Information gathering and culture shock: Mediating the effect of individual characteristics of international adjustment

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INFORMATION GATHERING AND CULTURE SHOCK: MEDIATING
THE EFFECT OF INDIVIDUAL CHARACTERISTICS
ON INTERNATIONAL ADJUSTMENT

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Psychology:
Industrial/Organizational

by
Jeremiah James McFarland
June 2008
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ABSTRACT

Adjustment to a foreign culture is a difficult process as the incoming expatriate is likely to be unfamiliar with many aspects of the host culture and experience a great deal of uncertainty as to how to approach these aspects. Successful adjustment depends on reducing this uncertainty. Previous research on the individual characteristics that facilitate adjustment primarily focused on the expatriate's ability to gather accurate information concerning the host culture. Yet, empirical analysis had not yet tested this assertion. Such research had also largely ignored the relevance of culture shock, which is a psychologically damaging reaction to uncertainty. This study empirically examined the manner in which both information gathering and culture shock play a role in the process of international adjustment. Analysis revealed that the relationship between cultural flexibility and international adjustment is mediated by both information gathering and culture shock. Analysis also revealed that the relationship between coping and international adjustment is mediated by information gathering. Finally, analysis revealed a direct, unmediated relationship between adaptive personality traits and international adjustment.
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CHAPTER ONE
INFORMATION GATHERING AND CULTURE SHOCK: MEDIATING
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ON INTERNATIONAL ADJUSTMENT

According to Black and Gregersen (1999), almost 80 percent of companies are sending selected members into foreign countries in order to establish business and compete in global expansion. Although many of the expatriates are selected because they are high in technical competence of the specific job requirements, a large number of assignments end in failure with the expatriates ending the project and returning to their home countries prematurely, or remaining on the project and performing below expected standards. According to the Global Relocation Trends Survey (GRTS, 2005), in 2005, 21 percent of expatriates left their company in mid-assignment, 23 percent left their company within the first year of return from assignment, and 20 percent left their company between the first and second year of return. Of those who stayed, 27 percent had to be transferred in mid-assignment to a new location. Finally, 31 percent of the expatriates who finished the assignment were unable to do so in the
expected schedule of time. According to the survey, the most common causes for assignment failure are poor job performance, unmet expectations, and the inability to adapt to the host culture.

Black, Mendenhall, and Oddou (1991) have developed a theory which emphasizes that, regardless of technical expertise, if an expatriate is unable to adjust to the host culture, he or she is less likely to succeed. Research based on this theoretical framework has identified various individual factors that facilitate international adjustment. Much of the research has speculated that these individual factors relate to adjustment because they facilitate the ability to gather necessary information about the culture and aid in modifying behavior to fit the culture. However, the path analysis needed to explore such an idea has yet to be conducted. Additionally, when exploring the relationship between individual factors and international adjustment, research has lacked exploration into the mediating effects of culture shock, in which emotional and psychological reactions to the host culture can inhibit successful adjustment to the culture (Sims & Schraeder, 2004; Mumford, 1997; Winkelman, 1994). Research exploring the effect of individual factors on international
adjustment can be benefited by examining the individual factors' ability to facilitate information gathering and decrease culture shock.

The purpose of this study was to review the model of international adjustment proposed by Black et al. (1991). This study examined various individual factors shown to have an effect on international adjustment. Furthermore, this study examined the possibility that such an effect is mediated by information gathering and culture shock.

Black et al. (1991) propose that when an expatriate leaves a familiar environment and enters a novel environment, the person may find that the new environment possesses a culture that contrasts with the previous environment. The individual may be unfamiliar with many aspects of the host culture in which he/she must now live. For instance, the individual may be surrounded by languages, living conditions and types of food that he/she does not generally encounter. Moreover, there may be differences in the kind of behavior that is acceptable in the new culture, and the expatriate may not be familiar with such behavior. The expatriate's usual manner of behavior may no longer be acceptable in the new culture.
Also, the person may be expected to behave in a manner to which he or she is not accustomed.

Unfamiliarity with the new environment’s culture and acceptable manner of behavior will induce feelings of uncertainty in the expatriate. Uncertainty, which is the central barrier to international adjustment according to Black et al. (1991), occurs when the expatriate’s routine manner of behavior is disrupted. Since one is familiar with the aspects and behavioral cues of his/her home culture, he/she becomes use to behaving in a near automatic manner that is comfortable to him/her. However, when encountering the unfamiliar aspects of the host culture, the expatriate may not know how to respond. In addition to simple reaction, the expatriate is no longer able to engage in his/her routine manner of behavior if the acceptable manner of behavior in the host culture is different from that of the expatriate’s. Adjustment is made when the expatriate reduces uncertainty by becoming familiar with the host culture and becoming comfortable with a routine behavior that is tailored to that culture.

According to the model of international adjustment (Black et al., 1991), uncertainty can be separated into three facets. These facets, which were described by Black
(1990), include uncertainty in the general environment, the work environment, and the interaction that an expatriate has with host nationals of the foreign culture. The first facet of uncertainty concerns the general environment of the host culture. The aspects of the general environment that the expatriate may need to adjust to include the living arrangements, transportation, common foods, shopping, weather, and entertainment opportunities. For instance, the economy of the host culture may not be as advanced as the home culture, which means that the expatriate may have to adjust to poorer housing conditions. Also, different value systems may influence a difference in the common forms of entertainment that are acceptable to engage in, such as the degree of sexual behavior or the public consumption of alcohol. An expatriate coming from a sexually dormant culture may not know how to respond in a culture where public displays of affection and sexual advancements are more common. Therefore, the expatriate may experience uncertainty with the general culture and have difficulty behaving properly in public.

The second facet of uncertainty described by Black (1990) concerns the work environment. The aspects in this facet include job responsibilities, performance standards,
and planning responsibilities. For instance, an expatriate from a collectivistic culture in which responsibilities and rewards are focused on the group as a whole may find him/herself in an individualistic culture in which responsibilities and rewards are focused on the individual. The expatriate’s request for help or advice may be interpreted as weakness or inability to function independently. Therefore, the expatriate may experience uncertainty in the working environment and may have difficulty performing on the job.

The final facet of uncertainty described by Black (1990) concerns interaction with the host nationals. The aspects in this facet that the expatriate needs to adjust to includes working with host national coworkers, working with host national non-coworkers, interacting with host nationals in general, and supervising host national subordinates. For instance, an expatriate that comes from a culture in which communication includes little eye contact and low vocal tone may enter a culture in which normal conversation involves direct eye contact and raised voices. The expatriate may interpret this as confrontational and the host nationals may interpret little eye contact and low vocal tones as shyness or even weakness. Therefore, the
expatriate may experience uncertainty in interactions with host nationals and have difficulty communicating with them.

According to Black et al., (1991), when expatriates are confronted with these unfamiliar aspects, they will have a natural tendency to attempt to reduce their uncertainty. Therefore, the expatriate’s ability to function in the new environment (e.g., complete a business assignment) will become dependent on whether or not the expatriate can make general, work, and interaction adjustments, which are done by effectively reducing uncertainty in the respective facets. For instance, an expatriate entering a sexually dormant culture will have adjusted to the general environment when he/she is familiar with encountering sexual advancements and can comfortably respond in a manner that is acceptable in that culture.

According to Black et al. (1991), uncertainty is reduced as the expatriate gathers accurate information concerning the aspects of the host culture and the appropriate manner of behavior. If he/she gathers information before entry into the host culture, the expatriate can make anticipatory adjustments. Still, the expatriate is likely to encounter some level of uncertainty. Any further reduction of uncertainty is
dependent on individual characteristics, the socialization provided to the expatriate from the host nationals, factors of the organizational culture (i.e., organizational novelty, social support, and logistical help) and various aspects of the assignment such as clarity, discretion, and role conflict.

Of these factors, a great amount of research has been devoted to examining individual differences. Many individual differences have been found to relate to adjustment. However, research has yet to test the theoretical assertion that these individual differences facilitate adjustment through their ability to provide the expatriate with accurate information about the host culture. Additionally, the model proposed by Black et al. (1991) does little to explain how the experience of culture shock influences the process of international adjustment. Most recently, Sims and Schraeder (2004) have defined culture shock as the emotional reactions an expatriate experiences when confronted with the numerous differences of a new culture. This supports earlier definitions of culture shock as an emotional and psychological reaction to confusion, ambiguity, and conflicts of values with another culture (Solomon, 1994; Mumford, 1997). In comparing this
notion to the model of international adjustment, the expatriate is likely to encounter unfamiliar aspects in the new culture, which may disrupt his/her routine behavior and create a degree of psychological uncertainty. The unfamiliarity, disruption of routine behavior, and residual uncertainty may illicit psychological and emotional reactions indicative of culture shock.

Those who have acknowledged the importance of culture shock have theorized that once an expatriate experiences culture shock, he or she is less likely to adjust to the new culture (Sims & Schraeder, 2004; Mumford, 1997; Winkelman, 1994). For that reason, it is important to identify the process in which the unfamiliarity with a new culture and the residual uncertainty in the expatriate leads into culture shock. Winkelman (1994) theorized that when an expatriate first encounters a new culture, they begin a honeymoon phase. The expatriate experiences interest and excitement with the new culture and has positive expectations of the upcoming experience. Any unfamiliarity and uncertainty that he or she encounters is interpreted positively as the expatriate perceives the experience as an exciting challenge. However, there is a critical point at which the expatriate transitions into a
crisis phase. He or she begins to feel as though he/she has lost control over his/her ability to adapt and begins to feel isolated within the host culture. At this point, the expatriate will begin to experience the debilitating feelings and emotions indicative of culture shock.

Mumford (1997) has provided clarity to the literature of culture shock by operationally defining the affective responses an expatriate experiences during culture shock. Specifically, culture shock includes seven intrapersonal aspects and five interpersonal aspects. The intrapersonal aspects are a) feelings of strain attributed to the effort of attempting to adjust to the host culture, b) feeling deprived of one’s social support groups (e.g., friends, family, and teachers), c) feeling as though one has been rejected by the members of the host culture, d) thoughts of leaving the host culture, e) confusion of one’s role in the host culture, f) feelings of shock and disgust with aspects of the host culture, and g) feeling unable to cope with the new culture. The interpersonal aspects are a) feelings of anxiety when interacting with host nationals, b) inability to understand host national’s gestures or facial expressions, c) feeling uncomfortable with receiving public attention, d) feeling as though host nationals are trying
to be deceptive in shopping exchanges, and e) feeling as though it is an effort to be polite to the host nationals.

Winkelman (1994) has outlined four sources responsible for the transition from the honeymoon phase to the crisis phase and the affective experience referred to as culture shock. The first source is prolonged stress. Although the expatriate is likely to experience feelings of stress in the honeymoon phase, he/she will interpret it as a welcome challenge. However, if the expatriate cannot successfully overcome such challenges, essentially reducing uncertainty, the stress will persist and lead to a point of strain in which the person experiences anxiety, depression, and physical illness.

The second source of crisis is cognitive overload (Winkelman, 1994). The expatriate is required to absorb a large amount of new information in order to understand the host culture. This may be difficult as the expatriate, who is used to functioning in a near automatic manner due to his or her familiarity with his or her own culture, must now put forth a great deal of effort in order to take in a wide variety of new information and understand the new host culture.
The third source of crisis involves role shock (Winkelman, 1994). That is, an expatriate may be required to suppress behaviors that he or she perceives as central to his or her self-concept. Consequently, the suppression of such behaviors may affect the expatriate’s perception of his or her self concept and he or she may become unsure of his or her own identity within the host culture.

Similarly, the fourth source of crisis is personal shock (Winkelman, 1994). This involves the expatriate’s loss of support systems (e.g., friends, family, and teachers). Much like the expatriate’s typical behaviors, his or her support system helps the expatriate maintain his or her identity. Consequently, feeling isolated from one’s support system creates confusion in the expatriate concerning his or her identity.

So although expatriates must be able to endure or avoid exposure to the sources of culture shock transition (i.e., prolonged stress, cognitive overload, role shock, and personal shock) as identified by Winkleman (1994), adjustment has predominately been conceptualized as the gathering of information to better understand the host culture and the modification of behavior. However, there
has yet to be empirical research conducted to support either of these theoretical assertions.

By empirically examining the mediating effects of information gathering and culture shock, research can better understand and explain the process of international adjustment. Specifically, further research would be better served by investigating how individual characteristics shown to effect adjustment immunize expatriates from culture shock and facilitate their ability to gather information. Among the factors that Winkelman (1994) proposes to be relevant in transitioning into culture shock, he emphasizes the importance of individual characteristics. Specifically, individual characteristics will influence the point at which the aforementioned sources of culture shock result in transition from the honeymoon phase into the crisis phase. The notion of individual characteristics' influence on culture shock has been supported by Mumford (1997) as well as Sims and Schraeder (2004) who propose that some people may experience culture shock much sooner than others who experience it only after a process in which minimal levels of anxiety and frustration progress gradually into feelings of culture shock.
Individual characteristics also have a great deal of influence in the model of international adjustment proposed by Black et al (1991). Specifically, individual characteristics will influence the extent to which expatriates are able to reduce uncertainty and adjust to the host culture (Shaffer, Harrison, Gregersen, Black, & Ferzandi, 2006; Black & Gregersen, 1999; Black et al., 1991; Mendenhall & Oddou, 1985). However, the model of international adjustment provides little if any explanation as to how these characteristics relate to the possibility of experiencing culture shock. Since this study suggests that the effect of individual characteristics on adjustment is mediated through the immunization of culture shock, in addition to the ability to gather accurate information about the culture, it is beneficial to examine the manner in which individual characteristics influence the onset of culture shock as the expatriate transitions from the honeymoon phase into the crisis phase. To satisfy the purpose of this study, the individual characteristics shown to relate to adjustment were examined. However, in addition to examining the roles they play in providing expatriates with information, this study also examined how those individual characteristics influence the experience of
culture shock. The individual characteristics reviewed were self efficacy, extroversion, agreeableness, conscientiousness, and cultural flexibility, as well as the ability to cope with stress.

According to Chen, Gully, and Eden (2001), self efficacy is the belief in one’s ability to effectively manage a variety of situational circumstances. Black et al. (1991) emphasize the importance of self efficacy in the model of international adjustment, proposing that it is positively related to work, interaction, and general adjustment. They theorize that an expatriate high in self efficacy will be more likely to believe in his or her ability to adjust to the foreign culture. Therefore, he or she will be more persistent in attempting to adjust regardless of initial failure to modify his or her behavior to acceptable standards. In addition to increased persistence to adjust, more attempts at performing acceptable behavior will provide expatriates with more feedback, giving them more information to use towards further adjusting. In support, empirical evidence has shown that workers high in self efficacy will spend more time on a task and will exhibit more attempts at completing a task (Multon, Brown, & Lent, 1991). Furthermore, a meta-analysis
conducted by Stajkovic and Luthans (1998) has shown that self efficacy predicts job performance.

Further theoretical and empirical research on the effect of self efficacy on culture shock has been lacking. However, in relation to Winkleman's (1994) sources of transition into culture shock, increased persistence should allow expatriates to tolerate prolonged stress, and better feedback should minimize cognitive overload. Thus, expatriates high in self efficacy should be less likely to transition from the honeymoon phase into the crisis phase and subsequent culture shock.

The next relevant individual characteristic is extroversion. O'Sullivan (1999) defines extroversion as an orientation in which a person is more willing to develop interpersonal relationships. In relation to international adjustment, O'Sullivan (1999) proposes that extroversion is a stable competency that is necessary to develop dynamic relationship competencies in which the expatriate is better able to understand how cultural differences may be interpreted during interactions and how to resolve conflicts that may arise due to cultural differences. Caligiuri (2000) theorizes that extroversion facilitates a socialization process, in which expatriates are better able
to formulate alliances with host nationals, providing them with information needed to adjust.

Empirical evidence has already shown that extroversion predicts increased interpersonal facilitation (Hurtz & Donovan, 2000), increased job satisfaction (Judge, Heller, & Mount, 2002), and increased motivation towards achieving set goals (Judge & Ilies, 2002). Shaffer et al., (2006) has shown empirical support for the effect of extroversion in an international setting by showing that extroversion predicts work and general adjustment as well as task performance. Caligiuri (2000) also found empirical support showing that extroversion predicts the desire to terminate an assignment. Specifically, those high in extroversion are less likely to consider terminating an assignment.

In investigating the relationship between extroversion and culture shock, it is likely that the source of personal shock will be reduced since extroversion allows for increased relationship development. That is, expatriates will develop a new support system of friends and mentors, which will make the expatriate more comfortable with his or her identity in the new culture. Moreover, these relationships provide necessary information for adjusting, which should minimize the source of cognitive overload. Due
to its minimization of personal shock and cognitive overload, extroversion should immunize the expatriate from the transition into culture shock.

Much like extroversion, agreeableness is a trait that facilitates the formation of alliances. According to Shaffer et al., (2006), agreeableness enhances one's sociability by making them more sympathetic, cooperative, and accepting of social circumstances. This provides a system of social support as well as a rich source of information concerning the culture (Caligiuri, 2000). Furthermore, O’Sullivan (1999) proposes that agreeableness, in addition to extroversion, is a stable competency that is necessary to develop dynamic relationship competencies in which the expatriate is better able to understand how cultural differences may be interpreted during interactions and how to resolve conflicts that may arise due to cultural differences.

Similar to extroversion, there is empirical evidence showing that agreeableness predicts increased interpersonal facilitation (Hurtz & Donovan, 2000), and increased job satisfaction (Judge et al., 2002). Empirical research has also supported a relationship between agreeableness and international adjustment. Recently, agreeableness has been
found to be positively related to work adjustment, interactional adjustment, and general adjustment (Shaffer et al., 2006). Moreover, Caligiuri (2000) showed that agreeableness predicts desire to terminate an assignment.

Empirical research has yet to examine the influence that agreeableness has on the culture shock process. However, empirical research has shown that managers supervising expatriates for business assignments believe that agreeableness is important to the expatriates’ ability to form interpersonal relationships with the host nationals. Supervisors also judge agreeableness as an important factor when appraising job performance (Ones & Viswesvaran, 1999). Much like extroversion, agreeableness allows for increased relationship development, which should reduce the source of personal shock. Moreover, these relationships provide necessary information for adjusting, which should minimize the source of cognitive overload. Due to its minimization of personal shock and cognitive overload, agreeableness should immunize the expatriate from the transition into culture shock.

Another individual characteristic related to adjustment is conscientiousness. According to O’Sullivan (1999), conscientiousness allows people to remain strong-
willed and control impulses to conform with situational circumstances. In relation to international adjustment it can facilitate perceptual questioning skills in which an expatriate suspends immediate judgment on an aspect that is unfamiliar due to cultural distance. This will allow the expatriate to better evaluate the aspect and make more accurate attributions concerning the meaning and reason of the prevalence of the aspect in the host culture. This falls in line with Mendenhall and Oddou’s (1985) perceptual dimension. They propose that expatriates need to have accurate perceptions of the aspects of the host culture and make correct attributions about the reasons or causes of the aspects.

Empirical evidence has shown that in addition to predicting interpersonal facilitation, conscientiousness predicts increased job dedication and job performance (Hurtz & Donovan, 2000). It has also been shown to predict increased job satisfaction (Judge et al., 2002) and increased motivation towards achieving set goals (Judge & Ilies, 2002). As conscientiousness relates to the international setting, Caligiuri (2000), who theorized that expatriates high in conscientiousness are more thorough in approaching their assignments, also provided empirical
support by showing that conscientiousness predicted supervisor ratings. Specifically, expatriates high in conscientiousness received higher ratings from their supervisor. This supported a study by Ones and Viswesvaran (1999) who found that conscientiousness is the factor of the Big Five Personality traits that managers perceive to be most crucial when selecting for expatriates. The outcomes that managers believe to be facilitated by conscientiousness include increased interpersonal relations, better performance, international adjustment, and completion of assignment. This is further supported by Shaffer et al., (2006) who showed that conscientiousness predicts general adjustment and task performance.

Although a relationship between conscientiousness and success on an international assignment has been supported, there has yet to be an examination of the relationship of conscientiousness with culture shock. Based on the theoretical proposition that conscientiousness allows expatriates to make more accurate perceptions and correct attributions of the aspects of the host culture (O'Sullivan, 1999), conscientiousness should minimize the source of cognitive overload. By minimizing the source of
cognitive overload, conscientiousness immunizes the expatriate from the onset of culture shock.

Another individual factor that may relate to the perceptual dimension is cultural flexibility, which Black (1990) defines as the tendency to find interest in experiencing different aspects of culture. Mendenhall and Oddou (1985) propose that people who are high in cultural flexibility make less rigid evaluations of the aspects of the host culture, and are amendable concerning their attributions of such aspects, are more likely to adjust. This proposition is echoed by Black and Gregersen (1999) who hold that those who are receptive of the different customs of the host culture are more likely to adjust.

Empirical research has supported the relationship between cultural flexibility and international adjustment. In a survey conducted by Arthur and Bennett (1995), expatriates report that flexibility is important to the success of their assignments. This is supported by Black (1990) who showed that cultural flexibility is positively correlated with all three facets of adjustment and by Shaffer et al. (2006) who show that cultural flexibility predicts work and general adjustment as well as task performance.
Empirical research has yet to examine the relationship that cultural flexibility has with culture shock. However, Sims and Schraeder (2004) propose that without cultural flexibility, the expatriate is more likely to experience feelings of isolation, loneliness, and frustration. It is possible that since cultural flexibility allows an expatriate to be more receptive of cultural differences, they may be less likely to believe that their identities will be compromised. That is, he/she will be more comfortable with the need to suppress behaviors that he/she perceives as central to his/her identity. Thus, the possible source of role shock will be minimized, which should immunize the expatriate from transitioning into culture shock.

The final individual characteristic is one that is more relevant to the immunization of culture shock as opposed to the gathering of information. It is the ability to sufficiently reduce stress. According to Carver (1997), when a person encounters a stressful situation, he or she can effectively reduce the experience of stress in one of two ways. First, the person can directly address the source of stress. Such forms of problem focused coping include planning and seeking information from others. Second, the
person can alleviate the stressful emotions elicited from the situation while still acknowledging the source of stress. Such forms of emotion focused coping include positive reappraisal and seeking emotional support from others. Essentially, culture shock is a stress process as the expatriate is experiencing emotional reactions to a set of demands that may exceed his or her resources. Therefore, it is important for the expatriate to be able to deal with that stress in an adaptive manner, so that he or she can relieve stress and adjust to the host culture. Such an assertion was put forth by Mendenhall and Oddou (1985), who stated that emotion focused coping helps the expatriate manage feelings of stress and gradually adjust to the host culture. This was supported by Sims and Schraeder (2004) who report that expatriates who utilize emotion focused coping are able to relieve anxiety and endure the challenges of culture shock. Furthermore, O’Sullivan (1999) postulated that emotional stability facilitates the development of dynamic competencies necessary for self maintenance in a foreign environment.

Parkes (1990) showed that direct coping as well as suppression are related to lower levels of distress and Latack (1986) provided empirical support for the effect of
coping on workplace outcomes showing that both emotion-focused and problem-focused coping are negatively related to anxiety and propensity to leave a job and positively related to job satisfaction. The effect of coping as it relates to international assignments has been empirically supported by Shaffer et al. (2006) who have shown that the emotional stability predicts work and interaction adjustment as well as intention to leave the host culture. Specifically, those better able to cope with stress were more likely to adjust to the work environment, more likely to adjust to interactions with host nationals, and less likely to think about leaving an assignment prematurely. The decreased desire to terminate the project as a function of emotional stability has also been supported by Caligiuri (2000). In addition to coping with the emotional reactions to stress, Stahl and Caligiuri (2005) have shown that coping with stress by attempting to alter the source of stress is positively related to adjustment when cultural distance is high and the expatriate is a low to mid-level worker. Therefore both emotion focused coping and problem focused coping have been empirically shown to be related to adjustment. This study suggests that both emotion-focused coping and problem-focused coping reduces the expatriate’s
exposure to prolonged stress, which immunizes him or her from a source of transition into culture shock.

In summary, it appears that each of these characteristics facilitate international adjustment in two ways. First, they enhance the expatriate's ability to gather accurate information about the host culture. Many of these individual characteristics increase the sociability of the expatriate to the host nationals, which in turn provides the expatriate with more resources of information. Additionally, the increased persistency through self efficacy provides the expatriate more opportunities to draw information from these resources, and conscientiousness allows the expatriate to better evaluate such information. The second way in which these characteristics facilitate international adjustment is through decreasing the expatriate's susceptibility to transitioning into culture shock. For instance, coping will prevent expatriates from prolonged exposure to stress, conscientiousness will prevent cognitive overload, and cultural flexibility will buffer the feeling that an expatriate's identity is being compromised, thus reducing role shock. Finally, many of the personality characteristics that increase the sociability
of the expatriate to the host nationals, should result in decreased personal shock.

The purpose of this study was to examine the mediating effect that information gathering and culture shock have on the relationship between individual characteristics and international adjustment. The hypothesized model is presented in Figure 1, where circles represent latent variables, and rectangles represent measured variables. Lines with arrows indicate hypothesized direct relationships between variables. Absence of a line connecting variables implies no hypothesized direct effect. Asterisks indicate parameters to be estimated. It is hypothesized that culture orientation, a latent variable with three indicators (i.e., amount of previous international experience, distance of previous international experience, and cultural flexibility) and adaptive personality traits, another latent variable with four indicators (i.e., self efficacy, extroversion, agreeableness, and conscientiousness) will predict information gathering, a latent variable indicated by amount of general information obtained, amount of work information obtained, and amount of interaction information obtained. Additionally, it is predicted that
coping skills, a latent variable with two indicators (i.e., problem focused coping behaviors and emotion focused coping behaviors) along with culture orientation, and adaptive personality traits will predict culture shock, a latent variable indicated by intrapersonal responses to the culture and interpersonal responses to the culture. Finally, it is hypothesized that increased information gathering and decreased culture shock will predict an increase in international adjustment, a latent variable indicated by general adjustment, work adjustment, and interaction adjustment. Thus, information gathering and culture shock serve as mediating variables between culture orientation, adaptive personality, and international adjustment. Culture shock serves as a mediating variable between coping skills and international adjustment.
CHAPTER TWO

METHODS

Participants

Participants for this study consisted of 95 international students within the California State University system. These programs host students that are expatriating from outside of America to attend college in the pursuit of a four-year degree. The age of the students that participated in this study ranged from 18 - 49 years. Of the 95 participants, 75 were female, 18 were male, and two did not report their gender.

There were 29 different countries represented in the sample. The greatest representation came from China with 13 students. There were also 11 students from Mexico, nine students from Japan, eight students from Germany, and six students from India. Participants were asked to report their primary language, and as a result, 22 different languages were reported. The most common primary languages reported were Chinese and Spanish, each of which were reported by 14 students. It should be noted that 12 students reported their primary language to be English. There were also nine students reporting their primary
language to be German, and another nine reporting their language to be Japanese.

When asked about both the likelihood and probability of leaving their current university, approximately ten percent of students reported that they very much wanted to leave and it was very likely that they would leave. Nineteen students reported that they had previously transferred from a university. Twelve of those students had transferred only once, with four of them transferring twice before, two of them transferring three times, and one had transferred four times. All participants were treated in accordance with the Ethical Principle of Psychologists and Code of Conduct" (American Psychological Association, 2002).

Such participants are relevant to this study, because they undergo a similar experience to that of more business oriented expatriates. They enter a foreign culture for a similar purpose, they face similar difficulties, and they must address all three facets of adjustment described by Black (1990). These students find themselves entering a new culture, in which they encounter new aspects (e.g., food, communication habits, and entertainment opportunities). They may find that their usual manner of behavior is no
longer acceptable and that they may be expected to behave in a manner of which they are not accustomed. They will have to learn new information, modify their behavior, and avoid negative emotional and psychological reactions to the new culture.

Much like their business oriented counterparts; international students are entering the foreign culture with a high degree of technical expertise. In order to qualify for the International Students program, they must meet entrance requirements displaying their proficiency in education. Yet, regardless of their expertise, the international students may begin experiencing mental exhaustion with trying to live in a new culture. They may begin to suffer from feelings of alienation, confusion, inadequacy, homesickness, depression, and lethargy. As a result, they may have difficulty carrying out the intended work of which they have expertise. Additionally, they may have difficulty engaging the general environment and maintaining interpersonal relations. Thus, they must adjust to the culture through the three facets described by Black (1990).

Since they must perform duties such as homework, team projects, and class presentations, they are required to
make work adjustments. Yet, regardless of their technical expertise, (i.e., educational proficiency), they are less likely to succeed if they are not able to adjust to interacting with host nationals and the general culture. They must adjust to interaction with host nationals since their assignment requires communication with a wide variety of people in the host culture such as teachers and administrators. Additionally, they will also have to interact with various people involved with their educational program such as other students, dorm partners, and an assortment of authorities and civilians. Finally, since they are completely immersed in the host culture they must adjust to the general aspects, such as food, transportation, and various recreational activities.

Measures

Cultural flexibility was assessed using a six item measure that operationalized the definition put forth by Mendenhall & Oddou (1985). They referred to the idea of cultural flexibility as the ability to identify discrepancies between the home culture and host culture, and then develop understandings of the discrepancies as well as learned enjoyment of how to utilize different
aspects for one’s pleasure. The six item measure, which recently yielded a coefficient alpha of .74 (Shaffer et al., 2006), asks participants to identify the extent to which they are interested in and able to adapt to unfamiliar aspects of the foreign culture. A sample item reads, “Even though a foreign country might not have things I enjoy in my home country, it is easy for me to find new ones.” For each participant, the reported score was an average of all items in the scale. Reliability for cultural flexibility in this study yielded an alpha coefficient of .69.

Self efficacy was assessed using Chen, Gully, and Eden’s (2001) New General Self Efficacy Scale (alpha = .90). Participants indicated the extent to which they agree with each of the eight items on the scale. A sample item reads, “When facing difficult tasks, I am certain that I will accomplish them.” For each participant, the reported score was an average of all items in the scale. Reliability for Self Efficacy yielded an alpha coefficient of .90.

Extroversion, Conscientiousness, and Agreeableness was assessed using scales from Saucier’s Big Five Mini-Markers measure (1994). Participants were presented with a series of adjectives and asked to indicate on a 9-point Likert
scale the extent to which the adjective describes them. Coefficient alphas have recently been reported at .86 for extroversion, .76 for conscientiousness, and .85 for agreeableness (Palmer and Loveland, 2004). For each participant, the reported score was an average of all items in the respective scales. For this study, coefficient alphas were .71 for extroversion, .86 for conscientiousness, and .92 for agreeableness.

Emotion focused coping and problem focused coping were assessed using the Brief COPE (Carver, 1997). Each participant indicated on eight 4-point Likert scales (1 = I would not do this at all; 4= I would do this a lot) the extent to which they respond to stressful situations using responses indicative of emotion-focused coping and problem focused coping. Scales assessing emotion focused coping include positive reframing, acceptance, turning to religion, seeking emotional support, and denial. Scales assessing problem focused coping include active coping, planning, and seeking instrumental support. Prior to this study, there had yet to be a study to assess an overall reliability coefficient for this combination of scales. However, the reliability reported for similar combinations have been supporting. Shen, McReary, and Myers (2003)
reported a reliability coefficient alpha of .82 for a measure that consisted of 6 of the 8 scales used in this study (i.e., positive reframing, acceptance, emotional support, instrumental support, active coping, and planning). Rosenberger, Ickovics, Epel, D'entrmont and Jokl (2004) used a measure that included positive reframing, acceptance, turning to religion, emotional support, active coping, and planning. They left out denial and instrumental support and included venting of emotions. The overall reliability for that measure was reported at .81. For the purposes of this study, problem-focused coping and emotion-focused coping were combined into one scale. For each participant, the reported score was an average of all items in the combined scale. This combined scale yielded an alpha coefficient of .73.

Culture shock was assessed using the measurement of culture shock developed by Mumford (1997). This is a 12-item measure with seven items assessing “core” culture shock items and five items assessing interpersonal stress items. In the “core” culture shock items, participants were asked if they feel strain from the effort to adapt, if they miss family and friends from home, if they feel as though they are generally accepted by the host nationals, if they
wish to escape the host culture, if they feel confused about their identity in the host culture, if they find things in the host culture shocking or disgusting, and if they feel powerless to cope with the host culture. In the interpersonal stress items, participants were asked if they feel anxious when meeting host nationals, if they can make sense of host nationals' gestures or facial expressions, if they are uncomfortable with host nationals staring at them, if they feel as though host nationals are trying to cheat them while shopping, and if they find it an effort to be polite to host nationals. Cronbach's alpha is reported at \( \alpha = 0.79 \). For each participant, the reported score was an average of all items in the scale. Reliability for the scale in this study yielded an alpha coefficient of \( \alpha = 0.84 \).

Information gathering was assessed using the 13-items used by Black (1990), which are designed to measure the three facets of adjustment (i.e., adjustment to work, adjustment to interaction with the host nationals, and adjustment to the general environment). The participants were asked to indicate the extent to which they have gathered accurate information to better understand each item. The participants were asked to make this indication regardless of any emotional feelings they may have toward
the item or any behavioral modification they have made to adjust each item. For each participant, the reported score was an average of all items in the scale. Reliability for this scale yielded an alpha coefficient of .87.

Adjustment was assessed using the 13-item measurement of international adjustment used by Black (1990), which is designed to measure the three facets of international adjustment. The participants were asked to indicate the extent to which they believe they have adjusted to those items (1 = Not adjusted at all; 7 = Completely adjusted). Items on the adjustment to work scale are job responsibilities, performance standards and planning responsibilities. Items on the adjustment to interaction with host nationals scale include working with coworkers, working with host nationals that are not coworkers, interaction with host nationals in general, and supervising host national subordinates. Items on the adjustment to the general environment scale are general living in the host culture, transportation system in the host culture, food, shopping, weather, and entertainment opportunities. Shaffer et al. (2006) recently reported coefficient alphas of .89 for general adjustment, .83 for interaction adjustment, and .77 for work adjustment. For the purposes of this study,
the three scales were combined. For each participant, the reported score was an average of all items in the combined scale. Reliability for the combined scale in this study yielded an alpha coefficient of .93.

Procedure

All participants completed a series of Likert-type surveys. These surveys asked questions assessing participants' level of cultural flexibility, extroversion, conscientiousness, agreeableness, self-efficacy and coping behaviors. Following these questions, the participants completed another series of questions assessing their ability to gather accurate information on the host culture, their level of culture shock, and their level of international adjustment.
CHAPTER THREE
RESULTS

Means and Standard Deviations of the Variables

On a 4-point Likert scale, the mean score reported for cultural flexibility is 3.08 with a standard deviation of .51. Therefore, cultural flexibility appeared to average relatively high for the sample. Similarly, the adaptive personality traits hypothesized to relate to international adjustment yielded high means. On a 9-point Likert scale, the mean score reported for conscientiousness is 6.80 with a standard deviation of 1.52. On a 9-point Likert scale, the mean score reported for extroversion is 6.07 with a standard deviation of 1.34. On a 9-point Likert scale, the mean score reported for agreeableness is 7.02 with a standard deviation of 1.61. On a 4-point Likert scale, the mean score reported for problem focused coping at 3.22 with a standard deviation of .42 was slightly higher than the mean score reported for emotion focused coping responses at 2.69 with a standard deviation of .45. The final adaptive individual characteristic, self efficacy also yielded a high mean score of 3.30 on a 4-point Likert scale with a standard deviation of .49.
On a 4-point Likert scale, the mean score reported for culture shock is 2.23 with a standard deviation of .57. Therefore, the reported scores for culture shock were moderate at best. There were not a high number of participants experiencing a high amount of culture shock, nor were there a great amount of participants experiencing a low amount of culture shock. On a 4-point Likert scale, the mean score reported for information gathered is 2.95 with a standard deviation of .51. Therefore, many of the participants believed that they had gathered a good amount of accurate information on many of the aspects within the culture. On a 7-point Likert scale, the mean score reported for international adjustment is 5.46 with a standard deviation of 1.03. So, the average participant score indicates that students believe that, to a reasonable extent, they were able to adjust to the culture.

An initial analysis of the relationship among the variables was conducted using bivariate correlational analysis and is shown in Table 1. Information gathered was positively related to both cultural flexibility and coping. Culture shock had strong negative relationships with cultural flexibility and self efficacy. International
adjustment is positively related to information gathered, whereas it is negatively related to culture shock.

The Hypothesized Model

The intended hypothesized model, as presented earlier, was meant to test the relationship among latent factors, with each latent factor consisting of a set of measurable variables. The level of analysis required to test such a model is dependant on a large enough sample to test each parameter (e.g., each measurable variable loading onto one factor). After a lengthy recruitment effort, the sample size acquired was not large enough to perform such an analysis. Therefore, instead of testing latent factors, this study analyzed only the measureable variables thought to account for those latent factors. Demographic data concerning previous experience that was intended to account for the latent factor of cultural orientation was removed from analysis and cultural flexibility alone was analyzed as a measurable variable. The variables of extroversion, agreeableness, conscientiousness, and self efficacy were combined as one measurable variable titled "adaptive personality traits". As shown earlier these variables have previously established psychometric properties, which
decreases the need to run the full measurement model. Confirmatory Factor Analysis shows that the four variables load into one factor yielding a comparative fit index of .99. All variables loaded well onto the factor with communality values of .67 for agreeableness, .89 for conscientiousness, .52 for extroversion, and .48 for efficacy. Reliability for the combined scale yielded an alpha of .89.

A path analysis, based on the data collected from international students, was performed through EQS using the measurable variables of cultural flexibility, adaptive personality traits, coping, information gathering, culture shock, and international adjustment. The hypothesized model is presented in Figure 2, where rectangles represent the indicated measurable variables. Lines with arrows indicate hypothesized direct relationships between variables. Absence of a line connecting variables implies no hypothesized direct effect. Asterisks indicate parameters to be estimated. It was hypothesized that cultural flexibility and adaptive personality traits (i.e., self efficacy, extroversion, agreeableness, and conscientiousness) would predict information gathering. Additionally, it was predicted that coping skills, along
with cultural flexibility, and adaptive personality traits would predict culture shock. Finally, it was hypothesized that increased information gathering and decreased culture shock would predict an increase in international adjustment. Thus, information gathering and culture shock mediate cultural flexibility and adaptive personality's relationship with international adjustment. Culture shock serves as a mediating variable between coping skills and international adjustment.

Assumptions

Of the 95 questionnaires completed, there was less than five percent missing data. One subject had scores for cultural flexibility, work adjustment, and general adjustment that exceeded three standard deviations from the mean of the respective scales and so the subject's data was removed from the analysis. All scales displayed normal distribution.

Model Estimation

Maximum likelihood estimation was used to estimate the independence model and the hypothesized model. The independence model was evaluated to test the hypothesis
that there is no relationship among the variables. This hypothesis was rejected, \( \chi^2 (15, N = 94) = 112.416, p<.05 \). The hypothesis model was tested to evaluate the fit of the model. This test yielded support for the hypothesized model, \( \chi^2 (7, N = 94) = 8.345, p=.303 \). A variety of fit indices were used to test the improvement in fit between the independence model and the hypothesized model. According to Ullman (2007), the comparative fit index (CFI) and the root mean-square error of approximation (RMSEA) are the most frequently reported indices of fit. Both indices indicate a significant improvement in fit between the independence model and hypothesized model in this study. RMSEA needs to be at .06 or less to indicate a good fitting model (Hu & Bentler, 1999). RMSEA for this study yielded a .04. CFI should be greater than .95 to indicate a good fit. For this hypothesized model, CFI yielded a .99. In addition to CFI, Hu and Bentler (1999) suggest reporting the standardized root mean square residual (SRMR), which should be .08 or lower to indicate a good fitting model. For this hypothesized model, SRMR yielded a .06.

The final model, including significant standardized coefficients, as well as unstandardized coefficients in parentheses, is illustrated in Figure 3. According to the
model, international adjustment was predicted by both
information gathered (.53), culture shock (-.20), and
adaptive personality traits (.28, $R^2=.12$, $p<.05$). So as
hypothesized, international adjustment increased as
information gathered increased and culture shock decreased.
However, international adjustment also increased as a
result of an unmediated relationship with increased
adaptive personality traits. Information gathered was
predicted by coping (.30, $R^2 = .12$, $p<.05$), but a
relationship in which information gathered was predicted by
cultural flexibility was not significant (.16, $R^2 = .12$
_n.s._). Specifically, coping responses predicts an increased
ability for expatriates to gather accurate information on
the culture. Culture shock was predicted by cultural
flexibility (-.37, $R^2 = .14$, $p<.05$). Specifically, cultural
flexibility predicted a decreased susceptibility to the
damaging effects of culture shock.
CHAPTER FOUR

CONCLUSION

The purpose of this study was to examine the mediating effect that information gathering and culture shock have on the relationship between individual characteristics and international adjustment. Previous research has already reported a relationship between individual characteristics and international adjustment. However, speculation that such a relationship is mediated by the ability to gather accurate information about the foreign culture had yet to be tested. Additionally, the mediating effect of culture shock had remained absent in previous research. In order to better understand the relationship between individual characteristics and international adjustment, this study empirically evaluated the mediating effect that information gathering and culture shock has on the process.

Utilizing path analysis, this study supported the model shown in Figure 2. As predicted, it was found that the relationship between cultural flexibility and international adjustment is mediated by cultural shock. A high level of cultural flexibility predicted a lower level of culture shock. This in turn, predicted a higher level of
international adjustment. With that said, the relationship between cultural flexibility and international adjustment was not mediated by increased information gathering. So, the international students that were more open to aspects of the foreign culture were more likely to make the proper adjustments to that culture, because they were less likely to experience the maladaptive emotional and psychological reactions of culture shock. This supports Sims and Schraeder (2004), who propose that without cultural flexibility, the expatriate is more likely to experience feelings of isolation, loneliness, and frustration. This should result in a reduction of role shock in which, according to Winkleman (1994), the expatriate may feel as though their identity is compromised within an enclosed environment, which then transitions the expatriate into the crisis phase of culture shock. However, these students' increased level of international adjustment was not due to an increase in their ability to gather accurate information about the foreign culture.

The prediction that culture shock mediated the relationship between coping and international adjustment was not supported. A high level of coping skills did not predict a decreased level of culture shock. However, this
study still found a relationship between coping and adjustment. Although it was not predicted in the current study, this relationship was found to be mediated by information gathering. That is, increased levels of coping skills predicted an increase in information gathering, which in turn predicted an increase in international adjustment. Therefore, the international students reporting a high level of coping skills were more likely to make the proper adjustments to the foreign culture. Yet, this was not due to the hypothesized notion that students high in coping skills would be less likely to experience the debilitating emotional and psychological reactions of culture shock. Instead, international students high in coping skills were more likely to make the proper adjustments to the foreign culture because they were more likely to gather accurate information about that foreign culture.

The idea that coping skills would facilitate international adjustment through decreased culture shock was based on reports from Mendenhall and Oddou (1985), Sims and Schraeder (2004), Parkes (1990), and Latack (1986) who reported that coping decreases levels of anxiety and distress in expatriation settings. Thus, it was
hypothesized that those high in coping skills would not be subjected to the prolonged stress responsible for transition into the crisis phase of culture shock (Winkleman, 1994). It is possible that expatriates may still transition into culture shock, and then cope through information gathering. Such an idea may be supported by Stahl and Caligiuri (2005) who have shown that expatriates high in coping skills will adjust by attempting to alter the source of stress.

Finally, there was a relationship found between personality and international adjustment, but in contrast to this study's hypothesis, this relationship was not mediated by information gathering and culture shock. That is, high levels of adaptive personality traits did not result in higher levels of information gathering or lower levels of culture shock. Instead, this study revealed a direct, unmediated relationship between adaptive personality traits and international adjustment. Specifically, high levels of adaptive personality traits resulted in a high level of international adjustment regardless of the lack of increase found in information gathering and the lack of decrease found in culture shock. So, international students possessing a high level of
adaptive personality traits were more likely to make the proper adjustments in the foreign culture. Nevertheless, this increase in their ability to adjust was not due to any increase in their ability to gather accurate information about the culture. It was also not due to any decrease in the level of debilitating emotional and psychological reactions experienced as a result of their exposure to the foreign country.

It should be noted that this study revealed a relationship between cultural flexibility and adaptive personality traits. That is, a high level of cultural flexibility resulted in a high level of adaptive personality traits. So those international students that were more open to experiencing a new culture were more likely to display traits indicative of extroversion, agreeableness, conscientiousness and self efficacy. This may explain the direct relationship found between adaptive personality traits and international adjustment. For instance, Black and Gregersen (1999) report that people high in cultural flexibility are more receptive to understanding the different customs of the host culture, a trait indicative of agreeableness, and are more likely to adjust. Additionally, Mendenhall and Oddou (1985) report that people high in cultural flexibility make less rigid
evaluations of the distinctive aspects of the culture and are amendable concerning the attributions they place on such aspects. This may allow for a more careful evaluation of such aspects, which is a trait indicative of conscientiousness. Finally, it may increase an expatriate’s belief in his/her ability to make the proper adjustments, which is a trait indicative of self efficacy. So although one may not be able to experience an increase in his/her ability to gather accurate information about the culture, cultural flexibility may increase traits such as extroversion and agreeableness. This will make that person more likely to reach out to people of the foreign culture and accept the viewpoints regarding the distinctive aspects of that culture, which will allow them to peacefully exist within that culture, thus making the proper adjustments. Moreover, it should be noted that this study only studied the onset of culture shock and not the recovery from such reactions. It is possible that people high in cultural flexibility may still experience the debilitating reactions of culture shock, yet through an increased level of self efficacy, they will persist in their attempts to adjust (Black et al., 1991). The increased persistence in adjusting associated with self efficacy may help them recover from these emotional and psychological reactions.
This study also uncovered a relationship between adaptive personality traits and coping skills. That is, a high level of adaptive personality traits resulted in a high level of coping skills. This may help explain why the relationship between coping skills and international adjustment was found to be mediated through information gathering, as opposed to culture shock, in which a mediating relationship was hypothesized but not supported. Once again, this study only evaluated the onset of culture shock and not the recovery. So, even though adaptive traits personality and coping skills did not prevent the onset of culture shock, it is possible that they facilitate the recovery from such reactions while coping responses facilitate the increase of information gathering. For instance, increased levels of conscientiousness and extroversion, as well as increased persistence through self efficacy, may increase one’s tendency to respond to any experienced stress within the new culture through problem focused coping approaches such as seeking information from foreign nationals and strategizing about their approach to the stress. Additionally, traits indicative of agreeableness and conscientiousness may help enhance emotion focused coping responses such as positive reframing.
needed to reevaluate negative attributions of information gathered and develop more accurate assessments of the distinctive aspects of the culture. This in turn will help facilitate adjustment.

In summary, this study found that cultural flexibility, adaptive personality traits, and coping skills facilitated the ability to adjust to a foreign culture. Although no relationship was found between cultural flexibility and information gathering, this study found that cultural flexibility facilitated international adjustment through its ability to decrease the debilitating emotional and psychological reactions of culture shock. Additionally coping skills were found to increase international adjustment through increasing a person's ability to gather accurate information about the foreign culture, regardless of its inability to decrease a person's susceptibility to culture shock. Finally, adaptive personality traits were found to facilitate international adjustment directly, without increasing a person's ability to gather accurate information about the foreign culture or decreasing the person's susceptibility to the experience of culture shock.
It should be noted that this study intended to test the relationship among latent factors, with each latent factor consisting of a set of measurable variables. After a lengthy recruitment effort, the sample size acquired was not large enough to perform such a level of analysis, which is dependant on a large enough sample to test each parameter. Instead of testing latent factors, this study only analyzed the measurable variables thought to account for those latent factors.

It also needs to be acknowledged that this study's investigation of international adjustment was limited to the area of individual characteristics. Although individual characteristics are one of the most frequently investigated and most commonly reported facilitator of international adjustment, one should note that Black et al.'s (1991) model also emphasizes the importance of aspects such as training, socialization, and logistical support given to the expatriate. Investigation of individual characteristics is important and will deliver a great amount of knowledge to relevant research, but individual characteristics alone will not deliver an ideally comprehensive investigation.

There is also a possibility that there may be differences in survey responses across cultures within the
sample. For instance, Chen, Lee, and Stevenson (1995) reported that some cultures are more likely to report at the extreme ends, both high and low, when using Likert-type scales, whereas other cultures are more likely to report at the midpoint of the scale. This study did gather reports from participants representing 29 different countries and Chen et al. (1995) did report that the differences in reporting style did not affect cross cultural comparisons of reports.

Another issue involved with differences in reporting styles across cultures involves differences in interpretation. For instance, Wong, Rindfleisch, and Burroughs (2003) report that differences in interpretation of items are likely to occur when the items are phrased in both positive and contrasting negative direction. This study used the Mini-markers (Saucier, 1994), which asks participants to rate the extent to which they relate to a variety of descriptive words. In addition to using both positive and negative directed words, the meanings of the words themselves may vary across cultures.

Another limitation of this study may be the generalization of international students to the more business-like nature of other expatriate counterparts.
Although individual differences can be generalized, international students may experience significant differences in the level of the other relevant factors of international adjustment mentioned above. It is possible that the motives of international students to enter a foreign setting differ from the motives of their business-like counterparts. Instead of being assigned to a foreign culture and provided monetary incentive for entering that culture, international students may be more likely to actively choose to enter a foreign culture and will select the culture of their choice. Any differences in motivation may influence significant differences in the variables that predict international adjustment. For instance, students that decide to enter into an international school program may do so because they are higher in cultural flexibility and adaptive personality traits. This may explain the high means shown in Table 1. These motivations may also have an untested influence on the outcome of an international student.

International students may receive more time to prepare for the foreign culture, which would allow for better training. They may also receive better logistical support given to them by their respective universities in
comparison to whatever logistical support may be provided by an organization to their business oriented expatriates. All of these factors may influence the level of international adjustment in addition to fluctuation in individual characteristics.

Perhaps the most significant limitation of this study is that it only investigated the onset of culture shock and did not include evaluation of the recovery from such emotional and psychological reactions. This study had predicted that adaptive personality traits and coping skills would prevent the experience of culture shock, and this prediction was not found. However, it is possible that even though adaptive personality traits and coping skills did not prevent the onset of culture shock, they may have facilitated the recovery from such emotional and psychological reactions.

Regardless of the noted limitations, the current study has developed a better understanding of the important relationship between individual characteristics and international adjustment. These findings yield benefits in the area of research as well as benefits in a practical setting. Research can continue to develop a better understanding of how individual characteristics facilitate
international adjustment by empirically investigating their
effect on information gathering as opposed to sufficing
with mere speculation. Additionally, this study
successfully incorporated research on culture shock into an
established model of international adjustment. In a
practically applied setting, the findings of this study
suggest that organizations may be able to screen for the
individual characteristics of potential expatriates in
order to improve project success. In addition to the
ability to screen for the expatriates more likely to make
adjustment, organizations can determine if potential
expatriates lacking in the necessary individual
characteristics need support in any of the other factors
involved with international adjustment. For instance,
expatriates lacking in cultural flexibility may be able to
successfully adjust as long as the organization provides
the necessary socialization and logistical support needed
to alleviate the experience of culture shock. Expatriates
lacking in coping skills may still be able to adjust as
long as organizations provide increased training to help
facilitate information gathering.

Future research on the relationship between individual
characteristics and international adjustment should
continue to investigate the mediating variables of information gathering and culture shock. However, such research should investigate individual characteristics' ability to facilitate international adjustment through its ability to help expatriates recover from culture shock in addition to its ability to prevent the onset of such reactions. Additionally, it is very important that future research pays respect to the other factors involved in international adjustment (e.g., training, socialization, and logistical support).
APPENDIX A

FIGURES AND TABLE
Figure 1. The hypothesized model of the relationship between individual characteristics and international adjustment.
Figure 2. The revised hypothesized model of the relationship between individual characteristics and international adjustment.
Figure 3. The final model of the relationship between individual characteristics and international adjustment.
Table 1. The relationships among individual characteristics, culture shock, information gathering, and international adjustment.

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<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>1. Cultural Flexibility</td>
<td>3.08</td>
<td>.51</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Agreeableness</td>
<td>7.02</td>
<td>1.61</td>
<td>.19</td>
<td>-</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Conscientiousness</td>
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<td>.11</td>
<td>.59</td>
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<td></td>
<td></td>
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<tr>
<td>4. Extroversion</td>
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<td>5. Self Efficacy</td>
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<td>.28</td>
<td>.44</td>
<td>.16</td>
<td>-</td>
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<tr>
<td>6. Problem Focused Coping</td>
<td>3.22</td>
<td>.42</td>
<td>.27</td>
<td>.14</td>
<td>.39</td>
<td>.12</td>
<td>.47</td>
<td>-</td>
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<tr>
<td>7. Emotion Focused Coping</td>
<td>2.69</td>
<td>.45</td>
<td>-.00</td>
<td>.09</td>
<td>.11</td>
<td>.16</td>
<td>.20</td>
<td>.35</td>
<td>-</td>
<td></td>
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<td>8. Culture Shock</td>
<td>2.33</td>
<td>.57</td>
<td>-.37</td>
<td>-.15</td>
<td>-.19</td>
<td>-.11</td>
<td>-.29</td>
<td>-.13</td>
<td>-.29</td>
<td>-</td>
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<td>9. Information Gathering</td>
<td>2.95</td>
<td>.51</td>
<td>.21</td>
<td>.10</td>
<td>.15</td>
<td>.07</td>
<td>.37</td>
<td>.32</td>
<td>.37</td>
<td>-.22</td>
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<td>10. International Adjustment</td>
<td>5.46</td>
<td>1.03</td>
<td>.32</td>
<td>.29</td>
<td>.32</td>
<td>.29</td>
<td>.38</td>
<td>.29</td>
<td>.38</td>
<td>.36</td>
<td>.60</td>
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APPENDIX B

SURVEY
Measure of Cultural Flexibility

The following items are statements about foreign cultures in general. These statements are not referring to specific cultures you may have visited. Instead, they refer to feelings you may have about all foreign cultures in general. Read each statement carefully. Then, on a scale of one to four, indicate the extent to which you agree with each statement.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

1. Most foreign countries have interesting and fun activities which are not common in my country ........................................ 1 2 3 4

2. Learning about other cultures is interesting and fun ......................... 1 2 3 4

3. It is easy for me to learn to enjoy new activities .............................. 1 2 3 4

4. It is easy for me to adapt to new ways of doing things ....................... 1 2 3 4

5. Even though a foreign country might not have things I enjoy in my home country, it is easy for me to find new ones ............. 1 2 3 4

6. Because I find new activities to enjoy, being away from my home country does not make me homesick ................................. 1 2 3 4
Measure of Extroversion, Conscientiousness, and Agreeableness

The following items are characteristics used to explain people. Please read each characteristic. Then on a scale of one to nine, indicate the extent to which you believe each characteristic explains you.
(1 = This does not explain me at all; 9 = This explains me very much)

1. Sympathetic
2. Sloppy
3. Kind
4. Organized
5. Extroverted
6. Cooperative
7. Practical
8. Warm
9. Systematic
10. Harsh
11. Withdrawn
12. Efficient
13. Cold
14. Inefficient
15. Talkative
16. Unsympathetic
17. Shy
18. Rude
19. Disorganized
20. Bashful
21. Quiet
22. Careless
23. Bold
24. Energetic
Measure of General Self Efficacy

These items are statements about the beliefs you have about your ability to perform general tasks and overcome challenges. Regardless of how you have performed on previous tasks and challenges, please indicate the extent to which you agree with each statement.
1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

1. I will be able to achieve most of the goals that I have set for myself ........................................1 2 3 4

2. When facing difficult tasks, I am certain that I will accomplish them ........................................1 2 3 4

3. In general, I think that I can obtain outcomes that are important to me ........................................1 2 3 4

4. I believe I can succeed at most any endeavor to which I set my mind ........................................1 2 3 4

5. I will be able to successfully overcome many challenges .........................................................1 2 3 4

6. I am confident that I can perform effectively on many different tasks ........................................1 2 3 4

7. Compared to other people, I can do most tasks very well ............................................................1 2 3 4

8. Even when things are tough, I can perform quite well ...............................................................1 2 3 4
Brief COPE Measure

These items deal with ways that you might respond to stressful situations. Read each item carefully. Then, regardless of whether or not these responses help you to alleviate stress, please indicate the extent to which you actually respond in the manner stated.

1=I do not do this at all
2=I do this a little bit
3=I do this a medium amount
4=I do this a lot

1. I concentrate my efforts on doing something about the situation I’m in ........................................... 1 2 3 4
2. I say to myself “this isn’t real.” ........................................... 1 2 3 4
3. I get emotional support from others ........................................... 1 2 3 4
4. I take action to try to make the situation better ........................................... 1 2 3 4
5. I refuse to believe that it has happened ........................................... 1 2 3 4
6. I get help and advice from other people ........................................... 1 2 3 4
7. I try to see it in a different light, to make it seem more positive ........................................... 1 2 3 4
8. I try to come up with a strategy about what to do ........................................... 1 2 3 4
9. I get comfort and understanding from someone ........................................... 1 2 3 4
10. I look for something good in what is happening ........................................... 1 2 3 4
11. I accept the reality of the fact that it has happened ........................................... 1 2 3 4
12. I try and find comfort in my religion or spiritual beliefs ........................................... 1 2 3 4
13. I try to get advice or help from other people about what to do ........................................... 1 2 3 4
14. I learn to live with it ........................................... 1 2 3 4
15. I think hard about what steps to take ........................................... 1 2 3 4
16. I pray or meditate ........................................1 2 3 4
Measure of Culture Shock

These items are statements concerning feelings you may have about your experience in the foreign culture. On a scale of one to four, please indicate the extent to which you agree with each statement.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

1. I have been missing my family and friends back home ........................................ 1 2 3 4
2. I feel generally accepted by the local people in the new culture ........................................ 1 2 3 4
3. At times, I wish to escape from my new environment all together ........................................ 1 2 3 4
4. I feel helpless or powerless when trying to cope with the host culture ........................................ 1 2 3 4
5. When I go out shopping, I feel as though people may be trying to cheat me ................................. 1 2 3 4
6. I feel uncomfortable if people stare at me when I go out .............................................................. 1 2 3 4
7. I feel strain from the effort to adapt to a new culture ................................................................. 1 2 3 4
8. I feel anxious or awkward when meeting local people ................................................................. 1 2 3 4
9. At times, I have found things in my new environment shocking or disgusting ............................. 1 2 3 4
10. When talking to people, I can make sense of their gestures or facial expressions ....................... 1 2 3 4
11. At times, I feel confused about my role or identity in the new culture ........................................... 1 2 3 4
12. I am finding it an effort to be polite to my hosts ................................................................. 1 2 3 4
Measure of Information Gathering

These items are aspects of the new culture that you have likely encountered as well as aspects of the interactions you have experienced and the work you do in the new culture. Please read each aspect carefully. Then, indicate the extent to which you have gathered accurate information to better understand the aspect.

1 = I have not been able to gather accurate information about this aspect.
2 = I have gathered a little information, although I not sure it is correct.
3 = I have gathered a good amount of information, and I am confident that it is accurate.
4 = I have gathered a complete amount of correct information.

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<td>Performance standards</td>
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<td>2</td>
<td>Entertainment opportunities</td>
<td>1 2 3 4</td>
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<td>3</td>
<td>Supervising American subordinates</td>
<td>1 2 3 4</td>
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<td>4</td>
<td>Shopping</td>
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<td>5</td>
<td>Working with American coworkers</td>
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<td>6</td>
<td>Transportation system in America</td>
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<td>7</td>
<td>Planning responsibilities</td>
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<td>Interacting with Americans in general</td>
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<td>9</td>
<td>Generally living in America</td>
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<td>The food</td>
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<td>Weather</td>
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<td>Working with Americans that are not coworkers</td>
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<td>13</td>
<td>My job responsibilities</td>
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Measure of International Adjustment

These items are aspects of the new culture that you have likely encountered as well as aspects of the interactions you have experienced and the work you do in the new culture. Please read each aspect carefully. Then, on a scale of one to seven, indicate the extent to which you can routinely behave in a manner that the new culture deems to be acceptable when dealing with that aspect.

(1 = Incapable of routinely performing accepted behaviors; 7 = Able to routinely perform accepted behaviors)

1. Performance standards .................. 1 2 3 4 5 6 7
2. Entertainment opportunities ............. 1 2 3 4 5 6 7
3. Supervising American subordinates ...... 1 2 3 4 5 6 7
4. Shopping .................................... 1 2 3 4 5 6 7
5. Working with American coworkers ........ 1 2 3 4 5 6 7
6. Transportation system in America ....... 1 2 3 4 5 6 7
7. Planning responsibilities ................. 1 2 3 4 5 6 7
8. Interacting with Americans in general .. 1 2 3 4 5 6 7
9. Generally living in America .............. 1 2 3 4 5 6 7
10. The food ...................................... 1 2 3 4 5 6 7
11. Weather ...................................... 1 2 3 4 5 6 7
12. Working with Americans that are not coworkers .................. 1 2 3 4 5 6 7
13. My job responsibilities ................... 1 2 3 4 5 6 7
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