</td>
<td>.13</td>
<td>1.19</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>-.01</td>
<td>.10</td>
<td>-.01</td>
<td>-.08</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (EP)</td>
<td>.08</td>
<td>.12</td>
<td>.06</td>
<td>.63</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.20</td>
<td>.16</td>
<td>-.13</td>
<td>-1.21</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X EP</td>
<td>-.18</td>
<td>.13</td>
<td>-.14</td>
<td>-1.36</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.01</td>
<td>-.01</td>
<td>.01</td>
<td>.57</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.21</td>
<td>.17</td>
<td>.13</td>
<td>1.19</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>-.01</td>
<td>.10</td>
<td>-.01</td>
<td>-.08</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (EP)</td>
<td>.08</td>
<td>.12</td>
<td>.06</td>
<td>.63</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>.07</td>
<td>.03</td>
<td>.06</td>
<td>3.22</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X EP</td>
<td>.54</td>
<td>.23</td>
<td>.24</td>
<td>2.31</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X EP</td>
<td>-.25</td>
<td>.13</td>
<td>-.20</td>
<td>-1.87</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 102.*
that when participants had higher English proficiency (i.e., one SD above the mean), there was a significant positive relation between acculturative stress and session depth, $b = .49$, $\beta = .31$, $p = .038$; in turn, there was no significant relation when participants had lower English proficiency (i.e., one SD below the mean), $b = -.06$, $\beta = -.04$, $p = .77$. The interaction was also plotted using the value of one standard deviation above (high) and below (low) the mean for English proficiency (see Figure 1). In all, these results suggested that when international student therapists are more proficient in English, acculturative stress is positively related to session depth.

A post hoc power analysis was conducted to determine the likelihood that the overall interaction effect ($R^2 = .09$) was statistically significant, given the sample size of 102 and the alpha set at .05. It was determined that the study had a power of .75 to detect the overall interaction effect.

Real Relationship and Working Alliance

Until now, no study has looked at the real relationship, working alliance, and session quality in a sample of international student therapists. The present dataset thus allows for replication and extension of prior work on the relations between the therapy relationship and session quality in an understudied population. As the tests conducted below are post-hoc, they were treated as research questions that could point to interesting avenues for future work.

As we saw before, the real relationship and the working alliance are related yet separate elements of the therapeutic relationship. This distinction has been empirically supported: therapist’s ratings of the real relationship and the alliance are typically
Figure 1

*Interaction between Perceived English Proficiency and Acculturative Stress on Session Depth*

*Figure 1.* Interaction effect between perceived English proficiency and acculturative stress on session depth. The dotted line with squares indicates higher English proficiency; the solid line with diamonds indicates lower English proficiency.
moderately correlated, but each adds uniquely to the prediction of session and treatment outcomes (Gelso, 2014). Kivlighan, Marmarosh, and Hilsenroth (2014) urged further exploration of the distinction between real relationship and working alliance by relating each variable to different types of outcomes. In theory, the real relationship should show stronger relations to outcomes that have to do with the personal aspects of therapy and weaker relations to outcomes that have to do with therapy work, and vice versa for the alliance (Kivlighan et al., 2014).

Thus, we might wonder whether in the present study (1) the real relationship and the working alliance will be moderately related to one another, and (2) each will add uniquely to the prediction of session quality and depth. We might also wonder, per Kivlighan et al. (2014), whether the real relationship and the alliance are differentially related to session quality and depth. Session quality was conceptualized as a broader dimension of session outcome, whereas session depth is a more specific, task-oriented aspect of session quality that has to do with the session’s power and effectiveness. As such, the real relationship and the working alliance may be similarly associated to session quality (since it is a broader concept), whereas the working alliance might show a stronger association to session depth compared to the real relationship.

An initial examination of the bivariate correlations among the variables largely supported previous theory and findings. As shown in Table 1, there was a large correlation between real relationship and working alliance ($r = .67, p < .001$). It should be noted that the strength of this association is closer in magnitude to what has been observed when therapy clients are the ones rating the real relationship and the alliance (typically $r$ of .70 to .80; Gelso, 2014).
To test the relative contribution of each relational variable to the prediction of session quality and session depth, separate hierarchical regression analyses were conducted for each session outcome. As shown in Table 8, in one set of regressions, the real relationship was entered first into the equation, followed by the working alliance. In another set of regressions, the working alliance was entered first, followed by the real relationship. Results partially supported prior research: the real relationship accounted for a significant amount of variance, above and beyond that accounted for by the working alliance, in the prediction of session quality. The real relationship added 7% incremental variance in predicting session quality, compared with a 2% increase accounted for by the addition of the working alliance. The real relationship uniquely predicted session quality; the working alliance approached significance ($p = .07$) in uniquely predicting session quality. In contrast, results showed that the real relationship did not add additional variance above and beyond that accounted for by the working alliance to the prediction of session depth. In fact, as can be seen in Table 8, the real relationship did not uniquely predict session depth; however, the working alliance did.

Taken together, these findings are largely in line with prior research (Gelso, 2014). From the perspective of the international student therapist, the real relationship seems to account for greater variance than the working alliance in predicting session quality when the two are pitted against one another in a regression format. In turn, the real relationship does not seem to add to the prediction of session depth. The working alliance, on the other hand, does. Given that session depth is considered a more specific,
Table 8

Hierarchical Regression Models with Working Alliance and Real Relationship Predicting Session Quality and Session Depth

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome variable: Session quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model I</td>
<td>.19</td>
<td>.18</td>
<td>.19</td>
<td>28.71</td>
<td>&lt; .001</td>
<td>.19</td>
<td>Adjusted R²</td>
<td>ΔR²</td>
<td>ΔF</td>
<td>p</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.42</td>
<td>.08</td>
<td>.43</td>
<td>5.35</td>
<td>&lt; .001</td>
<td>.42</td>
<td>.08</td>
<td>.07</td>
<td>12.38</td>
<td>.001</td>
</tr>
<tr>
<td>Model II</td>
<td>.26</td>
<td>.25</td>
<td>.26</td>
<td>12.38</td>
<td>.001</td>
<td>.26</td>
<td>.25</td>
<td>.02</td>
<td>3.28</td>
<td>.07</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.18</td>
<td>.10</td>
<td>.19</td>
<td>1.81</td>
<td>.07</td>
<td>.18</td>
<td>.10</td>
<td>.02</td>
<td>1.48</td>
<td>.22</td>
</tr>
<tr>
<td>Real Relationship</td>
<td>.63</td>
<td>.18</td>
<td>.37</td>
<td>3.51</td>
<td>.001</td>
<td>.63</td>
<td>.18</td>
<td>.08</td>
<td>12.65</td>
<td>.001</td>
</tr>
<tr>
<td>Model I</td>
<td>.24</td>
<td>.24</td>
<td>.24</td>
<td>39.76</td>
<td>&lt; .001</td>
<td>.24</td>
<td>.24</td>
<td>.04</td>
<td>3.28</td>
<td>.07</td>
</tr>
<tr>
<td>Real Relationship</td>
<td>.85</td>
<td>.13</td>
<td>.49</td>
<td>6.30</td>
<td>&lt; .001</td>
<td>.85</td>
<td>.13</td>
<td>.15</td>
<td>4.62</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Model II</td>
<td>.26</td>
<td>.25</td>
<td>.26</td>
<td>3.28</td>
<td>.07</td>
<td>.26</td>
<td>.25</td>
<td>.08</td>
<td>12.65</td>
<td>.001</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.63</td>
<td>.18</td>
<td>.37</td>
<td>3.51</td>
<td>.001</td>
<td>.63</td>
<td>.18</td>
<td>.08</td>
<td>12.65</td>
<td>.001</td>
</tr>
<tr>
<td>Real Relationship</td>
<td>.32</td>
<td>.26</td>
<td>.13</td>
<td>1.21</td>
<td>.22</td>
<td>.32</td>
<td>.26</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.53</td>
<td>.15</td>
<td>.38</td>
<td>3.55</td>
<td>.001</td>
<td>.53</td>
<td>.15</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
</tbody>
</table>

**Outcome variable: Session depth**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model I</td>
<td>.22</td>
<td>.21</td>
<td>.22</td>
<td>34.48</td>
<td>&lt; .001</td>
<td>.22</td>
<td>.21</td>
<td>.01</td>
<td>1.48</td>
<td>.22</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.65</td>
<td>.11</td>
<td>.47</td>
<td>5.87</td>
<td>&lt; .001</td>
<td>.65</td>
<td>.11</td>
<td>.15</td>
<td>4.62</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Model II</td>
<td>.23</td>
<td>.21</td>
<td>.23</td>
<td>1.48</td>
<td>.22</td>
<td>.23</td>
<td>.21</td>
<td>.15</td>
<td>4.62</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.53</td>
<td>.15</td>
<td>.38</td>
<td>3.55</td>
<td>.001</td>
<td>.53</td>
<td>.15</td>
<td>.15</td>
<td>4.62</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Real Relationship</td>
<td>.32</td>
<td>.26</td>
<td>.13</td>
<td>1.21</td>
<td>.22</td>
<td>.32</td>
<td>.26</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
<tr>
<td>Model I</td>
<td>.15</td>
<td>.14</td>
<td>.15</td>
<td>21.38</td>
<td>&lt; .001</td>
<td>.15</td>
<td>.14</td>
<td>.08</td>
<td>12.65</td>
<td>.001</td>
</tr>
<tr>
<td>Real Relationship</td>
<td>.95</td>
<td>.20</td>
<td>.38</td>
<td>4.62</td>
<td>&lt; .001</td>
<td>.95</td>
<td>.20</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
<tr>
<td>Model II</td>
<td>.23</td>
<td>.21</td>
<td>.23</td>
<td>12.65</td>
<td>.001</td>
<td>.23</td>
<td>.21</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
<tr>
<td>Working Alliance</td>
<td>.53</td>
<td>.15</td>
<td>.38</td>
<td>3.55</td>
<td>.001</td>
<td>.53</td>
<td>.15</td>
<td>.12</td>
<td>1.21</td>
<td>.22</td>
</tr>
</tbody>
</table>

*Note. N = 123.*
work-oriented dimension of session quality, these results seem to support Kivlighan et al.’s (2014) suggestion that the working alliance (vs. the real relationship) is more strongly related to work-related outcomes.
Chapter 6: Discussion

Paralleling theoretical and empirical literature on acculturation (e.g., Berry, 1997; Smith & Khawaja, 2011; Ward, Bochner, and Furnham, 2011), a small body of studies have suggested that many international student therapists struggle, to some degree, with feelings of inferiority and isolation, communication barriers with clients, doubts about therapeutic effectiveness, and other difficulties related to their acculturation (e.g., Chen, 2004; Knox et al., 2013; Ng, 2006; Ng & Smith, 2009). Some writers (e.g., Lee, 2013) have speculated that experiencing such difficulties could potentially spill into the work of international student therapists and interfere with the process of psychotherapy with their U.S. clients. Until now, however, no study had examined whether that is actually the case. The present exploratory study was thus an initial effort to address this gap in the literature. The overall purpose of the study was to examine whether and how international student therapists’ subjective experiences of acculturation (as captured by acculturative stress and cultural distance) were related to their experiences of the real relationship, the working alliance, and the quality and depth of a recent therapy session with a U.S. client.

The present study was the first in which the subjective reports of acculturative stress and cultural distance of international student therapists were directly measured. On average, the sample as a whole reported a moderate amount of acculturative stress ($M = 2.49, SD = .61$) using the ASSIS’s 5-point scale (Sandhu & Asrabadi, 1994), which is comparable to the mean levels of stress found in other samples of international graduate and undergraduate students enrolled in other disciplines (e.g., Tavakoli, Lumley, Hijazi, Slavin-Spenny, & Parris, 2009; Yakunina, Weigold, Weigold, Hercegovac, Elsayed, 2013). Consistent with prior literature on acculturation, present results also offer some
support for the cultural distance hypothesis, the idea that adjusting to cultures highly
dissimilar to one’s original culture is more stressful than adjusting to more similar
cultures (Ward et al., 2001). Acculturative stress and cultural distance were moderately
and positively correlated. In addition, Asian international student therapists, one subset of
the sample, had on average more acculturative stress and perceived greater cultural
distance than White international student therapists, another subset of the sample.
Overall, these results lend some context to the main findings: they suggest that among
many international student therapists, the process of acculturation (vis-à-vis acculturative
stress and cultural distance) seems to proceed largely as expected, based on existing
theory and prior findings.

Examination of the Hypotheses and Research Questions

Contrary to what was hypothesized, the self-reported acculturative stress and
cultural distance of international student therapists were unrelated to these student
therapists’ ratings of the real relationship, the working alliance, the overall quality of a
therapy session, or that session’s depth. Only one significant interaction effect was found:
acculturative stress interacted with self-reported English fluency to predict session depth
among student therapists for whom English is a second language (ESL). Specifically,
when these student therapists were more fluent in English, their acculturative stress was
positively related to their depth ratings, whereas acculturative stress and depth were
unrelated at lower levels of English fluency. This finding was somewhat surprising: it
was expected that acculturative stress would be negatively related to session depth at
lower levels of English fluency. The finding thus provides no support for the theory that
acculturative stress hinders treatment. In fact, among ESL student therapists who report speaking English fluently, that stress may even predict greater depth in a therapy session.

One possible interpretation of the interaction finding is that ESL student therapists who speak English more fluently can take advantage of this to use their stress therapeutically. Perhaps as these student therapists feel more acculturative stress, they become more sensitive to how the stress could affect the therapeutic relationship or the overall therapy process. If that is the case, when their levels of acculturative stress rise, ESL student therapists may feel compelled to explore and process the strength of their therapeutic relationship or, more generally, how the therapy is going, with their U.S. clients. Doing so could in turn result in a deepening of the session, as the use of exploratory techniques that focus on, for example, the dynamics of the therapeutic relationship are associated with greater depth in a session (Lingiardi, Coli, Gentile, & Tanzilli, 2011; Pesale & Hilsenroth, 2009; Stiles, Shapiro, & Firth-Cozen, 1988). Engaging with U.S. clients in that manner could have been easier for ESL student therapists who are more fluent in English because they may not have as much second-language anxiety or worry that could have inhibited their exploring and processing. These ESL student therapists may have felt more assured to intervene as such in the first place, since international student therapists who are more fluent in English report feeling more confident as therapists (Chen, 2004), and those who prefer using English over their native language report greater counseling self-efficacy (Nilsson & Anderson, 2004).

It is important to consider the interpretation discussed above tentatively and with some caution, for two main reasons. First, the interaction effect in question was examined post-hoc. Second, that effect was found in the context of a potential suppression effect
(Pandey & Elliott, 2010) in which the Cultural Distance X English Fluency interaction seemed to increase the predictive weight of the relevant Acculturative Stress X English Fluency effect when both interactions were considered together in a regression model. Thus, future research is needed to determine if the interaction of acculturative stress and English fluency on session depth is replicable, and, if so, to explore its potential implications more thoroughly.

The larger finding of the present study seems to be that, from the vantage point of most international student therapists, the process of psychotherapy with U.S. clients is unrelated to their levels of acculturative stress and their perceptions of cultural distance. This result is similar to Nissen-Lie, Havik, Høglend, Monsen, and Rønnestad (2013), who found that therapists’ personal stresses were unrelated to therapists’ ratings of the working alliance. The finding, however, appears to conflict with most of what has been written about international student therapists in the small body of theoretical and empirical literature that currently exists.

What could account for this apparent conflict? For one, the bulk of the research literature consists of surveys and qualitative studies that mainly describe international student therapists’ needs and struggles during training; little attention has been paid to their actual therapeutic experiences. The present study, in contrast, is the first quantitative study to try to link international student therapists’ acculturation experiences to their therapy experiences. The study thus went beyond description to explore the theory that acculturation difficulties could play a role in the process of therapy with U.S. clients. That theory was based on the observation that as a result of acculturative stress and cultural distance, international student therapists may experience reactions (e.g., greater
cognitive load, language anxiety, stereotype threat, difficulties understanding and interacting with U.S. people, etc.; Beilock & Ramirez, 2011; Redmond, 2000; Sparks & Patton, 2013) that could detract from their therapeutic work with U.S. clients. The results suggest that although such acculturation difficulties may well be present in some international students’ lives, they do not spill over into their therapy work.

One possible interpretation of the results may be that most international student therapists are adept at coping with the difficulties of acculturative stress and cultural distance, which helps keep such difficulties from interfering with therapy work. Chen (2004) found that international student therapists coped with difficulties by making new friends and seeking social support from peers, professors, and supervisors in their training programs. Similarly, Mittal and Weiling (2006) found that some international student therapists used strategies such as shoring up their confidence, speaking with clients about their cultural differences, seeking help from faculty, and maintaining a positive attitude. Perhaps these and other factors help keep negative effects associated with acculturative stress and cultural distance (e.g., difficulties with anxiety, detachment from the host society, etc.; Smith & Khawaja, 2011; Redmond, 2000) from spilling into the therapeutic relationship and manifesting in the treatment.

Another possible interpretation of the results may be that acculturative stress and cultural distance are too distal to exert a direct influence on international student therapists’ experiences of the real relationship, the working alliance, and the quality and depth of a therapy session with U.S. clients. Other variables, more proximal to the therapy situation, may intervene between the acculturation experiences of international student therapists and their therapy experiences.
One such variable, noted briefly in the introductory chapter, may be countertransference, therapists’ feelings and reactions to clients that are rooted in unresolved emotional conflicts within the therapist. Such reactions may originate in the therapists’ background (e.g., childhood), as well as in current vulnerabilities (Gelso & Hayes, 2007). In addition, countertransference may originate in the therapist’s experiences with culture (Comas-Díaz & Jacobsen, 1991; Gelso & Mohr, 2001). Gelso and Mohr (2001), for example, proposed the concept of cultural countertransference, or “the therapist’s culture-related distortions of the patient or rigid, interpersonal behaviors rooted in his or her direct or vicarious experiences with members of the patient’s [cultural] group” (p. 59). What this definition suggests is that countertransference seems to depend on the interaction of certain client material or attributes, and the therapist’s own vulnerabilities—an observation that Gelso and Hayes (2007) termed the countertransference interaction hypothesis. If not properly managed, countertransference can spill into the session, manifest behaviorally (that is, the therapist might act it out), and hinder the therapy (Gelso, 2014).

Thus, the vulnerabilities of international student therapists that originate in acculturation, in interaction with certain material or attributes of clients from the majority culture, may predict negative outcomes in the process of psychotherapy. For example, international student therapists who feel more acculturative stress due to perceived prejudice may be more susceptible to negative countertransference (e.g., being rejecting or hostile toward U.S. clients). Or those who feel isolated and yearn for connections with people in the U.S. may be more prone to positive countertransference (e.g., befriending the client). Or perhaps international student therapists who perceive more cultural
distance may be more distant toward the client than is warranted or needed by the client. Such countertransference behaviors have been negatively related to a host of outcomes, such as the real relationship, the working alliance, session evaluations, and treatment outcomes (see Gelso, 2014, for a review). Future research could thus examine whether countertransference behaviors are related to acculturative stress and cultural distance, and whether such relations in turn are predictive of therapy process and outcome. Such research may both expand the study of international student therapists’ experiences to include their therapy experiences, and deepen our understanding of the cultural origins and triggers of countertransference.

These inferences should be viewed with caution, and the findings from which they were drawn should be considered preliminary, for there is a dearth of empirical literature with which they may be compared. In addition, conclusions regarding the present findings must be drawn in the context of the current study’s limitations. These limitations are discussed next.

**Limitations**

The present study has several limitations that need to be addressed. First, only the perspective of the international student therapist was examined. This seemed reasonable given the current state of the literature, in which the acculturation experiences of international student therapists in relation to their therapy work with U.S. clients have gone largely unexamined. Nonetheless, in many studies, it has been found that certain therapist characteristics are differentially related to therapy processes and outcomes, depending on whether clients’ and/or therapists’ ratings are considered (e.g., Marmarosh et al., 2014; Nissen-Lie et al., 2013). In the study by Nissen-Lie et al. (2013), for
example, it was found that therapists’ reports of their personal stresses were unrelated to their ratings of the working alliance, but did relate to their clients’ alliance ratings. It will thus be fruitful for those conducting future research to gather dyadic data, which may shed some light on the interplay between the perspectives of international student therapists and their clients. This direction for future research seems particularly fruitful, since scarcely any attention has been given to the experiences of clients who work with international student therapists.

A related limitation involves the use of self-report measures. These measures can only assess that which participants are aware of and can report. Aspects of acculturative stress and cultural distance that remain out of awareness may be less accessible and thus underreported. Something similar may happen with self-reports of the real relationship, the working alliance, and session quality and depth. It is thus possible that using ratings from external raters may yield different findings. Self-reports may also yield different findings from behavioral data. Obtaining external ratings and behavioral data, however, requires careful consideration; after all, in a study such as the present one, it is the subjective experience of the international student therapist that was of main interest. It has also been argued that some therapy constructs, like those that make up Gelso’s tripartite model of the therapy relationship, may be most effectively studied from the perspective of the therapy participants (Gelso et al., 2012). That being said, some researchers have had success in studying such subjective experiences as transference and countertransference using external raters (Markin, McCarthy, & Barber, 2013). Thus, it would be useful to consider further what we can learned from behavioral data and data from external raters in the study of international student therapists’ experiences.
Similarly, it is possible that international student therapists had a hard time rating their own therapeutic abilities in a new culture. It may have been difficult to accept into awareness, for example, the idea that acculturation difficulties (in this case, those induced by acculturative stress and cultural distance) may spillover into and hinder therapeutic work. That may be indicative of social desirability (Paulhus, 1984), or perhaps it denotes the difficulty most people seem to have in assessing their own performance (e.g., Burson, Larrick, & Klayman, 2006; Kruger & Dunning, 1999). Many researchers are finding such possibilities increasingly tenable when examining psychotherapists’ self-reports of their therapeutic abilities (e.g., Nissen-Lie et al., 2013; Kivlighan, Gelso, Ain, & Hummel, 2015). The implication for the present study is that many international student therapists may have misestimated the extent to which acculturative stress and cultural distance influenced their interactions with clients. One way to elucidate this possibility would be to assess both the therapist’s and the client’s perspective on the same variables. Alternatively, or in addition to that, observers’ ratings may also be used.

Another limitation has to do with the methods used to recruit participants. Although the training directors of almost every training program accredited by the APA and CACREP were contacted and asked to distribute the study’s surveys via email to their international students, some directors did not respond to these contacts, and others did not forward the request to their students. As a result, the study reached only a portion of the population of international student therapists in the U.S. To minimize the impact of this limitation, an effort was made to recruit participants via online listservs and organizations known to have international student therapists as part of their core membership. It is unclear, however, just how many of the participants were members of
these relevant listservs. Despite these limitations, the current sample size is larger than that of any prior study of international student therapists, and includes students from a variety of training programs across many mental health disciplines. Furthermore, the sample’s characteristics (in terms of age, gender, race/ethnicity, country of origin, etc.) are diverse, and are also similar to those of previous studies of international counseling trainees (e.g., Nilsson & Anderson, 2004; Ng, 2006).

It should also be noted that the self-reported English fluency of the overall sample and the sub-sample of ESL student therapists was very high. This likely restricted the range and variability of the overall English fluency index, which may have influenced the post-hoc analyses involving this index. Moreover, the high level of English fluency in the sample could indicate that international student therapists who perceived themselves as having lower English fluency were dissuaded from participating in the study, or were the ones who dropped out of the survey prematurely. However, although such a participant self-selection bias is possible, the level of English fluency in the sample may actually reflect the true English ability of international student therapists. After all, it seems likely that most international students interested in coming to the U.S. to pursue education and training in counseling and psychotherapy—the talking cure—would have relatively high levels of English fluency.

Another limitation is that participants were asked to think about the most recent U.S. client they saw when rating the therapy process variables. An open question for future research is whether the acculturation of international student therapists influences their work with clients who are also foreign-born. Furthermore, the study relied on a correlational, cross-sectional design, which limits our ability to make inferences about
causality and to rule out the effects of extraneous variables. Finally, the majority of participants rated sessions that occurred early in their treatments. Some of the hypothesized effects may only be visible across a series of sessions or once therapy has ended. For example, the increase or decrease in the strength of the real relationship or the alliance, or in the quality or the depth of a session, may differ for international student therapists who experience and perceive more or less acculturative stress and cultural distance. Likewise, the experience and perception of acculturative stress and cultural distance may also vary as international student therapists adjust to life in the U.S. In the future, collecting repeated measures of these and other variables of interest would allow for exploration of how all of these factors relate to one another overtime.

**Implications for Future Research**

As has been noted, the predicted associations in the present study were unsupported. Perhaps this means that that acculturative stress and cultural distance are not promising predictors of therapeutic outcomes. Given that possibility, it may be necessary to expand the focus of research to include other variables that are relevant to the experiences of international student therapists. Indeed, little attention has been given to the full range of acculturation experiences that international student therapists may encounter. The current literature—both theoretical and the small body of empirical studies that have been conducted—has tended to emphasize the challenges and struggles faced by international student therapists, and overlook positive experiences encountered during acculturation. In this way, the literature may be overlooking the potential benefits (if any) that being a foreign-born therapist may afford the therapeutic process. It may thus be helpful to expand the focus of study from the struggles of being an international
student therapist to include the potential strengths that these student therapists may bring to the therapy situation.

Although acculturative stress and cultural distance were unrelated to the criterion variables, it bears repeating that the focus in the present study was on the perspective of the international student therapist. An important next step thus would be to consider the perspective of the client when assessing the relations (if any) between acculturation and the process and outcome of therapy with international student therapists. What may be the results of doing this? Similar to Nissen-Lie et al. (2013), we may speculate that clients may in fact see that international student therapists who report more acculturation difficulties have corresponding difficulties with their therapeutic capabilities (e.g., forming a sound therapeutic relationship or fostering quality in a session), in contrast to the present results. At the same time, some highly preliminary evidence (Morris & Lee, 2004) suggests that some U.S.-born clients are satisfied when working with international student therapists and are unconcerned with their international status and so-called a lack of English fluency). Whatever the specific form this line of work takes, the overall focus on the client’s view, and how it compares and/or contrasts with that of the international student therapist, seems particularly fruitful to consider, since (a) many studies have found that certain therapist characteristics are differentially related to therapy processes and outcomes depending on the rater’s perspective, and (b) little attention has been paid to the experiences of clients who work with international student therapists.

Another valuable topic for future research may be whether and how the in-session behaviors of international student therapists—for example, countertransference behaviors, therapeutic interventions, or both—are related to their acculturation. In
addition, future researchers may wish to explore in greater detail the finding that acculturative stress and cultural distance were higher among Asian international student therapists than among their White counterparts. It may also be interesting to further explore the finding that acculturative stress was significantly positively correlated with a multicultural/feminist theoretical orientation.

It may also be fruitful to consider the way that acculturation constructs, including but not limited to acculturative stress and cultural distance, are measured and operationalized in the counseling and psychotherapy context. There may be specific ways in which acculturation experiences manifest in counseling and psychotherapy that are not captured by more global measures, such as those used in the present study. There may be, for example, particularly stressful moments in therapy for international student therapists that are related to their acculturation (e.g., a client repeatedly corrects their English), which may in turn affect the therapy. Future researchers may thus wish to consider developing and validating measures of acculturation constructs with an eye toward how they manifest in the psychotherapy situation.

Finally, though not a primary focus of the present study, the results of additional analyses partially replicated and extended prior research on the relations between the real relationship, the working alliance, and the overall quality and the depth of a therapy session. To highlight one of the findings: the working alliance accounted for greater variance than the real relationship in predicting session depth, which may support the notion that the working alliance (vs. the real relationship) is more strongly related to work-related outcomes (Gelso, 2011; Kivlighan, Marmarosh, and Hilsenroth, 2014). There were also some potentially interesting differences between the present findings and
prior research. For example, the correlation between the real relationship and the working alliance in the present study ($r = .67$) was closer in magnitude to what has been observed when therapy clients are the ones rating the real relationship and the alliance (typically $r$ of .70 to .80; Gelso, 2014). Whether that difference in correlation coefficients is meaningful or not may be a topic for future study. Thus, interested researchers might study the psychotherapy constructs that were examined in the present study in a sample that includes international as well as domestic student therapists (or, more broadly, immigrant vs. non-immigrant therapists). This is a research topic that would seem to be of particular importance, as there is still a relative dearth of empirical research that has compared certain aspects of the therapeutic relationship and session quality as viewed and experienced by therapists from different nationalities and diverse backgrounds.

**Conclusion**

The present exploratory study is the first to tackle the question of whether and how the acculturation experiences of international student therapists relate to their experiences as therapists. In this way, the present study extended prior empirical literature, which up until now has focused mainly on describing the training experiences of international student therapists as they adjust to life in the U.S. Although the predicted associations were unsupported, it is helpful to keep in mind Orlinsky et al.’s (1994) counsel to consider and report null findings in psychotherapy research “… since it is just as important to know what isn’t as what is related to outcome” (p. 364). From the vantage point of most international student therapists, the subjective experience of acculturative stress and cultural distance appears largely unrelated to important process indicators: the real relationship, the working alliance, and the quality and the depth of a therapy session.
Perhaps acculturative stress and cultural distance do not, in fact, contribute to international students’ functioning as therapists. Having now considered the subjective experience of international student therapists—both qualitatively and quantitatively—it may be time to consider how clients perceive and experience the process of psychotherapy with international student therapists who are undergoing the process of acculturation. Indeed, given the state of the literature, future researchers may wish to consider more fully the conditions under which acculturation factors may or may not relate to the psychotherapy work of international student therapists.
Appendix A - Demographic Questionnaire

1. Sex (female = 1; male = 2; other = 3 – specify): _____
2. Age: _____
3. How would you classify yourself? (check all that apply):
   a. Arab
   b. Asian/Pacific Islander
   c. African American/Black
   d. Caucasian/European American/White
   e. Hispanic/Latino
   f. Indigenous/Aboriginal/Native American
   g. Multiracial
   h. Would rather not say
   i. Other (please specify): ____________

4. Where were you born? (Country): ____________
5. How long have you lived in the U.S.? (Months, Years) ________________________
6. What is your current visa/residency/immigration status? ____________________
7. Please rate your English proficiency on each of the following aspects according to the following scale (write down the number in the table):

<table>
<thead>
<tr>
<th>Language</th>
<th>Reading proficiency</th>
<th>Writing proficiency</th>
<th>Speaking fluency</th>
<th>Listening ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very poor = 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor = 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Functional = 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good = 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very good = 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Native-Like = 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. What is your first or native language? ________________________________
9. Please indicate the type of training program in which you are currently enrolled (e.g., Counseling psychology Ph.D., Clinical psychology Ph.D., etc.): __________________________
10. Year in current graduate program: ________

11. Your Theoretical Approach

Please write the number that best indicates how representative each of the following approaches is of your work in psychotherapy:

<table>
<thead>
<tr>
<th>Strongly Representative</th>
<th>Moderately</th>
<th>Neutral</th>
<th>Just a Little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

___ Humanistic/Experiential
___ Psychodynamic/Psychoanalytic
___ Cognitive/Behavioral
___ Multicultural/Feminist
___ Other (please specify) _______

Please write the number that best indicates how representative each of the following approaches is of your therapeutic work with the U.S.-born client you had in mind when you completed this study’s questionnaire:

<table>
<thead>
<tr>
<th>Strongly Representative</th>
<th>Moderately</th>
<th>Neutral</th>
<th>Just a Little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

___ Humanistic/Experiential
___ Psychodynamic/Psychoanalytic
___ Cognitive/Behavioral
___ Multicultural/Feminist
___ Other (please specify) _______

12. What is the race/ethnicity of the client you had in mind when you completed this study’s questionnaires?
   a. Arab
   b. Asian/Pacific Islander
   c. African American/Black
   d. Caucasian/European American/White
   e. Hispanic/Latino
   f. Indigenous/Aboriginal/Native American
   g. Multiracial
   h. Other (please specify): ___________

13. Approximately how many sessions have you had with the client? Please provide your best estimate: _______
Appendix B - Acculturative Stress Scale for International Students

This questionnaire contains items regarding the reaction of international students towards cultural adjustment. Please read each statement carefully. Then decide how strongly you agree or disagree with each statement. Click on the corresponding bubble to indicate how closely each statement describes your situation. There are no right or wrong answers and your responses to this questionnaire are completely anonymous.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Sure</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Homesickness bothers me.
2. I feel uncomfortable to adjust to new foods.
3. I am treated differently in social situations.
4. Others are sarcastic toward my cultural values.
5. I feel nervous to communicate in English.
6. I feel sad living in unfamiliar surroundings.
7. I fear for my personal safety because of my different cultural background.
8. I feel intimidated to participate in social activities.
9. Others are biased toward me.
10. I feel guilty to leave my family and friends behind.
11. Many opportunities are denied to me.
12. I feel angry that my people are considered inferior here.
13. Multiple pressures are placed upon me after migration.
15. People show hatred toward me non-verbally.
16. It hurts when people don't understand my cultural values.
17. I am denied what I deserve.
18. I frequently relocate for fear of others.
19. I feel low because of my cultural background.
20. Others don't appreciate my cultural values.
21. I miss the people and country of my origin.
22. I feel uncomfortable to adjust to new cultural values.
23. I feel that my people are discriminated against.
24. People show hatred toward me through actions.
25. I feel that my status in this society is low due to my cultural background.
26. I am treated differently because of my race.
27. I feel insecure here.
28. I don't feel a sense of belonging here (community).
29. I am treated differently because of my color.
30. I feel sad to consider my people's problems.
31. I generally keep a low profile due to fear.
32. I feel some people don't associate with me because of my ethnicity.

121
33. People show hatred toward me verbally.
34. I feel guilty that I am living a different lifestyle here.
35. I feel sad leaving my relatives behind.
36. I worry about my future for not being able to decide whether to stay here, or go back.

Perceived Discrimination Items: 3, 9, 11, 14, 17, 23, 26, 29.
Homesickness Items: 1, 6, 21, 35.
Perceived Hate Items: 4, 15, 20, 24, 33.
Fear Items: 7, 18, 27, 31.
Stress Due to Change/Culture Shock Items: 2, 13, 22.
Guilt Items: 10, 34.
Miscellaneous: 5, 8, 12, 16, 19, 25, 28, 30, 32, 36.
Appendix C - Brief Perceived Cultural Distance Scale

Think about the United States and your country of origin. Using the scale provided please indicate, in your opinion, how different or similar are the two countries in terms of…

<table>
<thead>
<tr>
<th>Similar</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

____ 1. Climate (temperature, rainfall, humidity)
____ 2. Natural environment (plants and animals, pollution, scenery)
____ 3. Social environment (size of the community, pace of life, noise)
____ 4. Living (hygiene, sleeping practices, how safe you feel)
____ 5. Practicalities (getting around, using public transport, shopping)
____ 6. Food and eating (what food is eaten, how food is eaten, time of meals)
____ 7. Family life (how close family members are, how much time family spend together)
____ 8. Social norms (how to behave in public, style of clothes, what people think is funny)
____ 9. Values and beliefs (what people think about religion and politics, what people think is right or wrong)
____ 10. People (how friendly people are, how stressed or relaxed people are, attitudes toward foreigners)
____ 11. Friends (making friends, amount of social interaction, what people do to have fun and relax)
____ 12. Language (learning the language, understanding people, making yourself understood)
Appendix D - The Real Relationship Inventory—Therapist Form

Please complete the items below in terms of your relationship with your client or patient in the last session. Use the following 1–5 scale in rating each item, placing your rating in the space adjacent to the item.

Strongly Agree Agree Neutral Disagree Strongly Disagree
5 4 3 2 1

____ 1. My client is able to see me as a real person separate from my role as a therapist.
____ 2. My client and I are able to be genuine in our relationship.
____ 3. My client feels liking for the “real me.”
____ 4. My client genuinely expresses his/her positive feelings toward me.
____ 5. I am able to realistically respond to my client.
____ 6. I hold back significant parts of myself.
____ 7. I feel there is a “real” relationship between us aside from the professional relationship.
____ 8. My client and I are honest in our relationship.
____ 9. My client has little caring for who I “truly am.”
____ 10. We feel a deep and genuine caring for one another.
____ 11. My client holds back significant parts on him/herself.
____ 12. My client has respect for me as a person.
____ 13. There is no genuinely positive connection between us.
____ 14. My client’s feelings toward me seem to fit who I am as a person.
____ 15. I do not like my client as a person.
____ 16. I value the honesty of our relationship.
____ 17. The relationship between my client and me is strengthened by our understanding of one another.
____ 18. It is difficult for me to express what I truly feel about my client.
____ 19. My client has unrealistic perceptions of me.
____ 20. My client and I have difficulty accepting each other as we really are.
____ 21. My client distorts the therapy relationship.
____ 22. I have difficulty being honest with my client.
____ 23. My client shares with me the most vulnerable parts of him/herself.
____ 24. My client genuinely expresses a connection to me.

Realism subscale items = 1, 3, 5, 7, 9, 12, 14, 15, 17, 19, 20, 21.

Genuineness subscale items = 2, 4, 6, 8, 10, 11, 13, 16, 18, 22, 23, 24.

Reverse scored items = 6, 9, 11, 13, 15, 18, 19, 20, 21, and 22.
Appendix E - Working Alliance Inventory – Short Form (Therapist Version)

Instructions
On the following pages there are sentences that describe some of the different ways a person might think or feel about his or her client. As you read the sentences mentally insert the name of your client in place of ______ in the text.
Below each statement inside there is a seven-point scale:

________________________________________________________________________

1 | 2 | 3 | 4 | 5 | 6 | 7
Never | Rarely | Occasionally | Sometimes | Often | Very Often | Always

If the statement describes the way you always feel (or think) circle the number 7; if it never applies to you circle the number 1. Use the numbers in between to describe the variations between these extremes. Rate the items below with respect to the last session with the client.

________________________________________________________________________

1. ___________ and I agree about the steps to be taken to improve his/her situation.

________________________________________________________________________

2. _____ and I both feel confident about the usefulness of our current activity in therapy.

________________________________________________________________________

3. I believe ____________ likes me.

________________________________________________________________________

4. I have doubts about what we are trying to accomplish in therapy.
5. I am confident in my ability to help _______________.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

6. We are working towards mutually agreed upon goals.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

7. I appreciate _______________ as a person.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

8. We agree on what is important for _______________ to work on.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

9. _______________ and I have built a mutual trust.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

10. _______________ and I have different ideas on what his/her real problems are.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

11. We have established a good understanding between us of the kind of changes that would be good for _______________.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

12. _______________ believes the way we are working with her/his problem is correct.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Occasionally</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very Often</td>
<td>Always</td>
</tr>
</tbody>
</table>
Appendix F – Session Evaluation Scale and Session Evaluation Questionnaire-Depth

Session Evaluation Scale

For the most recent session my client… (1 = Strongly Disagree, 5 = Strongly Agree)

1. … is glad he/she attended this session 1 2 3 4 5
2. … did not feel satisfied with what he/she got out of the session 1 2 3 4 5
3. … thought that this session was helpful 1 2 3 4 5
4. … did not think that this session was valuable 1 2 3 4 5
5. Rate the overall effectiveness of this session
Not effective 1 2 3 4 Highly effective 5

Session Evaluation Questionnaire – Depth

Please place an 'X' on each line to show how you feel about this session

This session was:

<table>
<thead>
<tr>
<th>Shallow</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Worthless</th>
<th>Valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Empty</th>
<th>Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weak</th>
<th>Powerful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinary</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Appendix G – Sample Letters of Recruitment

Sample Letter to Training Director

Dear Dr. X,

I greatly appreciate your taking the time to read this letter. My name is Andres Perez Rojas, and I am a doctoral candidate in the counseling psychology program at the University of Maryland, College Park. I would be very grateful if you will consider distributing to students enrolled in your program a request (included below) for participating in a study I am conducting for my dissertation under the guidance of my advisor, Dr. Charles Gelso.

We are examining international counseling student therapists’ experience of providing counseling in the U.S. as part of their clinical training. We hope to gain valuable insight into what is like for these student therapists to conduct therapy in the U.S.; however, in order to do so, we really need your help in reaching these students. Your forwarding this request to your students would be incredibly helpful and appreciated.

It would also help us tremendously if you could provide us with your best estimate of how many international students are currently enrolled in your training program. We hope to use this information to calculate a response rate for our study. It would also be of great help if you could confirm receipt of this email and whether you were able to follow through with our request.

We know that your time is very valuable, so I sincerely appreciate your help considering this request. This study has received IRB approval from the University of Maryland. If you or your students have any questions about this study, please contact Andres Perez Rojas at aperez2@umd.edu and 301-792-7894.

Thank you for your time and consideration.

Sincerely,

Andres Perez Rojas

Charles J. Gelso
Sample Letter to Potential Participants

Dear fellow students,

Thank you for taking time out of your busy schedule to read this short letter. This is an invitation to you, from a fellow graduate student, to participate in a research study.

I am looking for international student therapists to participate in a study about their experiences providing therapy to U.S.-born clients. With your help, we may gain a much better understanding of what it is like for you to provide therapy to U.S.-born clients, given how little research has been conducted in this area.

If you will please grant me about X minutes of your time to fill out an online questionnaire, I would greatly appreciate it! Below is the hyperlink to enter the study: <link>

To participate in the study, you must be a current international graduate student. You must also be working with a U.S.-born client who is at least 18 years old and with whom you have had at least 5 individual counseling sessions. Following the link above will give you more information about participating. Rest assured, though, that your responses will be anonymous and confidential, and that you may withdraw at any time with no penalties.

At the end of the study, you will have the opportunity to enter into a draw to win 1 of 5 $20 Amazon Gift Cards as a token of appreciation for your participation. (Chances depend on number of entrees.) You may also experience a sense of fulfillment for assisting a fellow graduate student inch toward the “world-outside-of-school”!

If you have any questions about this study, please feel free to contact me at aperez2@umd.edu, or my advisor, Dr. Charles Gelso, at gelso@umd.edu. I am incredibly grateful for your time and candid responses!

This study was approved by the University of Maryland’s Institutional Review Board. If you have questions about your rights as a participant, the Office of Regulatory Research Compliance at the University of Maryland, College Park, will be happy to take your call at XXX-XXXXXXX, or at <email>.

From one graduate student to another, thank you very much for taking the time to take part in my research.

I wish you all the best with your studies.

Warm regards,

Andres Perez Rojas

Charles J. Gelso.
Reminder Email to Training Directors

Dear Dr. X,

We recently sent you a request for your assistance in a study we are conducting. We have not heard from you and wanted to make sure you received our request. We will be deeply appreciative if you will be willing to pass along our invitation to participate in the study to the students enrolled in your program. Included below is the request that we sent you previously.

We apologize if you have already complied with our request. Would you let us know if this is the case? Also, if you do not wish to forward our email to our students, please respond to this email and we will no longer contact you.

Thank you for your time.

Sincerely,

Andres Perez Rojas

Charles J. Gelso

<Insert Request Here>
Appendix H – Additional Tables

Table H1

Hierarchical Regression Analysis Testing Interactions of Acculturative Stress, Cultural Distance, and English Proficiency in Predicting Real Relationship

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.01</td>
<td>-.01</td>
<td>.01</td>
<td>.47</td>
<td>.70</td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.05</td>
<td>.07</td>
<td>.09</td>
<td>.82</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.01</td>
<td>.04</td>
<td>.03</td>
<td>.33</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (EP)</td>
<td>.03</td>
<td>.05</td>
<td>.07</td>
<td>.70</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>.01</td>
<td>.05</td>
<td>1.74</td>
<td>.16</td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.04</td>
<td>.06</td>
<td>-.07</td>
<td>-.69</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X EP</td>
<td>.18</td>
<td>.09</td>
<td>.21</td>
<td>1.99</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X EP</td>
<td>-.10</td>
<td>.05</td>
<td>-.20</td>
<td>-1.80</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step III</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>-.001</td>
<td>.003</td>
<td>.29</td>
<td>.58</td>
</tr>
<tr>
<td>AS X CD X EP</td>
<td>.06</td>
<td>.11</td>
<td>.06</td>
<td>.54</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 102.*
Table H2

*Hierarchical Regression Analysis Testing Interactions of Acculturative Stress, Cultural Distance, and English Proficiency in Predicting Working Alliance*

<table>
<thead>
<tr>
<th>Step</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td>.01</td>
<td>- .01</td>
<td>.01</td>
<td>.36</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>.07</td>
<td>.12</td>
<td>.06</td>
<td>.60</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>- .001</td>
<td>.07</td>
<td>- .001</td>
<td>- .01</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (PEP)</td>
<td>.08</td>
<td>.09</td>
<td>.09</td>
<td>.95</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step II</td>
<td>.05</td>
<td>- .01</td>
<td>.04</td>
<td>1.32</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD</td>
<td>- .17</td>
<td>.11</td>
<td>- .15</td>
<td>-1.46</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X PEP</td>
<td>.18</td>
<td>.17</td>
<td>.11</td>
<td>1.07</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X PEP</td>
<td>- .17</td>
<td>.10</td>
<td>- .19</td>
<td>-1.64</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step III</td>
<td>.06</td>
<td>- .01</td>
<td>.01</td>
<td>1.27</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X CD X PEP</td>
<td>.28</td>
<td>.20</td>
<td>.14</td>
<td>1.12</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* N = 102
Table H3

Hierarchical Regression Analysis Testing Interactions of Acculturative Stress, Cultural Distance, and English Proficiency in Predicting Session Quality

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td>.004</td>
<td>.02</td>
<td>1.15</td>
<td>.32</td>
</tr>
<tr>
<td>Acculturative Stress (AS)</td>
<td>-.05</td>
<td>.11</td>
<td>-.05</td>
<td>-.48</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Distance (CD)</td>
<td>.10</td>
<td>.05</td>
<td>.18</td>
<td>1.79</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Proficiency (PEP)</td>
<td>.05</td>
<td>.08</td>
<td>.05</td>
<td>.61</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.05</td>
<td>.001</td>
<td>.02</td>
<td>.89</td>
<td>.44</td>
</tr>
<tr>
<td>AS X CD</td>
<td>-.03</td>
<td>.09</td>
<td>-.03</td>
<td>-.37</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X PEP</td>
<td>.23</td>
<td>.15</td>
<td>.15</td>
<td>1.54</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD X PEP</td>
<td>-.03</td>
<td>.08</td>
<td>-.04</td>
<td>-.43</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step III</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>.006</td>
<td>.01</td>
<td>1.50</td>
<td>.23</td>
</tr>
<tr>
<td>AS X CD X PEP</td>
<td>.19</td>
<td>.15</td>
<td>.16</td>
<td>1.22</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 102.
References


http://dx.doi.org/10.1080/02699939208409696


http://dx.doi.org/10.1177/0022022196272006


