

MEETING AT THE CROSSROAD: THE RELATIONSHIP OF
ENGLISH LANGUAGE PROFICIENCY, PERFECTIONISM,
LENGTH OF STAY WITH SELF- ESTEEM AMONG
NON-NATIVE ENGLISH-SPEAKING
INTERNATIONAL
STUDENTS

By

MASAFUMI UEDA

Bachelor of Arts
Aoyama Gakuin University
Tokyo, Japan
1990

Master of Education
Boston University
Boston, Massachusetts
1997

Submitted to the Faculty of
the Graduate College of
Oklahoma State University
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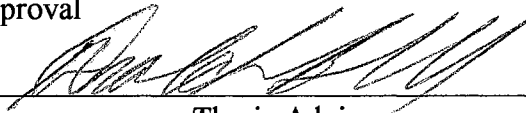
By

Masafumi Ueda

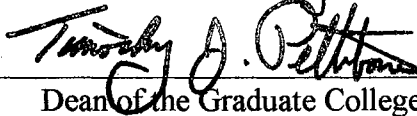
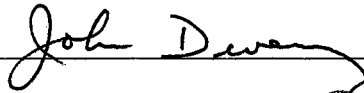
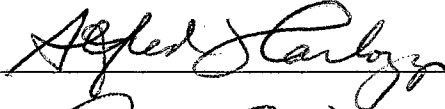
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Thesis Approval



Thesis Advisor



Dean of the Graduate College

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Preface

I remember citing Dr. Martin Luther King's famous speech "I have a dream!" in my personal statement when I applied for a Master's program at Boston University. Almost eight years have passed since that time. During this period, I have experienced various joys, have had numerous interesting encounters, as well as have been faced with a variety of challenges as an international student studying in the United States. These experiences have allowed me to grow both personally and professionally to a degree which may not have been possible, had I not come to the United States. Now I am about to graduate from Oklahoma State University with a Ph.D.. In a way, I have come to a crossroads in my life with many possibilities ahead of me. My dissertation reflects a culmination of my path up to this point. I would be delighted if the present study will help stimulate interest among other researchers regarding the issues of international students' adjustment and make a valuable contribution to this arena.

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CHAPTER I

Introduction

Historical Background

Contrary to a widely held belief, the international exchange of both students and scholars has a long history (Altbach, Kelly, & Lulat, 1985; Elenwo, 1988; Fasheh, 1984; Mncadi, 1993; Rad, 1986). As early as 600 B.C., traditional institutions such as Al-Azhar in Cairo, Egypt and the Hindu and Buddhist Universities of Taxila and Nalanda in India hosted both students and scholars and provided opportunities for the international exchange and the acquisition of greater knowledge (Altbach, Kelly, & Lulat, 1985; Dodge, 1961; Mncadi, 1993).

In the medieval period, European Universities such as Bologna, Florence, and Paris, which were the precursor of contemporary institutions, also attracted a great number of both students and scholars with little distinction being made between foreign

nationals and their native counterparts (Altbach, Kelly, & Lulat, 1985; Mandelbaum, 1956; Rad, 1986).

During the nineteenth century, many American scholars sought quality education in Europe for the purpose of gaining higher skills and knowledge, which were not readily available in the United States at the time. Naturally, the disproportionate flow of students was observed between the United States and Europe, going predominantly from the former to the latter (Altbach, Kelly, & Lulat, 1985). It was not until after World War II that the United States observed a rapid increase in the number of international students hosted in its higher institutions and became a major learning center for international students (Altbach, Kelly, & Lulat, 1985; Herbert, 1981; Rad, 1986).

Today hundreds of thousands of students from all over the world annually come to the United States to study with the expectation that it will be a rewarding experience for them. More specifically, Davis (1999) reported that there were a total of 490,933 international students studying at colleges and universities in the United States during the academic year 1998-1999, representing a 2% increase over the previous year. Compared to the number of international students in the academic year 1954-1955 (34,232), the total number of international students has increased by more than 1400% in the past 44 years. International students accounted for 3.6% of all higher education enrollments in the

United States, representing about 2.7% of all four-year undergraduate enrollments and 11.4% of graduate enrollments (Davis, 1999).

Davis (1999) indicated that more than half (56%) of the international students came from Asia. Chinese students represent the largest student population (51,001), followed by Japanese students (46,406) and Korean students (39,199). International students consisted of 58% males and 42% females in the year 1998-1999.

Business/Management and Engineering continue to be the two most popular majors among international students, accounting for approximately 20% and 15% of the international student population respectively (Davis, 1999).

During the academic year 1998-1999, it was estimated that the total combined expenditures on tuition and cost-of-living by the international students in the United States exceeded \$13 billion and given the fact that 75% of the international students receive their financial support from non-US sources (Davis, 1999), their economic contributions to the United States are considered to be enormous. In addition, international students can be a great resource in helping domestic students raise consciousness about global issues and acquire cross-cultural competencies (Hagey & Hagey, 1974; Paige, 1990). As a result, gaining a better understanding about what international students go through during their stay and paying close attention to their

welfare appear to be an important area that needs to be addressed by U.S. colleges and universities.

Statement of the Problem

Studying in a foreign country presents a unique set of challenges to most international students, since the culture of the host country is often based upon assumptions that are quite different from their own. Selltitz (1963) maintained that international students need to learn to adjust to a new culture, customs, and language, in addition to fulfilling their academic requirement. Furthermore, international students are also required to cope with their personal and social adjustments in the United States (Findsen, 1987).

Considering the fact that adjusting to a new environment is a challenge even to those native-born American students who are familiar with the U.S. culture, the challenges that international students need to face during their stay sounds even more arduous (Barratt, 1993; Maxwell, 1974). Pedersen (1991) noted that adaptation of international students requires learning new and “proper” roles of the host country in a short period of time and failure to learn these new roles will create conflicts and

confusion regarding their own identity. Given the fact that international students need to present themselves to the outside world through their use of English, English language proficiency seems to be one of the most important variables to successful adjustment, among other things, that were revealed by previous research. Findsen (1987) also indicated that the variable of English language is singled out and has been given special attention in the literature on international students' adjustment, due to its significant influence on general adjustment when English language proficiency is limited. Findsen (1987) further noted that although such variables as English language proficiency are commonly cited in the literature regarding international students' adjustment, it is relatively unknown how such factors interact to alter their experience at the personal level.

Crano (1986) pointed out that fluctuations in self-concept due to international exchange students' ambiguous status in the hosted country as a potentially important aspect of their difficulties. Crano (1986) writes, "These fluctuations (self-concept) may be exacerbated by feelings of inadequacy due to student's unfamiliarity with the culture and customs, their different physical attributes, and their less than native ability to speak" (p.4). Paige (1990) also refers to the potential reduction of self-esteem among international students facing adjustment in the host country. As previously stated, if

international students were to learn to adapt to new and “proper” roles of the host country as Pedersen (1991) suggested, they must present themselves to the outside world through the use of their English language skills. Relating to English language skills, Barratt (1993) indicated that some of the feelings international students sometimes experience as “feel(ing) like children, powerless and unable to express themselves easily on topics that they are expert in, or not knowing how to go about performing routine tasks and having to depend heavily on others to accomplish simple goals” (p.10). Other common feelings reported by international students are being treated like children rather than respectful, capable adults as they were in their home countries (Barratt, 1993) and reduction of their status in the host country compared to their experience in their home countries (Paige, 1990). Therefore it is reasonable to assume that English language proficiency, which is closely tied to their identity in the host country (in the United States), has ramifications for their level of self-esteem if they cannot fully express themselves in English.

Another variable that warrants attention is perfectionism, a construct that has been drawing greater attention in the psychological literature in recent years (Rice, Ashby, & Slaney, 1998; Slaney & Ashby, 1996). Traditionally, perfectionism has been generally associated with setting extremely and unreasonably high standards of performance for oneself (Frost, Marten, Lahart, & Rosenblate, 1990; Hamachek, 1978; Hewitt & Flett,

1991b; Preusser, Rice, & Ashby, 1994). Past research has shown that perfectionism is frequently associated with maladjustment and various psychological difficulties. The examples include depression (e.g., Burns, 1980; Hewitt & Flett, 1990; Hewitt, Flett, & Ediger, 1996), anxiety disorders (e.g., Alden, Bieling, & Wallace, 1994; Johnson & Slaney, 1996), obsessive-compulsive disorders (e.g., Broday, 1988; Frost & Gail, 1997), eating disorders (e.g., Axtell & Newlon, 1993), and suicide (e.g., Adkins & Parker, 1996; Hewitt, Flett, & Turnbull-Donovan, 1992). In addition, perfectionism is also associated with self-esteem (e.g., Cheng, Chong, & Wong, 1999; Flett, Hewitt, Blankstein, & O'Brien, 1991; Hamachek, 1978; Preusser, Rice, & Ashby, 1994; Rice, Ashby, & Slaney, 1998).

In addition to above variables, non-native English-speaking international students' length of stay in the United States was explored in this study. It makes intuitive sense that their adjustment difficulties will decrease over time as they become used to the host country. In fact, Rad (1986) noted that much of the past research with international students entertained such a presumption. However, the findings were inconclusive (e.g., Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002; Rad, 1986; Ward, Kennedy, Okura, & Kojima, 1998).

The present study attempts to examine the relationship between the following variables among non-native English-speaking international students: English language proficiency, perfectionism, length of stay in the U.S., and self-esteem.

Research Questions and Hypotheses

1. What is the relationship of English language proficiency, perceived English language proficiency (speaking, listening, reading & writing), perfectionism, and length of stay in the United States with self-esteem among non-native English speaking international students studying in the United States?

H1: Lower English language proficiency (lower TOEFL score), lower perceived English language proficiency, higher perfectionism score, and shorter length of stay will predict significantly lower self-esteem at present.

2. What is the relationship of English language proficiency, perceived English language proficiency (speaking, listening, reading & writing), perfectionism, length of stay in the United States with changes in self-esteem (difference between at home and at present) among non-native English-speaking international students in the United States?

H2: Lower English language proficiency, lower perceived English language proficiency, higher perfectionism, and shorter length of stay will predict significantly larger difference in self-esteem at present and at home.

Significance of the Study

This study examines the relationship between English language proficiency (both perceived and objective), perfectionism, length of stay, and self-esteem among non-native English-speaking international students studying in the United States, specifically at a large Southwestern public university. A review of both Eric (2002) and PsychInfo (2002) for literature search indicated that there has been no single study conducted to date exploring the relationship between English language proficiency, perfectionism, length of stay, and self-esteem among international/foreign students. It is hoped that this present study will contribute to further understanding of international students and their experiences during their stay in the United States and provide some empirical evidence to assist both professionals and individuals who are likely to be involved with this student population within the U.S. higher education institutions and their surrounding communities.

Definition of Terms

Foreign Student/International Student: The terms may be used interchangeably in this study. It refers to “students who claim permanent residence in a foreign country but are temporarily residing in the United States in order to study.” (Barratt, 1993, p. 26). For purposes of this study, it involves both undergraduate and graduate college or university students as well as those who are studying in ESL (English as a Second Language)/IE (Intensive English) programs.

English Language Proficiency: For purposes of this study, it is operationally defined as the total score on the TOEFL (Test of English as a Foreign Language) test reported by students. An overwhelming majority of the participants in this study reported their scores from the Paper/Pencil-Based version of the TOEFL test. For those who reported their scores from the Computer-Based version, scores were converted into the former using the conversion table listed on the TOEFL brochure.

Perceived English Language Proficiency: For purposes of this study, it is operationally defined as the self-evaluation of students’ general English language skills involving speaking, listening, reading and writing (see Appendix C).

Length of Stay: It refers to the length of time measured in months that international students have lived in the United States.

Non-native English-speaking International Student: The term refers to those international students whose native/first language is not English.

Perfectionism: It refers to “having high standards of performance accompanied by overly critical evaluations of one’s own behavior” (Fischer & Corcoran, 1994, p.232; Frost, Martin, Lahart, & Rosenblate, 1990). It is operationally defined in this study as a total perfectionism scale score of the Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990).

Self-esteem: It refers to “the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy” (Coopersmith, 1967, pp. 4-5). For purposes of this study, self-esteem is measured twice with the Rosenberg Self-esteem Scale (Rosenberg, 1965), one for the present and the other for the perceived self-esteem at home before coming to the United States in order to establish the baseline.

Assumptions

The following assumptions in this study should be noted.

1. It was assumed that instruments and demographic questionnaire used in this study were valid and reliable for studying international students.
2. It was assumed that all participants in this study had a clear understanding of all written instructions and questions provided in this study.
3. It was assumed that all participants responded to both instruments and the questionnaire to the best of their knowledge and in a candid manner.
4. It was assumed that counterbalancing in the administration of instruments controlled any influence that they might have had if they were all given in the same order.

Limitations

The following limitations should be taken into account when interpreting the results of this study.

1. The sample of this study at a large Southwestern public university may not be applicable to a general population of non-native English-speaking international students.

2. All participants of this study were on a voluntary basis. Therefore, the group may not be representative of nonvolunteer population.
3. All data in this study were derived from self-report instruments. Therefore, the results might be influenced by such factors as social desirability and experimenter bias.
4. The retrospective nature of assessing the level of self-esteem in the home country as a baseline may not accurately reflect the actual state of their self-esteem at the time.
5. Using past TOEFL score as an objective measure of assessing the participants' English language proficiency may not accurately represent their current level of English language proficiency. In addition, since the general TOEFL test does not assess English speaking ability, it may not be indicative of one's actual ability in that area even if he/she obtained high scores on the test.

CHAPTER II

Review of the Literature

The literature on international student adjustment problems with regard to length of stay, English proficiency, issues of self-esteem, and perfectionism is reviewed in this chapter.

International Student Adjustment Problems

There have been a number of studies focused upon the adjustment of international students. Wehrly (1988) stated that many of these studies indicated the special needs of these students. These international students are frequently identified as a higher-risk group with significant stress who have more psychological problems than their U.S. peers (Sandhu & Asrabadi, 1994). According to Paige (1990), international students are culturally different from host nationals, bringing their own cultural systems with them. These cultural systems include a different set of values, beliefs, patterns of behavior,

learning and thinking styles. Some of these cultural systems strike a sharp contrast to that of the host country, often causing serious adjustment difficulties for international students (Barratt, 1993; Church, 1982; Paige, 1990; Pedersen, 1991; Sandhu & Asrabadi, 1994). In fact, Paige (1990) indicated, “researchers and practitioners have identified cultural adjustment as one of the major problems facing international students” (P.167).

Despite the fact that individuals from different cultures differ in the extent to which they experience certain problems in a host country, Church (1982) indicated that the nature of problems reported by international students has basically remained the same for the past 30 years. Church cited language difficulties, financial problems, adjusting to a new educational system and social customs and norms, homesickness, and for some students, racial discrimination as the most commonly reported problems by international students. Lee, Abd-Ella, & Burke share a similar view (cited in Manese, Sedlacek, & Leong, 1988) but these authors as well as Wehrly (1988) also included loneliness as another problem. In addition, it is reported that international students often experience depression (Paige, 1990; Wehrly, 1988), feelings of social isolation (Yang et al., 1994), frustration, uncertainty, anger, homesickness, and anxiety (Paige, 1990) in response to what is frequently called “culture shock”, the term Oberg defined as an “occupational disease” experienced by individuals who are suddenly introduced to a culture that is very

different from their own (in Church, 1982). Oberg associated this phenomenon with anxiety stemming from losing one's familiar signs and symbols of social intercourse, such as customs, nonverbal behaviors and words. However, "culture shock" is generally considered as a normal process of adaptation to cultural stress (Church, 1982).

Issues Related to Length of Stay

Much of the past research with international students assumed that adjustment difficulties would decrease with time (Rad, 1986). However, these findings have presented inconsistent results. For example, in exploring the relationship between GPA and the length of stay in the U.S. among international students, Moghrabi (1966, cited in Rad, 1986) found no significant relationship between these two variables.

Spaulding and Flack (1976) reviewed the literature and reported that for those international students who stayed less than two years exhibited a tendency to maintain their traditional cultural and religious values. For those who stayed longer than two years, changes were observed in them, placing increased values on knowledge, freedom, and open-mindedness. However, consistent with the former population, no significant

changes were observed in their views and their feelings toward basic cultural beliefs and home country.

Rad (1986) examined the relationship of academic, personal, and interpersonal problems with length of stay among non-native English-speaking international students and reported that no significant relationships among these variables were found. Rad (1986) concluded that adjustment problems neither increase nor decrease over time among these international students and added that in most cases, new problems tend to appear as students handled other previous problems.

Ward et al. (1998) examined 35 Japanese students in New Zealand and reported that both psychological (depression) and socio-cultural (social difficulty) adjustment problems were greatest at the point of entry and decreased over time. However, no significant differences were found across the subsequent three testing sessions measured at four, six, and 12 months after the initial entry.

Hechanova-Alampay, Beehr, Christiansen, & Van Horn (2002) studied international and domestic sojourners regarding their adjustment process over six months period at a mid-western US state University. Consistent with their hypothesis, they found that both groups exhibited a linear adjustment pattern, which increased over time. However, the pattern of strain was found to be curvilinear for both groups, with level of

strain highest at three months after the initial entry and lowest at the entry and six months after the entry. In addition, self-efficacy was found to be positively related to adjustment and negatively related to strain for both international and domestic sojourners. For both groups, the stronger relationship of self-efficacy, adjustment, and strain was observed at the entry point than six months after the entry point. Hechanova-Alampay et al. (2002) also reported that international students generally presented more adjustment problems upon entry and three months into the semester than those domestic sojourner counterparts.

While the notion that international students' adjustment problems would decrease over time makes intuitive sense, past research has shown mixed results. Further research is needed to unravel the complexity in this area.

Issues related to English Language and Communication

Numerous studies have identified English language proficiency as one of the most prevailing concerns among international students as well as a valuable asset to successful adjustment (Cadioux & Wehrly, 1986; Findsen, 1987, Rad, 1986).

For example, Sharma (1969) examined the nature of problems experienced by Indian students at 322 educational institutions in the United States and found that more than 50% of these Indian students reported their struggles in oral communication as well as in writing papers.

A study conducted by Domingues (1970) reported that international students' major concern was related to their financial condition. However, Domingues also identified English language fluency as another important area that influences the success of an international student's academic and social adjustment.

White, Brown, and Suddick (1983) surveyed randomly selected international students who had completed at least two terms of coursework. Results of the study indicated that a lack of English language competency as well as difficulties in test taking and study techniques hampered international students' ability to perform at their optimum scholastic level in school.

Rad (1986) studied relationships between adjustment difficulty, length of time to adjust, and various nonacademic characteristics of 142 non-native English-speaking foreign students at the University of Houston. These participants completed a questionnaire and 10 volunteers among them were interviewed. The author found that (1) personal background and length of stay in the U.S. had no bearing on academic

performance, personal, and interpersonal adjustment of the participants; (2) higher language proficiency was associated positively with better adjustment in academic areas; (3) severity of personal problems was related to students' perceptions of American attitudes toward the students' home country; (4) an inverse relationship was found between severity of personal and/or interpersonal problems and academic satisfaction; (5) students with less serious academic problems were better satisfied with academic aspects of the sojourn. The findings suggested that the academic adjustment of these participants is directly related to their satisfaction with academic aspects of the sojourn and language proficiency.

Heikinheimo and Shute (1986) examined 42 randomly selected African and Southeast Asians at a Canadian University regarding their adjustment process using a qualitative method. The study identified language skills, academic issues, cultural differences, racial discrimination, and social interaction with Canadians as the areas requiring adjustment by these students. Concerning language skills, it was found that African students generally demonstrated more confidence in their English skills than did Southeast Asian students because all African students in the sample had studied English in their home countries. However, these African students expressed concerns about being understood due to their differences in accents. Southeast Asian students, on the other

hand, reported having serious problems in understanding lectures, taking notes, answering questions, and writing essays. One of the Asian students in this study expressed his dilemma and frustration as follows:

Teachers say, "Why are Chinese quiet?" Understanding problems causes silence and vocabulary causes difficulties. My Skill of writing is quite poor. Sometimes I do poorly in exams because my English isn't enough. I express things in my own way and the profs don't get it" (P. 401).

Heikinheimo and Shute (1986) also indicated that almost all these international students set academic achievement as their highest priority. As a result, strong academic pressure is frequently experienced by these students. Finally, they suggested that there is an inverse relationship between one's English language skills and one's degree of subsequent social and academic adjustment difficulties.

Mncadi (1993) examined the international graduate students' problems and coping strategies and found that fluency in English language is an essential factor in integrating to the host culture. In addition, inadequacy in English language poses challenges in a classroom setting. A South American female in the study stated that answering and asking questions is intimidating and said, "I am afraid to because of my accent and the fact that I cannot express myself well" (P.70). The study also revealed that

some international students perceived Americans were not making enough effort to understand international students' unique accents. A Middle Eastern male, for instance, expressed his feelings by saying, "I do not have a problem understanding American English, but Americans have a difficulty understanding me. I have noticed that they do not bother to understand an international person's accent" (P. 71). The study shows that even if a person is fluent in English, he or she may experience a hard time being understood if his or her accent is strong.

These findings and others appear to suggest English language proficiency plays a crucial role in determining international students' successful adjustment in a host country.

Self-esteem

Although the theoretical construct of self-esteem has existed for a long time, due to the ambiguity of the construct itself, researchers have faced difficulty in reaching a consensus about the definition of self-esteem (Mruk, 1999; Sinden, 1999). For example, what is the difference between self-esteem and self-concept? In fact some people use these two terms interchangeably to mean the same thing. However, according to Elenwo (1988), self-concept refers to "a person's ideas about himself; the value or judgment a

person places on himself and his behavior” whereas self-esteem refers to “feeling of personal worth” (P. 23). In other words, self-concept focuses upon one’s thinking while self-esteem emphasizes one’s feeling. Coopersmith defined self-esteem in his classic writing as “the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy” (Coopersmith, 1967, PP. 4-5). As Branden (1992) suggested, self-esteem appears to rest on two interrelated components: a sense of personal self-efficacy and a sense of personal worth.

Sinden (1999) noted that self-esteem, which concerns the satisfaction and dissatisfaction with oneself, is a psychological construct influenced by the developmental process. Based upon the information and feedback from other people and through a process of self-evaluation regarding one’s performance, people begin to formulate the idea of their own self-worth (Harter, 1982; Mruk, 1999; Sinden, 1999).

In response to the notion that self-concept/self-esteem is a fairly stable concept, Mruk (1999) stated,

“self-esteem is like an organic system in that even though it reaches a certain degree of stability by adulthood, it also seems to remain open to change. After all,

if this were not the case, how could we say that a person has chronically low self-esteem and that he or she should work on improving it?" (P. 24).

More than 100 years ago, William James thought that personal expectations was the intervening variable for assessing self-esteem. James developed the following formula viewing self-esteem from having the character of a ratio: Self-esteem = Success/Pretensions (James, 1890/1983, in Mruk, 1999). Mruk (1999) noted that since ratio expresses a dynamic relationship rather than static one, according to this view, self-esteem could be altered by changing the amount of either denominator or numerator.

Franken (1994) also shares a similar stance regarding the possibility of change in self-concept/self-esteem. He stated,

“there is a growing body of research which indicates that it is possible to change self-concept. Self-change is not something that people can will but rather it depends on the process of self-reflection. Through self-reflection, people often come to view themselves in a new, more powerful way, and it is through this new, more powerful way of viewing the self that people can develop possible selves”
(P.443)

From the above, it appears that it is reasonable to assume that although

self-concept/self-esteem has a generally stable quality, self-concept/self-esteem also

remains open to change in response to situational and contextual influences. However, this controversy is far from over.

Crano (1986), for example, examined the relationship between the self-concept and the cultural adjustment of 251 Latin American high school international exchange students in the United States and found that students who scored high on their pre-departure self-concept measures expressed fewer and less severe adjustment problems compared to those who did not score as high. In addition, the high correlations were found among the measures of self-concept administered at different times, indicating that “self-concept” is a fairly stable and consistent organization.

Drawing on her 1995 dissertation, Luzio-Lockett (1998), however, presents a different picture. Luzio-Lockett studied international students in the United Kingdom and found that language restrictions and other affective and situational factors can be detrimental to academic performance, resulting in lowered self-esteem compared to the time when they were at their home country. One student in the study said, “because of this linguistic restriction I can’t have a positive self-concept (much more socially than academically) despite the fact that I was a confident person with a positive self-concept in my country” (p. 217). Another student commented, “Besides the frustration of not being able to express myself, I feel diminished by how my classmates would evaluate me in my

professional capacity, unacceptable (sic) or unknowledgeable” (p. 217). These statements suggest that self-esteem can be negatively affected by their own perceptions of themselves as well as their perceptions of how others view them in association with their English language proficiency.

Various past cross-national comparative studies exploring self-esteem have generally shown that people from the Western countries tend to have higher self-esteem compared to those from the non-Western countries. Sethi and Calhoun (1986), for example, studied 200 students ages between 10 to 14 from the United States and India using the Coopersmith Self-esteem Inventory and found that the American students had significantly higher self-esteem scores than the students from India. Using the same instrument, Wood, Hillman, and Sawilowski (1995) examined the 112 African-American students of Grades seven and eight who were academically at risk of dropping out of school. They compared the at risk students’ means to the samples of Sethi and Calhoun’s study (1986) and found that while both African-American and heterogeneous American student groups shared similar self-esteem scores, their self-esteem scores were significantly higher than those of the Indian student sample. No significant gender differences were found in either study.

Watkins, Lam, and Regmi (1991) studied self-esteem among Nepalese children and compared their result to the Australian and Filipino counterparts. They reported that the Australians tended to have a relatively higher non-academic spheres of self-esteem compared to those of the two other countries. However, concerning academic spheres of self-esteem, mean scores of these three countries were not significantly different.

Radford, Mann, Ohta, and Nakane (1993) examined decisional aspects of self-esteem among Japanese and Australian university students and found that Japanese students scored lower on decisional self-esteem, higher on decisional stress and exhibited a tendency to utilize coping styles reflecting collectivist society compared to Australian students. These findings appear to suggest that there are international differences (e.g., culture, ethnicity) that may be profound and have an influence on self-esteem, as Wood, Hillman, and Sawilowski (1995) concluded.

One important study particularly relevant to the present study was conducted by Barratt (1993). She examined the relationships among several variables and the adjustment of international undergraduate students and found that adjustment is positively related to interpersonal relationships with Americans, written and oral/aural English language skills, and region of origin. In addition, interpersonal relationships were also found to be positively related to the students' self-esteem at present time, as well as

to their written and oral/aural English language skills. Self-esteem was also positively related to written and oral/aural English language skills. However, the self-esteem of international students at home and at present did not differ significantly.

Perfectionism

It is noted that the psychological literature on perfectionism has grown particularly over the past decade (Blatt, 1995; Rice, Ashby, & Slaney, 1998; Slaney & Ashby, 1996). The trend has generally been observed that negative aspects of perfectionism were highlighted in the literature (Blatt, 1995; Burns, 1980; Pacht, 1984; Rice, Ashby & Slaney, 1998). Past research has indicated that perfectionism is frequently associated with maladjustment and various psychological problems, including depression (e.g., Burns, 1980; Hewitt & Flett, 1990; Hewitt, Flett, & Ediger, 1996), anxiety disorders (e.g., Alden, Bieling, & Wallace, 1994; Johnson & Slaney, 1996), Obsessive-compulsive disorders (e.g., Broday, 1988; Frost & Gail, 1997), eating disorders (e.g., Axtell & Newlon, 1993), and suicide (e.g., Adkins & Parker, 1996; Hewitt, Flett, & Turnbull-Donovan, 1992). In addition, several studies examined the issues of perfectionism and self-esteem (e.g., Cheng, Chong, & Wong, 1999; Flett, Hewitt,

Blankstein, & O'Brien, 1991; Hamachek, 1978; Preusser, Rice, & Ashby, 1994; Rice, Slaney, & Ashby, 1998).

Traditionally, the definition of perfectionism has been centered around one's tendency to set unreasonably high standards of performance for oneself (Frost, Marten, Lahart, & Rosenblate, 1990; Hamachek, 1978; Hewitt & Flett, 1991b; Preusser, Rice, & Ashby, 1994). However, this definition appears to fail to capture the positive aspect of being a perfectionist, those who are able to capitalize on their tendencies to success.

Adler (1956) maintained that striving for perfection is a normal part of human development. However, it becomes problematic when individuals set unrealistically high standards of superiority in achieving their equally unrealistic goals (Rice, Ashby, & Preusser, 1996; Rice, Ashby, & Slaney, 1998).

Hamachek (1978) also suggested that there are two types of perfectionists: normal and neurotic. Normal perfectionists are those who apply high standards for themselves but "who feel free to be less precise as the situation permits" (p. 27). In other words, although normal perfectionists also set high standards for themselves, they can be flexible in their self-evaluations when things don't work out as they were planned because they are also capable of establishing performance boundaries that allows for their weaknesses and strengths (Hamachek, 1978). As a result, normal perfectionists utilize their

perfectionistic tendencies in a more positive and healthy way in order to improve themselves and attain their goals. Such attitudes often bring about a deep sense of satisfaction and enhancement of one's self-esteem (Hamachek, 1978).

On the other hand, neurotic perfectionists are governed by their own feelings that even with their best efforts, they never seem to be good enough. Unlike normal perfectionists, such attitudes would most likely reduce one's self-esteem (Hamachek, 1978). Another difference between normal and neurotic perfectionists is that the former is motivated by a need for achievement, while the latter is driven by a fear of failure that leads to avoidance behavior (Hamachek, 1978).

Until recently, the construct of perfectionism has been treated as if it were unidimensional (Burns, 1980; Frost et al., 1990; Hewitt & Flett, 1991b; Rice, Ashby, & Slaney, 1998). However, recent views have stressed that perfectionism to be multidimensional in nature (Frost et al., 1990; Hewitt & Flett, 1991b; Rice, Ashby, & Slaney, 1998). Frost et al. (1990) argued that the definition of perfectionism should encompass setting high standards of performance for oneself, which is accompanied by overly critical evaluations of one's own behavior. They (1990) developed the Frost Multidimensional Perfectionism Scale that has six subscales: Concern over Mistakes

(CM), Personal Standards (PS), Parental Expectations (PE), Parental Criticism (PC), Doubts about Actions (D) and Organization (O) (see methodology section).

Hewitt and Flett (1991b) developed another scale called the Multidimensional Perfectionism Scale (MPS), dividing perfectionism into Self-Oriented, Other-Oriented, and Socially Prescribed subscales. Both Frost et al. (1990)'s and Hewitt and Flett's model have good psychometric properties and have been used extensively in exploring the issue of perfectionism.

Empirical work on the relationship between perfectionism and self-esteem is still limited. Flett, Hewitt, Blankstein, & O'Brien (1991) examined perfectionism and depression among college students and found that aspects of perfectionism that could be considered adaptive perfectionism were modestly correlated to self-esteem and unrelated directly to depression. In addition, aspects of maladaptive perfectionism were associated with lower self-esteem and greater depression (Rice, Ashby, & Slaney, 1998). Preusser et al. (1994) examined the maladaptive perfectionism and depression and found support for the mediating role of self-esteem.

In this chapter, the international students' adjustment problems with regard to length of stay, language proficiency, issues of self-esteem, and perfectionism were reviewed. The review of the literature indicates that these topics are important areas to

explore. Since there has been no single study conducted on examining the relationship between English proficiency, perfectionism, length of stay, and self-esteem among international students, it is hoped that this research will make a valuable contribution to this arena.

CHAPTER III

Research Method

Overview

The primary goal of this study was to examine the relationship between self-esteem and the following variables among non-native English-speaking international students: English language proficiency (both perceived and objective), perfectionism and the length of time in the United States. Participants, independent/predictor and dependent/criterion variables, instrumentation, procedure, and statistical analysis are discussed in this section.

Participants

The participants in this study were comprised of 93 non-native English-speaking international students recruited at a large Southwestern public university. According to the preliminary information obtained from the University's International Students and

Scholars Office, there were 1705 international students (both undergraduate and graduate) enrolled in the fall semester of the year 2000, representing 116 countries from around the world. The five largest student populations among international students were as follows: (a) India (297), (b) Malaysia (211), (c) China (204), (d) Indonesia (111), and (e) Korea (98). These top five countries together indeed accounted for more than 45% of the total international student population at the university in the present study.

The demographic characteristics of study participants are summarized in Tables 1 and 2. Approximately 59.1% of participants were males, ages ranged from 18 to 45 years of age ($M = 25.67$, $SD = 5.44$), and the majority of participants were graduate students (54.8%). Although participants were from 20 different countries of origin, approximately 80.6% of participants were from Asian countries ($n = 75$). For participants in the present study, length of stay in the U.S. ranged from one to 295 months, with a mean of 35.42 months and a median of 24 months ($SD = 37.91$).

Table 1
Demographic Characteristics of Participants (N = 93)

Demographic Variables	<i>n</i>	%
Gender		
Male	55	59.1
Female	38	40.9
Student Classification		
Undergraduate	37	37.8
Graduate	51	54.8
English Language Institute (ELI)	3	3.2
Undergraduate and ELI	2	2.2
Country of Origin		
Japan	14	15.1
Indonesia	18	19.4
China	4	4.3
Malaysia	10	10.8
India	5	5.4
Taiwan	10	10.8
Thailand	3	3.2
Hong Kong (China)	2	2.2
South Korea	4	4.3
Pakistan	4	4.3
Germany	2	2.2
Italy	1	1.1
The Netherlands	1	1.1
Bulgaria	2	2.2
Turkey	4	4.3
Georgia	1	1.1
Lebanon	3	3.2
Saudi Arabia	2	2.2
Jordan	1	1.1
Mexico	1	1.1
Ecuador	1	1.1

Table 2

Age and Length of Stay of Participants in the U.S. (N = 93)

Demographic Variables	<i>M</i>	<i>SD</i>
Age	25.67	5.44
Length of Stay (Months)	35.42	37.91

Independent/Predictor Variables

The predictor variables in this study were English language proficiency as measured by the total score of TOEFL (Test of English as a Foreign Language) reported by each student, perceived English language proficiency as measured by international students' self-evaluation of English language skills (speaking, listening, reading, and writing), perfectionism as measured by the Multidimensional Perfectionism Scale (FMPS; Frost, Marten, Lahart, & Rosenblate, 1990), and the length of time that international students had lived in the United States.

Dependent/Criterion Variable

Self-esteem as measured by the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) was studied as the criterion variable in this study. More specifically, both self-esteem at present and changes in self-esteem as measured by the difference in scores

between the self-esteem at present and the self-esteem at one's home country were examined as the criterion variables in this study.

Instrumentation

Three instruments were used to collect data in this study: Participant Questionnaire, the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), and the Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990).

Participant Questionnaire

The researcher created the Participant Questionnaire in order to understand the background of the participants in this study. Variables asked in the questionnaire included; age, gender, country of citizenship, academic level of student, length of stay in the U.S., highest TOEFL score obtained, self-evaluated overall English language competency as well as the participants' respective speaking, listening, reading, and writing skills in English, and the items related to their perceived mistreatment experiences in the United States. These Self-evaluated English language competencies and perceived mistreatment experiences were measured on 5-point Likert-type scales.

The Rosenberg Self-Esteem Scale (RSE)

The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) was used twice to assess self-esteem at home (RSE Form A) and at present (RSE Form B). In assessing self-esteem at home, the participants were asked to fill out the RSE as if it had been filled out before coming to the United States.

The RSE is a self-report measure consisting of 10 items on a four point Likert-type scale ranging from 1 = “strongly agree” to 4 = “strongly disagree”. Half of the items are worded positively and another half of the items are worded negatively. These positively worded items were reversely coded and added together with the rest of the items to obtain the total score for both Form A and B. The higher score indicates the higher self-esteem. It purports to measure general or global self-esteem (Rice, Ashby, Preusser, 1996; Wylie, 1989).

Goldsmith (1986) reported that internal consistency reliability ranges from .86 to .93. Concerning test-retest reliability, Crandall (1973) reported it as $r = .85$ over a two week interval (as cited in Rice, Ashby, Preusser, 1996).

Due to its simplicity (shortness and the use of easily understood language), the RSE appears to be an appropriate instrument for assessing self-esteem with international students.

The Multidimensional Perfectionism Scale (FMPS)

The Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990) was used to assess perfectionism in this study. The FMPS is a 35 item self-report measure using a five point Likert-type scale ranging from 1 = “strongly agree” to 5 = “strongly disagree”. The FMPS yields a total perfectionism score as well as the following six subscale scores: (1) Concern over Mistakes (CM), (2) Personal Standards (PS), (3) Parental Expectations (PE), (4) Parental Criticism (PC), (5) Doubts about Actions (D), and (6) Organization (O).

The Concerns over Mistakes (CM) subscale consists of nine items and measures negative reactions to mistakes and the tendency to view mistakes as failure. The Personal Standards (PS) subscale consists of seven items and measures one’s tendency to set high standards, goals, and expectations for his/her performance. The Parental Expectations subscale (PE) consists of five items and assesses the belief that parents had high

expectations and set high standards for oneself. The Parental Criticism (PC) subscale has four items that measure the perception that parents are overly critical. The Doubts about Actions (D) subscale has four items that assess the extent to which respondents have doubts about their ability to accomplish tasks effectively. The Organization (O) subscale consists of six items and measures the extent to which respondents place importance on precision, order, and organization. A total perfectionism scale score is obtained by adding all subscale scores except Organization scores as the Organization scale was found to be loosely connected to the other scales (Frost et al., 1990). Thus the potential total perfectionism score ranges from 35 to 175 with the higher scores indicate a greater degree of perfectionism.

Adequate to excellent reliability has been reported for the FMPS scale. Frost et al. (1990) reported that Cronbach's coefficient alphas of the past research studies using the FMPS have ranged from .77 to .93. The Cronbach reliability alpha for the total scale was .90. The internal reliability coefficients for the six subscales were reported to be CM = .88, PS = .83, PE = .84, PC = .84, D = .77 and O = .93.

The FMPS also has good concurrent validity as evidenced by statistically significant correlations between other perfectionism scales (Fischer & Corcoran, 1994; Rice & Mirzadeh, 2000) such as the Burns Perfectionism Scale (1980), the Internal Belief

Test, and the Eating Disorder Perfectionism Scale as well as with more recent perfectionism scales such as another Multidimensional Perfectionism Scale (MPS) and the Almost Perfect Scale.

Procedure

Recruiting participants from international student populations often posits a challenge to many researchers since they are generally spread around on campus. In order to have access to the international student population, the following approaches were employed. First, this researcher contacted the International Students and Scholars Office for their help in recruiting participants for this study and was able to obtain the list of contact information for various international student organizations. Based on this list, this researcher contacted the various international student organizations as well as networked in order to obtain participants for this study. Specifically, the researcher contacted the various presidents of international student organizations and asked them for their assistance in distributing the research packets for their member students. The researcher also posted announcements/flyers on campus to recruit subjects. In addition, in order to maximize the recruitment, this researcher conducted a \$100 prize raffle and the lucky

winner was selected from the participants in this study and rewarded with the prize.

A total of 233 research packets were distributed and 97 were returned (41.6%). However, of those, 4 had to be eliminated because of incomplete information. Thus, a total of 93 subjects was obtained in this study. These data were collected during the summer of 2001 between 6/13/01 and 8/30/01. Each participant received a research packet consisting of the above listed instruments (Participant Questionnaire, RSE Form A&B, and FMPS) presented in a counter balanced format along with a cover letter and a consent form with a raffle ticket. A stamped return envelope addressed to the researcher was provided for his/her convenience. Participation in this study was on a voluntary basis. All the information obtained was kept confidential and the results were examined in the aggregate form. The participants were most likely able to complete this research packet within 20 minutes.

Statistical Analysis

This study is primarily a predictive study exploring the relationship between both perceived and objective English language proficiency, perfectionism, and length of stay with non-native English-speaking international students' self-esteem.

H1: Lower English language proficiency (lower TOEFL score), lower perceived English language proficiency, higher perfectionism score, and shorter length of stay will predict significantly lower self-esteem at present.

In order to test the above hypothesis, simultaneous multiple regression analysis was employed with a significance level set at $\alpha = .05$.

H2: Lower English language proficiency, lower perceived English language proficiency, higher perfectionism, and shorter length of stay will predict significantly larger difference in self-esteem at present and at home.

In order to test the above hypothesis, simultaneous multiple regression analysis was employed with a significance level set at $\alpha = .05$.

CHAPTER IV

Results

This chapter summarizes the results of the statistical analyses performed on the data collected in the investigation. The analyses are categorized into four areas: (a) analyses on the reliability of the measures, (b) descriptive and correlational statistics on the measures, (c) analyses used to test the hypotheses, and (d) post hoc analyses.

Reliability of the Measures

Cronbach's coefficient alphas were produced to assess the internal consistency reliability of the measures used to test the hypotheses (see Table 3). Reliability of the measures was remarkably similar with reliabilities ranging from .84 (Multidimensional Perfectionism Scale) to .88 (Rosenberg Self-Esteem Scale: Present). Thus, all coefficients were in the range of acceptable reliability established by psychometric experts (Anastasi & Urbina, 1997).

Table 3

Reliability Coefficients for Instruments (N = 93)

Measure	Cronbach's Alpha	Number of Items
Rosenberg Self-Esteem Scale: Present	.88	10
Rosenberg Self-Esteem Scale: Home	.86	10
Perceived English Proficiency	.85	4
Multidimensional Perfectionism Scale	.84	29

It is important to note that, in the present study, participants perceived English language proficiency was measured in two ways. The first way of defining this construct was by participants' responses to a single item (Item 8) that asked their "overall competency in the use of English language."

The second method of measuring perceived English proficiency was by averaging individuals' responses to four separate items that asked participants how competent they perceived themselves to be in speaking (Item 9), listening (Item 10), writing (Item 11), and reading (Item 12) English. The coefficient alpha for these four items indicated a high degree of consistency among the responses on these items ($\alpha = .85$). Because reliability coefficients cannot be produced for single-item measures, a reliability estimate was only available for the four items, not the single-item measure of perceived overall English proficiency.

Descriptive Statistics and Correlations

Table 4 summarizes the descriptive statistics on each variable used to assess the hypotheses.

Table 4

Descriptive Statistics for Measures (N = 93)

Variables	<i>M</i>	<i>SD</i>	Min.	Max.
Self-Esteem: Present	30.24	5.94	12	40
Self-Esteem: Home	30.70	3.31	11	40
Self-Esteem: Difference	-.45	3.93	-11	21
TOEFL Scores	558.89	45.39	460	647
Perceived English Language Proficiency ^a	3.54	.82	1	5
Perceived English Language Proficiency ^b	3.56	.75	1.5	5
Perfectionism	83.88	14.49	47	123
Length of Stay	35.52	37.90	1	295

Note. ^a 1 item. ^b 4 items.

These statistics indicate that the distributions for the variables had a respectable degree of variability. The only exception to this was the length of participants' stay; this variable had substantial variability indicated by the fact that the standard deviation of the variable exceeded the size of its mean.

The means and standard deviations for the single-item and four-item measures of perceived English competency were remarkably similar. Moreover, the Pearson correlation between this single and multiple item measure was very large, $r(91) = .92$, $p \leq .001$, indicating that the two measures shared nearly 85% of their variability in common. Given this high relationship, a decision was made to test the hypotheses using the single item measure of perceived English competency. The rationale for this decision was that the single-item measure had somewhat greater variability than the multiple item measure, and increased variability increases the power of correlational analyses (Tabachnick & Fidel, 2001). Furthermore, testing of hypotheses using both variables resulted in no noticeable differences in the patterns of the findings of the single-item or four-item measures. Thus, for parsimony, only the results for the single item measure of English competency are presented hereafter.

A paired samples t test was performed to determine if there were statistically significant differences between the two self-esteem variables (i.e., Self-esteem at the time of the study [at present] and self-esteem before coming to the U.S. [at home]). There were no statistically significant differences between the self-esteem scores at present ($M = 30.24$, $SD = 5.31$) and scores at home ($M = 30.70$, $SD = 5.94$), $t(91) = 1.11$, $p \leq .271$.

Table 5 displays the intercorrelations among the research variables. Self-esteem at present demonstrated a significant and large positive correlation ($r = .76, p \leq .001$) with at home self-esteem, indicating substantial shared variability between these two self-esteem ratings.

Difference scores were created to test Hypothesis 2 by subtracting self-esteem at home scores from self-esteem at present scores. These difference scores had a statistically significant, moderate correlation with self-esteem at present ($r = .48, p \leq .001$), but only a negative, non-significant correlation with at home self-esteem scores ($r = -.19, p \leq .053$).

Table 5

Correlations Among Main Variables (N = 93)

	1.	2.	3.	4.	5.	6.	7.
1. Self-Esteem:							
Present	--	.76 ***	.48 ***	.27 **	.37 ***	-.21 *	-.02
2. Self-Esteem: Home		--	-.19	.20 *	.25 *	-.14	-.13
3. Self-Esteem:							
Difference			--	.14	.21 *	-.12	.15
4. TOEFL				--	.59 ***	.04	-.22
5. Perceived English							
Competency					--	-.12	.19
6. Perfectionism						--	-.11
7. Length of Stay							--

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Research Questions and Hypothesis Testing

This investigation was designed to test two hypotheses. Each hypothesis was tested in its null hypothesis form, consistent with null hypothesis testing methodology. Both hypotheses were tested using simultaneous linear multiple regression analysis in which one outcome variable was predicted by more than one predictor variable (Tabachnick & Fidell, 2001). The statistical assumptions of this multivariate technique were examined after each regression run. In both regression analyses, normal probability plots of the standardized residuals indicated that the relationships examined approximated a multivariate normal distribution.

Inspection of scatterplots that plotted the standardized residuals against the standardized predicted scores revealed compliance with the assumptions of homoscedasticity and multivariate linearity. Moreover, these plots revealed no multivariate outliers. Tolerance values in both regression analyses exceeded .52, indicating no problems with multicollinearity (Tabachnick & Fidell, 2001).

Additionally, because the sample size was relatively small, adjusted R^2 was reported instead of the standard R^2 . Like R^2 , adjusted R^2 provides an indication of how much total variation is explained in the outcome by the predictors. Because R^2 tends to

overestimate the population value of R^2 , particularly in small samples, the adjusted R^2 provides a more accurate index of the variance accounted for by the predictors (Tabachnick & Fidell, 2001). In all analyses reported, the non-adjusted R^2 was no greater than .042 points larger than the adjusted R^2 .

Research Question 1: What is the relationship of English language proficiency, perceived English language proficiency, perfectionism, and length of stay in the U.S. with self-esteem among non-native English-speaking international students?

Hypothesis 1: Prediction of Self-Esteem at Present

In its null form, Hypothesis 1 predicted the following:

H1: Lower English language proficiency (lower TOEFL score), lower perceived English language proficiency, higher perfectionism score, and shorter length of stay will *not* significantly predict lower self-esteem at present.

To determine if this null hypothesis could be rejected, a simultaneous linear multiple regression analysis was conducted. In this analysis, self-esteem at present was used as the outcome variable and the TOEFL, perceived English competency,

perfectionism, and length of stay scores were entered simultaneously as predictors. A significance level of $\alpha \leq .05$ was used as the criterion for the rejection of the null hypothesis.

Combined, the four predictors explained a statistically significant 14.6% of the variance in the outcome, Adjusted $R^2 = .146$, $F(4, 88) = 4.95$, $p \leq .001$. The beta coefficient of each of the predictors is summarized in Table 6. The only statistically significant predictor was perceived English competency ($p \leq .018$), which demonstrated a positive association with self-esteem. Perfectionism scores, however, approached statistical significance ($p \leq .058$) and were negatively related to self-esteem. These coefficients indicate that the Objective English competency, as measured by TOEFL scores, and length of stay were not significantly related to self-esteem at present.

Squared part correlations were also produced to determine the proportion of variance that each variable uniquely explained in the outcome (see Table 6). These analyses indicated that perceptions of English competency uniquely explained approximately 5.4% of the variance in self-esteem at present whereby perfectionism uniquely accounted for only 3.4% of the variance.

Table 6

Regression Coefficients of Variables Predicting Self-Esteem at Present (N = 93)

	<i>B</i>	Std. Error	Beta	<i>Part r</i> ²	<i>t</i>
Constant	23.67	8.57			2.76**
TOEFL	.01	.01	.07	.003	.55
Perceived English					
Competency	2.31	.95	.32	.054	2.41*
Perfectionism	-.07	.04	-.19	.034	-1.92
Length of Stay	-.01	.02	-.09	.007	-.85

* $p \leq .05$. ** $p \leq .01$.

These findings failed to reject null Hypothesis 1 for TOEFL scores, perfectionism, and length of stay. Although perfectionism was not significantly related with self-esteem at present, the association was in the expected direction in that increased perfectionism was related to lowered self-esteem at present. Null hypothesis 1 was rejected, however, for perceived English competency. That is, the less participants viewed themselves to be competent in English, the lower their self-esteem at present.

Research Question 2: What is the relationship of English language proficiency, perceived English language proficiency, perfectionism, and length of stay in the U.S. with changes in self-esteem among non-native English-speaking international students?

Hypothesis 2: Prediction of Self-Esteem Differences

In its null form, Hypothesis 2 predicted:

H2: Lower English language proficiency, lower perceived English language proficiency, higher perfectionism, and shorter length of stay will *not* significantly predict larger difference in self-esteem at present and at home.

As with Hypothesis 1, this null hypothesis was tested using a simultaneous linear multiple regression; the outcome variable represented the difference between self-esteem at present and self-esteem at home. The same predictors were entered in this analysis that were entered in the analysis of the first hypothesis.

These four predictors accounted for a non-significant 3.2% of the variance in the self-esteem difference scores, Adjusted $R^2 = .032$, $F(4, 88) = 1.75$, $p \leq .146$. The beta coefficient of each of the predictors was evaluated using a significance level set at alpha of .05 (see Table 7). None of the four variables were statistically significant predictors of the self-esteem difference scores ($ps \geq .222$). Moreover, the squared part correlations indicated that each of the predictors uniquely explained less than 2% of the variance in the self-esteem difference scores (see Table 7).

These findings failed to reject null Hypothesis 2 and therefore an acceptance of this null hypothesis. That is, the difference in self-esteem at present and at home could not be predicted above chance by objective English proficiency, self-perceived English language proficiency, perfectionism, and length of stay.

Table 7

Regression Coefficients of Variables Predicting the Difference Between Self-Esteem at Present and Self-Esteem at Home (N = 93)

	<i>B</i>	Std. Error	Beta	<i>Part r</i> ²	<i>t</i>
Constant	-5.93	6.05			-.98
TOEFL	.01	.01	.11	.007	.79
Perceived English Competency	.52	.67	.11	.006	.76
Perfectionism	-.03	.03	-.10	.010	-.98
Length of Stay	.01	.01	.14	.016	1.23

Note. No predictors were statistically significant at $p \leq .05$.

Post Hoc Analyses

Predicting Self-Esteem at Home

Additional analyses were conducted to explore various associations among the variables. The first analysis was designed to determine if the predictors examined in

Hypotheses 1 and 2 were significantly related with self-esteem at home. These self-esteem scores were regressed onto TOEFL, perceived English language proficiency, perfectionism, and length of stay scores and these four predictors accounted for a statistically significant 8.0% of the variance in the outcome, Adjusted $R^2 = .080$, $F(4, 88) = 3.01$, $p \leq .022$. Table 8 summarizes the regression coefficients from this analysis.

As was found for the prediction of self-esteem at present (see Hypothesis 1), the only statistically significant predictor was perceived English competency ($p \leq .046$), and this variable was positively associated with self-esteem at home. Moreover, perfectionism scores also approached statistical significance ($p \leq .067$) in the prediction of this self-esteem variable and was negatively related to self-esteem, as was found in the analysis for Hypothesis 1.

Table 8

Regression Coefficients of Variables Predicting Self-Esteem at Home (N = 93)

	<i>B</i>	Std. Error	Beta	<i>Part r</i> ²	<i>t</i>
Constant	29.61	7.96			3.72 ***
TOEFL	-1.41	.02	-.00	.013	-.01
Perceived English					
Competency	1.80	.89	.28	.042	2.02 *
Perfectionism	-.05	.04	-.14	.036	-1.32
Length of Stay	-.03	.02	-.21	.016	-1.85

* $p \leq .05$. *** $p \leq .001$.

Group Differences

The next set of analyses examined gender differences among all of the variables examined in this study. Levene's test for equality of variance was calculated to determine if the groups' variances were significantly heterogeneous on any of the variables examined. None of the variances were significantly different from each other ($ps > .05$), indicating adherence to the assumption of homogeneity of variance. Using independent samples t tests, no statistically significant differences were found on any of the measures (see Table 9).

Analyses were also calculated on all measures in the study to determine if there were any differences between whether participants' country of origin was Asian ($n = 75$) or non-Asian ($n = 18$). The results of these independent samples t tests are presented in Table 10. Levene's test for equality of variance indicated that the groups' variances were not significantly different on any of the variables ($ps > .05$).

Table 9

Gender Differences on Research Variables

	SEX	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Self-Esteem: Present	Male	55	30.40	6.14	.30
	Female	38	30.02	5.69	
Self-Esteem: At Home	Male	55	30.80	6.01	.22
	Female	38	30.55	4.17	
Self-Esteem: Difference	Male	55	-.40	4.28	.15
	Female	38	-.52	3.40	
TOEFL	Male	55	558.37	45.45	-.13
	Female	38	559.64	45.89	
Perceived English Competency	Male	55	3.63	.72	1.39
	Female	38	3.39	.94	
Length of Stay	Male	55	37.06	43.60	.47
	Female	38	33.28	28.11	
Overall Perfectionism	Male	55	85.34	12.73	1.17
	Female	38	81.76	16.67	
Concern Over Mistakes	Male	55	24.60	5.88	.97
	Female	38	23.23	7.70	
Personal Standards	Male	55	24.30	4.48	1.35
	Female	38	23.02	4.49	
Parent Expectations	Male	55	15.05	4.55	-.11
	Female	38	15.15	4.62	
Parental Criticism	Male	55	9.58	3.10	.00
	Female	38	9.57	3.26	
Doubts about Actions	Male	55	11.80	2.95	1.82
	Female	38	10.76	2.24	
Organization	Male	55	22.83	4.11	.32
	Female	38	22.55	4.20	

Note. No statistically significant gender differences were present at $p \leq .05$.

Table 10

Country of Origin Differences on Research Variables

	Country of Origin	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Self-Esteem: Present	Asian	75	29.61	5.70	-2.14 *
	Non-Asian	18	32.89	6.35	
Self-Esteem: At Home	Asian	75	30.45	4.39	-.91
	Non-Asian	18	31.72	8.21	
Self-Esteem: Diff.	Asian	75	-.84	3.40	1.97
	Non-Asian	18	1.17	5.48	
TOEFL	Asian	75	554.32	44.32	2.01 *
	Non-Asian	18	577.94	46.08	
Perceived English Competency	Asian	75	3.41	.81	-3.09 **
	Non-Asian	18	4.06	.73	
Length of Stay	Asian	75	31.91	27.02	-1.90
	Non-Asian	18	50.56	65.60	
Overall Perfectionism	Asian	75	84.35	14.32	.63
	Non-Asian	18	81.94	15.46	
Concern Over Mistakes	Asian	75	24.65	6.31	1.82
	Non-Asian	18	21.50	7.75	
Personal Standards	Asian	75	23.27	4.47	-2.31 *
	Non-Asian	18	25.94	4.12	
Parent Expectations	Asian	75	14.97	4.36	-.53
	Non-Asian	18	15.61	5.41	
Parental Criticism	Asian	75	9.89	3.17	1.98 *
	Non-Asian	18	8.28	2.80	
Doubts About Actions	Asian	75	11.56	2.74	1.33
	Non-Asian	18	10.61	2.59	
Organization	Asian	75	22.44	4.17	-1.34
	Non-Asian	18	23.89	3.88	

* $p \leq .05$. ** $p \leq .01$.

Five of the 13 variables evidenced statistically significant differences between the two groups. Namely, individuals from non-Asian countries had significantly higher scores on self-esteem at present, $t(91) = -2.14, p \leq .035$, the TOEFL, $t(91) = -2.01, p \leq .047$, perceived English proficiency, $t(91) = -3.09, p \leq .003$, and the FMPS Personal Standards subscale, $t(91) = -2.31, p \leq .023$, compared with individuals with an Asian origin. Scores on the FMPS Parental Criticism subscale, however, were significantly higher among participants from Asian countries than participants from non-Asian countries, $t(91) = 1.98, p \leq .050$. Although none of these mean differences were substantially large, these findings do imply that individuals from Asian countries might differ on these characteristics from those from non-Asian countries.

Predicting Self-Esteem for Asians Only

Because there were statistically significant differences on several variables that were used to test the hypotheses, the hypotheses were retested using only participants who were from an Asian country ($N = 75$). That is, analyses were conducted while filtering out individuals from non-Asian countries.

Hypothesis 1 was reevaluated on just individuals from Asian countries by

regressing self-esteem at present on the TOEFL, perceived English competency, perfectionism, and length of stay scores. Combined, the predictors accounted for a statistically significant 18.0% of the variance in the outcome, Adjusted $R^2 = .180$, $F(4, 70) = 5.07$, $p \leq .001$. Beta coefficients were evaluated at alpha of .05 and revealed that the only statistically significant predictor was length of stay ($\beta = .24$, part $r^2 = .047$, $p \leq .044$), which demonstrated a positive association with self-esteem present. TOEFL scores ($\beta = .09$, part $r^2 = .005$, $p \leq .486$), self-perceived English competency ($\beta = .24$, part $r^2 = .033$, $p \leq .089$), and perfectionism ($\beta = -.17$, part $r^2 = .026$, $p \leq .131$) were all nonsignificant predictors of self-esteem at present.

These results provide a different pattern of findings than was found when this hypothesis was tested using the entire sample. Namely, when non-Asians were excluded from the sample, the only variable that predicted self-esteem at present was length of stay in that self-esteem was higher the longer they had been in the U.S. This variable was not significant when non-Asians were included in the analysis.

Hypothesis 2 was also reevaluated on just individuals from Asian countries. The difference scores between self-esteem present and at home were regressed onto the four predictors evaluated in the first hypothesis. These predictors explained a nonsignificant .7% of the variance in the self-esteem difference scores, Adjusted R^2

= .007, $F(4, 70) = 1.13$, $p \leq .349$. TOEFL scores ($\beta = -.03$, part $r^2 = .001$, $p \leq .826$), self-perceived English competency ($\beta = .05$, part $r^2 = .002$, $p \leq .739$), perfectionism ($\beta = -.03$, part $r^2 = .001$, $p \leq .841$), and length of stay ($\beta = .22$, part $r^2 = .039$, $p \leq .093$) were all nonsignificant predictors of self-esteem difference scores. These results are congruent with those found when these associations were tested with the entire sample.

A regression analysis was also performed for self-esteem at home scores that excluded participants from non-Asian countries. TOEFL scores, perceived English competency, perfectionism, and length of stay explained a statistically significant 18.7% of the variance in self-esteem before coming to the U.S., Adjusted $R^2 = .187$, $F(4, 70) = 5.24$, $p < .001$. TOEFL scores ($\beta = .15$, part $r^2 = .013$, $p \leq .275$), self-perceived English competency ($\beta = .27$, part $r^2 = .042$, $p \leq .054$), perfectionism ($\beta = -.20$, part $r^2 = .036$, $p \leq .073$), and length of stay ($\beta = .14$, part $r^2 = .016$, $p \leq .229$) were all nonsignificant predictors of self-esteem at home; however, when combined, these predictors were significant, as noted above.

Associations Among Variables

Next, Pearson correlations were produced to examine the association of the three self-esteem variables (i.e., present, at home, and difference between present and home) with the individual items assessing perceived English competency, participants' overall and individual item ratings of their experience of mistreatment, and the six subscales of the Multidimensional Perfectionism Scale (FMPS). These correlation coefficients are shown in Table 11.

Table 11

Correlations of Self-Esteem with Perceptions of English Proficiency, Mistreatment and Subscales of the Multidimensional Perfectionism Scale (N = 93)

	Self-Esteem: Present	Self-Esteem: At Home	Self-Esteem: Difference
Perceived English Proficiency			
Speaking Skills	.35***	.20	.26*
Listening Skills	.23*	.15	.15
Writing Skills	.29**	.26*	.08
Reading Skills	.25*	.23*	.06
Perceived Mistreatment By Others			
Total	-.03	.08	-.16
English Skills	.01	-.09	.13
Appearance	.02	-.04	.08
Customs/Beliefs	-.07	-.08	.00
Perfectionism Subscales			
Concern Over Mistakes	-.23*	-.18	-.11
Personal Standards	.17	.17	.02
Parent Expectations	-.08	.09	-.27**
Parental Criticism	-.30**	-.32**	-.01
Doubts about Actions	-.36***	-.41***	.01
Organization	.06	.14	-.09

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Self-Esteem at present had positive, statistically significant correlations with all four items assessing perceptions of English proficiency. The strongest correlation was with participants' perceptions of their speaking skills ($r = .35, p \leq .001$). The higher their self-perception of being competent in speaking English, the higher their current level of self-esteem. Speaking competency also had a statistically significant positive correlation with self-esteem difference scores ($r = .26, p \leq .011$), but not with self-esteem before coming to the U.S. (i.e., at home). Participants' self-esteem at home evidenced significant, positive correlations with perceptions of competency of writing ($r = .26, p \leq .011$) and reading ($r = .23, p \leq .024$) English.

Self-esteem at present evidenced statistically significant inverse correlations with three FMPS subscales: Concern over Mistakes ($r = -.23, p \leq .025$), Parental Criticism ($r = -.30, p \leq .003$), and Doubts about Actions ($r = -.36, p \leq .001$). Self-esteem at home had statistically significant inverse correlations with two FMPS subscales: Parental Criticism ($r = -.32, p \leq .002$) and Doubts about Actions ($r = -.41, p \leq .001$). The difference between self-esteem present and self-esteem at home was only significantly correlated with the FMPS Parental Expectations subscale ($r = -.27, p \leq .009$).

Perceptions of being mistreated were not significantly correlated with any of the self-esteem variables. Inspection of the means of the mistreatment variables indicated that

individuals in this study did not perceive a high degree of mistreatment by others (see Table 12). The mean scores for the overall and individual measures of mistreatment were all near the mid range of the scale (i.e., 3), which corresponded to the sometimes anchor.

Table 12

Descriptive Statistics for Mistreatment (N = 93)

Variables	<i>M</i>	<i>SD</i>	Min.	Max.
Overall Mistreatment (MT)	2.58	.78	1	4
MT Due to English Skills	2.99	.97	1	5
MT Due to Racial/Ethnic Appearance	2.92	1.04	1	5
MT Due to Different Customs/Beliefs	3.20	.97	1	5

CHAPTER V

Summary and Interpretation of the Findings

Discussion

The present study examined the degree that objective and self-perceived English language proficiency, perfectionism, and length of stay in the U.S. predicted self-esteem among non-native English-speaking international students. Data from the 93 international students provide interesting insights into which of these factors predict self-esteem among non-native English-speaking international students.

In investigating the relationships, this study explored three aspects of self-esteem: (a) current levels of self-esteem (at present), (b) retrospective reports of self-esteem before coming to the U.S. (at home), and (c) the difference between current self-esteem and self-esteem before coming to the U.S. (difference). Although this study made specific predictions only for current self-esteem and the self-esteem differences, the findings for self-esteem before coming to the U.S. will be reported alongside the predicted findings in

order to provide in richer detail the nature of the relationships with self-esteem.

The first prediction of this study was that non-native English-speaking international students' current reports of self-esteem would increase as a function of students' objective and self-perceived proficiency in English and the longer they had been in the U.S. Current self-esteem was expected to decrease the more that the international students reported tendencies toward perfectionism. These predictions were only partially supported, however.

The results supported the claim that self-perceived English competency would relate to the present level of self-esteem in non-native English-speaking international students. The less competent in English these international students perceived themselves to be, the lower self-esteem at present they reported.

In contrast, objective English fluency, measured by TOEFL scores, had no meaningful association with students' self-esteem. Although TOEFL scores demonstrated a significant positive zero-order correlation with current self-esteem, these scores were not predictive of self-esteem when simultaneously considering the influence of students' self-perceptions of their competency in English. That is, with self-perceived ratings of English proficiency in the prediction model, TOEFL scores no longer had a significant relationship with current self-esteem.

The obvious explanation for this finding is that the objective and subjective measures of English competency were redundant in the prediction of self-esteem at present. Although the TOEFL and self-perceived English competency were positively related to each other, these two aspects of English proficiency had less than 35% of their variability in common.

This implies two things. First, the lack of shared variance between objective and subjective English proficiency indicates that redundancy was probably not the main reason for TOEFL scores not predicting self-esteem. Instead, it is more probable that self-perceptions of proficiency in English are more strongly related to international students' current self-esteem than is the objective index of English proficiency. Inspections of the zero-order correlations support this interpretation. The correlation of the subjective proficiency with self-esteem was noticeably higher than the correlation of the TOEFL with self-esteem.

The second implication is that international students' self-perceptions of English proficiency are not substantially based on the objective TOEFL scores. Thus, students seem to form impressions of their competency in English based on factors other than how they score on the TOEFL.

In sum, the findings suggest that students' current self-esteem is more a function of

their perceptions of their competency in English, and not their actual degree of proficiency. This is not a surprising discovery given that self-esteem is created by one's self-evaluations. Thus, it makes sense that regardless of their actual degree of proficiency in English, international students will have lowered self-esteem if they perceive themselves to have less competence with the dominant language. This fits Branden's (1992) contention that one's self-esteem is largely dependent upon individual levels of self-efficacy and personal worth, not objective reality.

Although the relationship between perceived competency in English and self-reported self-esteem was in the expected direction, it is important to state that it was not a substantially strong relationship. In particular, students' perceptions of their competency in English only explained 5.4% of the variability in self-esteem at the time of the study. This implies that, although self-esteem is related to students' subjective perceptions of their English proficiency, there are likely many other factors that contribute to these feelings.

Although perfectionism was not significantly related with current reports of self-esteem, the association was in the expected direction and approached statistical significance. In particular, the self-esteem of the international students tended to decrease the more perfectionistic the students perceived themselves.

This relationship was clarified when examining the association of self-esteem with the subscales of the Multidimensional Perfectionism Scale. In particular, self-esteem at present was related to three specific aspects of perfectionism: (a) Concern over Mistakes, (b) Parental Criticism, and (c) Doubts about Actions.

Non-native English-speaking international students' self-esteem was lower the more that they reported that they reacted to mistakes in a negative manner and viewed their mistakes as failures. This relationship was not particularly strong, however, and could have occurred by chance given the numerous correlations produced. Students' self-esteem also decreased as a function of perceptions of parental criticism; the more that international students perceived their parents to be overly critical of them, the lower their current level of self-esteem was. Similarly, the more that students reported doubting their ability to accomplish tasks effectively, the lower self-esteem they reported at present.

These findings add to the existing literature that increased perfectionism is related to poor psychological and emotional adjustment. More specifically, however, these findings support other studies that report a negative association among perfectionism and self-esteem, such as Cheng, Chong, and Wong (1999), Flett, Hewitt, Blankstein, and O'Brien (1991), Preusser, Rice, and Ashby (1994), and Rice, Ashbey, & Slaney (1998).

Results from the current investigation suggest that overall perfectionism might not be the best way to measure this construct among international students. Because the strongest findings were for specific aspects of perfectionism, findings are likely to be underestimated if these individual aspects of perfectionism are ignored.

Contrary to expectations, there was no relationship between non-native English-speaking international students' current self-esteem and how long they had been in the U.S. This variable was positively related to self-esteem when only students from Asian countries were examined ($n = 75$). That is, among students from Asian countries, self-esteem increased the longer students had been in the U.S. Although this relationship was somewhat moderate in magnitude, length of stay in the U.S. did uniquely explain approximately 4.7% of the differences in self-esteem scores at present. In addition, none of the other variables (i.e., TOEFL, subjective English competency, and perfectionism) were significant predictors of current self-esteem when examining the Asian student.

The second prediction tested in the present study was that larger differences in self-esteem at present and self-esteem before coming to the U.S. would be related to lower objective and subjective English language proficiency, higher perfectionism, and shorter length of stay in the U.S. No support was found for these predictions.

Interestingly, none of the variables examined in this study were able to predict the differences in the two self-reports of self-esteem. Contrary to expectations, the difference between non-native English-speaking international students' self-esteem at present and at home was not significantly related to their objective English proficiency, self-perceived English language proficiency, overall perfectionism, and length of stay in the U.S.

Although the global index of subjective English proficiency was not related to self-esteem difference, one aspect of this competency was. The more that students perceived themselves to have a high degree of competency in speaking English, the greater the self-esteem difference. In particular, students who believed they spoke English competently tended to report self-esteem as being higher at the time of the study compared to before they came to the U.S. This relationship was not very strong and could have occurred by chance given the great number of correlations produced.

Similarly, differences in self-esteem were also related to one aspect of perfectionism in that the Parent Expectations subscale of the Multidimensional Perfectionism Scale was inversely related to self-esteem difference scores. This finding implies that the more students perceived that their parents set high expectations for them, their self-esteem at present was lower than before they came to the U.S.

Together, these findings suggest that discrepancies in self-esteem are largely

independent of the variables measured in this study. Still, the findings do imply that some relationship can be found if the individual characteristics of self-perceived English competency and perfectionism are examined.

Interestingly, the pattern of findings for self-esteem before coming to the U.S. (i.e., at home) was nearly identical to those found for current self-esteem. That is, the better non-native English-speaking international students perceived their English competency to be, the higher self-esteem at home they reported. Subjective perceptions of proficiency in English uniquely explained approximately 4.2% of the differences in the retrospective reports of self-esteem before students came to the U.S. Objective English competency (TOEFL), however, had no meaningful relationship to self-esteem at home.

This finding suggests that, among non-native English-speaking international students, subjective reports of English proficiency are important in explaining current levels of self-esteem and self-esteem that was present before coming to the U.S. Objective estimates of English proficiency do not seem to offer much to explaining international students' perceptions of self-esteem.

As with current self-esteem, perfectionism approached statistical significance in the prediction of self-esteem before coming to the U.S. Global perfectionism explained approximately 3.6% of the differences in reports of self-esteem at home. Moreover, the

more that students viewed their parents having high expectations, had lower self-esteem at home. The strongest relationship, however, was with the Doubts about Actions subscale. The more that students doubted themselves, the less self-esteem at home they reported.

The similar findings for current self-esteem and the retrospective reports of self-esteem before coming to the U.S. are not surprising given the high relationship among these two self-reports. International students' reports of self-esteem at present and at home had approximately 58% of their variance in common. This degree of communality suggests that students' reports of their current self-esteem and their self-esteem before they came to the U.S. were considerably similar.

A concern of the present investigation was that the retrospective reports of self-esteem would be reflective of current self-esteem, not past self-esteem. For instance, some students might not have recognized the directions requesting them to report retrospectively; instead, they might have responded with their current feelings. If this occurred to an extreme degree, however, it would be expected that the two self-esteem reports would have had a higher degree of relationship than was observed. The fact that the two versions of the Rosenberg Self-Esteem Scale do not share approximately 42% of their variability implies that the two versions of assessed different aspects of self-esteem, as was

intended. This is quite remarkable given that both versions of self-esteem used the exact same items scaled in the exact same way, reflecting considering shared method variance.

Despite the degree of independence of self-esteem present and self-esteem at home, the mean scores were not different between the two versions. Each version had a mean of around 30, indicating moderate self-esteem. The current findings appear to provide empirical evidence to support for Franken (1994) and Mruk's (1999) contention that while self-esteem is fairly consistent over time, it remains open to change.

Although adjustment was restricted to self-esteem in the present study, it provides solid evidence that this narrow aspect of adjustment is related to international students' self-perceptions of language proficiency. These findings answer Findsen's (1987) question regarding how language proficiency affects international students' experiences at a personal level. The findings also support the argument by Crano (1986) and Luzio-Lockett (1998) that fluctuations in self-concept would be expected to occur as a result of not speaking the native language fluently.

Yet, the current study illuminates that actual language competency has little to do with self-esteem. Instead, self-esteem of English-speaking international students appears to be related to students' perceptions of how competent they are in the English language.

Thus, this study supported the common belief that English proficiency is an important variable for adjustment.

Paige (1990) argues that international students' self-esteem can be negatively affected by the adjustment to their new country. The lack of meaningful differences between students' current self-esteem and their reports of self-esteem before they came to the U.S. does not provide empirical support for Paige's contention. Several explanations can be considered for this reason. First, as many theorists have claimed, self-esteem is indeed a fairly stable organization while it remains open to change. Second, this may indicate that international students are "robust" and have enough ego strength to survive various adjustment difficulties as some researchers suggested (e.g., Barratt, 1993). Lastly, this may stem from the methodological issues related to the use of difference scores (Meltzoff, 1998), which will be described shortly in the following limitations section.

It was also interesting to note that this study found no gender differences on any of the variables examined. Male and female non-native English-speaking international students were similar on their self-esteem, perfectionism, TOEFL scores, perceived English language competency, and length of stay in the U.S.

Moreover, students' perceptions of the degree they were mistreated because of their differences in English language skills, ethnic appearance, and to their having

different cultural customs and beliefs demonstrated no relation to their self-perceived self-esteem. On average, students reported a below-average occurrence of overall mistreatment. This finding is not consistent with Church's (1982) review of the problems reported by foreign students as well as the result of Heikinheimo and Shute's (1986) study in which 91 % of the international students reported their experience of racial discrimination. One possible explanation is that the University under the current investigation has hosted a growing number of international students over the years and provided various opportunities for interaction between these international students and the people from the surrounded community. As a result, the local people have become more acquainted with these international students and their cultures, which contributed to a lack of mistreatment experiences among this international student population. Another possible explanation is that many participants in this study may spend most of their time with people from their own country and as a result, their mistreatment experience is limited.

One of the most intriguing findings of the present investigation was that 75 individuals from Asian countries were different on several research variables compared to the 18 individuals whose country of origin was non-Asian. In particular, compared to international students from non-Asian countries, students from Asian countries

demonstrated significantly lower self-esteem at present, TOEFL scores, perceived English competency, and perfectionism related to personal standards. This study also found that Asians reported significantly higher parental criticism than did non-Asians. Although most of these mean differences were not substantial, the biggest difference was found for self-perceptions of English proficiency. Although these findings must be interpreted with caution due to the small sample size, the results appear to indicate there are underlying international differences (e.g., culture, ethnicity) that may be profound to affect self-esteem, as Wood, Hillman, and Sawilowski (1995) have claimed.

The most interesting finding from the current study was the relationship among the predictors and self-esteem when only international students from Asian countries were examined. When the study explored this relatively considered homogeneous group, the pattern of findings for the predictions was completely different. Unlike the situation when the entire sample was examined, when the relationships among variables were tested with only students from Asian countries, self-perceived English competency and perfectionism did not significantly contribute to the explanation of self-esteem. Instead, years in the U.S. emerged as the only significant predictor of present levels of self-esteem. That is, the longer students had been in the U.S., the higher self-esteem they reported.

This demographic variable explained approximately 4.2% of the variability in current self-esteem among the students from Asian countries.

As with the total sample, however, none of the variables predicted differences in self-esteem. It is interesting to note, however, that within the group of students from Asian countries, length of stay was close to reaching statistical significance and uniquely accounted for approximately 3.9% of the variability in self-esteem differences.

None of the variables were significant predictors of self-esteem at home compared when using only students from Asian countries. Although none were significant predictors, English competency uniquely explained 4.2% of the variability in self-esteem before coming to the U.S. and perfectionism accounted for 3.6%. The direction of the relationships was also what was expected: increased self-esteem before coming to the U.S. was associated with higher current self-perceived competency with the English language and lower perfectionistic cognitions.

Implications

The information gleaned from this study is particularly crucial given the increasing rise in the number of international students who are choosing to study in the

U.S. If these findings can generalize to the population of the hundreds of thousands of international students in U.S., then they imply meaningful implications.

These findings suggest that international students' perceptions of their English proficiency will have a relation to their levels of self-esteem. Although there are likely many other contributions to students' self-esteem, it is important to make students aware of this relationship.

Awareness of this relationship can be created in many ways. It is possible to mention this association in orientation materials, international student meetings, or in one-on-one consultations with international students. The message that would likely be most helpful to convey is that how they feel about their language proficiency might correspond to how they feel about themselves in general. Language fluency is a real source of struggle for many international students, yet this struggle does not necessarily need to lead to students negatively evaluating themselves in a global fashion. A tendency to personalize their struggles with language most likely leads to a deflation of self-worth. Awareness of the tendency to personalize self-perceived English proficiency should prove helpful to these students.

The ancillary finding that length of stay in the U.S. was the only significant predictor of self-esteem among students from Asian countries also has several

implications. The key issue it raises is whether the relationships found in the present study are dependent on students' countries of origin. Because of this finding, individuals working with the international student population might need to pay attention to which country students are from when they are giving advice about students' self-worth.

Although the results need to be replicated before definitive conclusions can be made, recognition of the differential experiences of individuals from different countries seems a relevant recommendation.

Pedersen (1994) noted that many international students rarely seek counseling services for personal support. If this is true, if the individual has difficulties with communicative English and has low self-esteem, it appears more unlikely they will seek such services. Therefore, it is important to consider more active outreach programs coordinated between the International Students and Scholars Office and the University Counseling Services and let these students know various help can be obtained through them. Forming a support group can be very effective in helping these international students. Focus should be placed on deemphasizing pathology and emphasizing their respective strengths. The therapists should make an utmost effort to provide a safe environment for them so that students can begin to openly share their experiences. Such group activities will likely promote what Yalom (1995) termed "Universality" and help

these students realize they are not alone, which can help them gain a proper perspective and provide a sense of great relief.

Limitations

A number of limitations in the present study need to be borne in mind when considering the results. Because the data were collected from a large Southwestern public university, it is possible data collected will not generalize to a population of non-native English-speaking international students. Furthermore, all participants in the study were voluntary and therefore might not be representative of a non-volunteer population.

Another potential limitation arises from the fact that all data were self-reported. It is possible that these reports were influenced by response biases, such as socially desirable responding. Unfortunately, the current study did not include a measure of social desirability to assess the degree to which this bias was present in the data. If biased responding did affect the data, it was not readily apparent. Scores on most all measures were centered near the center of the distribution and had a fair degree of variability. In addition, the current study did not place time limits on participants and ensured their

anonymity, which has been reported to reduce socially desirable response patterns (Paulhus, 1991).

Another possible limitation of the study concerns the assessment of self-esteem at home, which was mentioned briefly earlier in this chapter. Participants were asked to retrospectively report their level of self-esteem in their home country, before they came to the U.S. It is feasible that this resulted in inaccurate reporting, particularly given the flawed nature of memory. As stated earlier, however, the correlation between these measures was large, but not exceptionally so, indicating that both versions offered unique information. Despite the fact that the at home and current self-esteem measures were somewhat independent of each other, this does not provide evidence that the at home scores were an accurate representation of actual self-esteem before they came to the U.S.

In addition, it is possible that the TOEFL scores did not reflect students' current English language proficiency. Participants were not asked how long ago they had taken the TOEFL. It is likely that many students' English proficiency had increased since they took the TOEFL. The only way to avoid this issue in the future is to collect a measure of English proficiency at the same time that the other data are being collected. Furthermore, as the general TOEFL does not assess speaking aspects of English, the score may not reflect one's true ability in this area.

Another potential drawback of this investigation is that difference scores between at-home and current self-esteem ratings were used as the outcome of interest. Despite their widespread use, difference scores have numerous methodological problems.

Although difference scores are easy to interpret and analyze, there are some who argue that change scores are not as reliable as regular scores and tend to regress to the mean (Meltzoff, 1998). Raw difference scores also do not take into account that the amount of change may be associated with the initial level. Ceiling and floor effects can also be a problem with difference scores (Meltzoff, 1998). Although all of these issues could be a concern in the present investigation, examination of the distribution of difference scores did not indicate that any substantial problems existed in the distribution. The reliability of these scores, however, remains unknown.

The current study also examined a diverse group of students from many different countries. It is possible that this diversity was actually a limitation of the study and not a strength. If there are meaningful differences in associations based on country or region, then the real associations might have been diluted.

Lastly, the sample of international students used in the present study was collected before the 9/11 terrorists attacks. It is possible that the relationships found in this study could be different if examined after this tragedy happened.

Future Research

There are many different avenues for future research suggested by this study. For example, researchers might consider examining the associations using a longitudinal, predictive design. One of the biggest limitations of the current study was the retrospective report of self-esteem. Future research would benefit from obtaining measures of self-esteem and language proficiency before international students leave to the U.S. for school. Measurements could then be taken after they had been in the U.S. for a year or more. This methodology is perhaps the only way that researchers will be able to gain a solid understanding of the relationship of variables with changes in self-esteem.

Researchers should also consider examining the associations using qualitative interview methodology. The disadvantage of using quantitative data is that the data are limited to the measures administered. Interviews allow for probing and follow up that would undoubtedly help identify other variables that would be important when trying to quantitatively predict adjustment among international students. The literature in this area would benefit greatly by a study that provides detailed insights into the experiences of international students.

Future research could also expand the current study by assessing other outcomes and other predictors than those used in the present study. For instance, it would be enlightening to assess how parenting styles (e.g., authoritative, authoritarian) would relate to international students' self-esteem. In addition, cultural issues should be explored further, such as by examining acculturation and cultural identification. Because a subjective viewpoint appears critical, future studies may also want to examine the locus of control in association with the variables studied in this study.

The nature of the relationships explored also needs to be explored in greater detail. For instance, the current study examined only the main effects of English competency, perfectionism, and length of time in the U.S. on self-esteem and changes in self-esteem. Investigating possible mediating and moderating variable would help to unravel the complexity involved in explaining international students' self-reported self-esteem. For example, personality variables, such as obsessive compulsiveness, might mediate the relationships found. Alternatively, the degree of social support experienced by international students might buffer any negative affects on their self-esteem. Other variables that are worth considering include financial support, students' expectations of coming to the U.S. to study, socioeconomic status, stressors, and previous exposure to the host country and its citizens. Other possible variable of interest included the voluntary or

involuntary nature of how the international student came to the U.S. For instance, some students come due to a new country due to a parental work assignment and therefore they come to the U.S. on a non-voluntarily basis. In contrast, other students come out of their own volition. Adjustment and self-esteem might vary as a function of the voluntarily nature of coming to the host country.

Future research should also consider recruiting participants from different settings than that used in the present study. In this study, participants were predominantly regular undergraduate or graduate international students. Only a few were English Language Institute students. The outcome could have been different if the study had recruited participants solely from this latter population. Examining the effects of the participants' settings could prove useful in understanding the extent to which research on international students extends across various placements.

Research could also consider assessing the associations with self-esteem using a younger group of participants. Studies could assess international high school students, or even assess a younger group of students. Younger participants may be more vulnerable developmentally to the fluctuation of their self-esteem, thereby resulting in more robust findings than that observed in the present study.

Future studies could also benefit from comparing regular American students' adjustment/self-esteem with those of international students'. This would help determine whether there is a difference in the pattern of their adjustment.

The present research represents a beginning in an understanding the nature of the factors that predict self-esteem and changes in self-esteem among non-native English-speaking international students. It is hoped that the present study will further help to stimulate and raise interest among other researchers regarding the issues of international students' adjustment. Only through additional research can the complexity of the factors that contribute to international students' adjustment be better understood.

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Appendix A

Dear fellow international student:

My name is Masafumi Ueda and I am a 4th year doctoral student in Counseling Psychology here at Oklahoma State University. I am currently collecting data for my dissertation research that explores the psychological adjustment of international students at Oklahoma State University. I am seeking your help with the study by asking you to complete the enclosed questionnaires, which should not take more than 15 to 20 minutes of your time. Please note that two of the questionnaires (RSE A and RSE B) exactly ask you the same questions. Please answer RSE A as if you were in your home country before coming to the United States. Please fill out RSE B based upon your feelings and experience after you came to the United States. By participating in this study, you have a chance to win the \$100 prize.

Please carefully read the enclosed informed consent form before participating in this study. If you agree to participate in this study, please return all the questionnaires along with the \$100 prize entry form using the stamped envelope enclosed in the packet.

I would greatly appreciate it if you could return them as soon as you can. The deadline for \$100 prize entry is 8/20/01. The winner of \$100 prize will be notified with a check around the end of August (8/31/01).

If you have any questions or concerns, please feel free to contact me by phone at 332-0347 or by e-mail at ueda@okstate.edu. You can also contact persons listed on the informed consent form.

THANK YOU SO MUCH FOR YOUR ASSISTANCE!

Best regards,

Masafumi Ueda, Ed.M.
Ph.D. Candidate in Counseling Psychology
Oklahoma State University

Appendix B

Informed Consent Form

You are being invited to participate in a research project that explores the psychological adjustment of international students at Oklahoma State University. The purpose of this study is to gain a greater understanding of non-native English speaking international students' experiences with regard to their adjustment in the United States and the study is being conducted through Oklahoma State University. The results of this research are expected to benefit both society and participants by providing useful information to both professionals and administrators, which in turn can be used to assist those international students studying in the United States. There are no anticipated risks of participation in this study beyond those ordinarily encountered in daily life. By participating in this study, you have a chance to win a \$100 prize.

Your participation in this study is voluntary. You are free to withdraw from participation at any time without penalty. If you agree to participate, you will be asked to fill out four questionnaires including a demographic survey. It should take no more than 15 to 20 minutes to complete all these questionnaires. Please use the provided stamped envelope to return all of your completed questionnaires along with the detached Prize Entry Form below to the researcher.

Your identity will remain anonymous. The researcher will not ask you to place your name or student identification number on any of the questionnaires except for the purpose of prize entry. All the information provided will be kept confidential and results will be examined in the aggregate form. Therefore, no individuals will be identified.

If you have any questions regarding this study, please contact the researcher, Masafumi Ueda, Ed.M., or his dissertation advisor and chair, Dr. Donald Boswell at (405) 744-9454. You may also contact Sharon Bacher, IRB Executive Secretary, Oklahoma State University, 203 Whitehurst, (405) 744-5700.

Please read the following statements carefully before participating in this study. "I have read and fully understand the consent form. My participation of the accompanying packet of questionnaires serves as my consent to participate in this study. I will keep this copy of the informed consent for my records".

Thank you so much for your help!

-----Detach Here-----

Prize Entry Form

Name: _____

Address: _____

Appendix C

Participant Questionnaire

Instructions: This questionnaire was developed to collect information about the background of participants in this study. Please complete all parts of the questionnaire by filling in the blank or circling the answer. Please do not write your name anywhere on the questionnaire.

Q1. What country are you from? _____

Q2. What is your gender? 1. Male 2. Female

Q3. How old are you? _____

Q4. How long have you been in the United States? Please answer this question in total months (e.g., if you have been in the U.S. for 1 and 1/2 years now, please put 18 instead of 1.5).

_____ months

Q5. What is your student classification? If you are both undergraduate or graduate student and ELI student, please circle both.

1. Undergraduate student
2. Graduate student
3. English Language Institute (ELI) student

Q7. What is your highest TOEFL score obtained? _____

Q8. How would you rate your overall competency in the use of English language (speaking, listening, reading, and writing) on the following scale?

Poor	Average			Excellent
1	2	3	4	5

Q9. How would you rate your competency in speaking English?

Poor	Average			Excellent
1	2	3	4	5

Q10. How would you rate your listening skills in English?

Poor		Average		Excellent
1	2	3	4	5

Q11. How would you rate your writing skills in English?

Poor		Average		Excellent
1	2	3	4	5

Q12. How would you rate your reading skills in English?

Poor		Average		Excellent
1	2	3	4	5

Q13. Using the scale below, please circle the rating that best describes your experience of being or feeling mistreated in the United States because you are from another country.

Never	Rarely	Sometimes	Frequently	Almost Daily
1	2	3	4	5

Q14. How much of your experience (mistreatment) do you think was due to your English proficiency (e.g., your accent, your difficulty speaking or understanding, etc.)?

Strongly Agree		Neutral		Strongly Disagree
1	2	3	4	5

Q15. How much of your experience (mistreatment) do you think was due to your different racial/ethnic appearance (e.g., color of your skin, hair, eyes, etc.)?

Strongly Agree		Neutral		Strongly Disagree
1	2	3	4	5

Q16. How much of your experience (mistreatment) do you think was due to having different customs and/or beliefs?

Strongly Agree		Neutral		Strongly Disagree
1	2	3	4	5

Thank you for your cooperation!

Appendix D

Institutional Review Board Approval

Oklahoma State University
Institutional Review Board

Protocol Expires: 6/11/02

Date: Tuesday, June 12, 2001

IRB Application No ED01136

Proposal Title: MEETING AT THE CROSSROAD: THE RELATIONSHIP OF ENGLISH LANGUAGE
PROFICIENCY, PERFECTIONISM, LENGTH OF STAY WITH SELF-ESTEEM AMONG
NON NATIVE ENGLISH SPEAKING INTERNATIONAL STUDENTS

Principal
Investigator(s):

Masafumi Ueda
15 N. University Pl apt #3
Stillwater, OK 74075

Donald Boswell
406 Willard
Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI:

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

VITA 2

Masafumi Ueda

Candidate for the Degree of
DOCTOR OF PHILOSOPHY

Dissertation: MEETING AT THE CROSSROAD: THE RELATIONSHIP OF ENGLISH LANGUAGE PROFICIENCY, PERFECTIONISM, LENGTH OF STAY WITH SELF-ESTEEM AMONG NON-NATIVE ENGLISH SPEAKING INTERNATIONAL STUDENTS

Major Field: Educational Psychology

Biographical:

Education: Graduated from Yokohama Higashi High School, Yokohama, Japan in March 1985; received a Bachelor of Arts degree in English from Aoyama Gakuin University, Tokyo, Japan in March 1990; received a Master's of Education degree in Counseling from Boston University, Boston, MA in May 1997; complete the requirements for the Doctor of Philosophy with a major in Counseling Psychology at Oklahoma State University, Stillwater, Oklahoma in August, 2003.

Experience: Employed as a salesperson and an acting sales chief for Seibu Department Store, Tokyo, Japan; employed as a marketing staff for Ivex, inc., Tokyo, Japan; worked as a graduate administrative assistant and a research assistant at Oklahoma State University, Stillwater, OK; worked as a part-time individual and marriage and family therapist at Oklahoma State University as part of doctoral practicum requirements; completed APA approved predoctoral psychology internship at Nova Southeastern University Community Mental Health Center, Ft. Lauderdale, FL.

Professional Memberships: American Psychological Association, Student Affiliate.