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INTERNATIONAL STUDENT ADAPTABILITY: THE INFLUENCE OF THE SINO-AMERICAN 1+2+1 DUAL DEGREE PROGRAM

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by

Michael Colin Rose

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ABSTRACT

An increasing reliance on expatriate employees makes it critical that multinational organizations make a concerted effort to facilitate the successful transition of employees from foreign cultures. The parallels between the experience of expatriate employees and international students suggests that the results of research investigating issues of cross-cultural adaptability that are conducted in academic settings should generalize to the workplace. The current study investigated the influence of the Sino-American 1+2+1 Dual Degree Program on the cross-cultural adaptability, acculturation, and withdrawal intentions of international students. It was hypothesized that participants in the 1+2+1 program would demonstrate higher levels of psychological adaptability and socio-cultural adaptability, while demonstrating lower levels of withdrawal intentions. In addition, it was hypothesized that 1+2+1 participants would be more likely to adopt an acculturation orientation style than 1+2+1 non-participants. To test the hypotheses, survey responses were obtained from 50 Chinese international students who were currently enrolled at California State University, San Bernardino, Northern Arizona University, and Coastal Carolina University. Results provided partial support for the 1+2+1 program improving the socio-cultural adaptability of international students, while providing no support for the other three hypotheses. An interpretation of the results is provided that cites past studies which present potential explanations for the findings. Finally, an overview of the limitations of the current study, as well as the theoretical and practical implications of the results are discussed.

ACKNOWLEDGMENTS

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CHAPTER ONE

LITERATURE REVIEW

Expatriate Employees and International Students

As multinational organizations continue to adjust to globalization, employees are being sent to work oversees in record numbers. The reliance of multinational organizations on these employees, commonly referred to as expatriates, is expected to continue to rise as the global workforce continues to evolve (Pattie & Parks, 2011). In recent years, the investigation of expatriate employees has become increasingly prevalent in the field of Industrial/Organizational Psychology (Scott & Reynolds, 2010). Due to an increased reliance on expatriate employees, multinational organizations stand to benefit more than ever from the study of characteristics and attributes of employees that may serve as predictors of turnover intentions and job satisfaction within the organization (Pattie & Parks, 2011).

A similar trend is being observed in academic settings, as 819,644 international students were enrolled in institutes of higher education within the United States during the 2012-2013 academic year (Institute of International Education, 2013). This figure, which represents 3.9% of the U.S. college population, indicates that colleges and universities stand to benefit from the study of cross-cultural adaptability as much or more than multinational organizations, and should make a concerted effort to promote the successful adaptability of international students.

Similarities in the challenges and experiences that expatriate employees and international students face while entering a foreign culture suggest that their successful adaptability may rely on many of the same predictors. Like expatriate employees, international students must adjust to novel responsibilities and expectations while adjusting to foreign cultural norms that shape their interactions with host-nationals (Firth, Chen, Kirkman, & Kim, 2014; Shin, Morgeson, & Campion, 2007). In addition, both international students and expatriate employees demonstrate a specific academic or professional goal that motivated them to willingly enter an unfamiliar cultural setting. These similarities give reason to believe that the results of research designed to investigate the cross-cultural adaptability of international students will generalize to expatriate employees. Therefore, as the number of expatriates is projected to continue to grow from the current estimate of one million worldwide (Firth, Chen, Kirkman, & Kim, 2014), the study of international exchange students' adaptability should benefit the field of Industrial/Organizational Psychology more than ever.

<u>Turnover Intentions</u>

An area of great interest for both multinational organizations and institutions of higher education is the study of the retention of expatriate employees or international students. In a small scale study designed to investigate six Chinese international students who were attending college in the United States, Zhou (2014) identified consistent motivators that predicted

academic persistence. Specifically, the students in the study identified their intrinsic interest in their area of study, the value of the U.S. degree, and the high social cost of quitting as critical motivators for retention (Zhou, 2014). These results highlight the importance of persistence motivation in the turnover intentions of international students.

Survey responses indicated that individuals who were motivated to succeed in the work transition process were more likely to become knowledgeable of the host culture, which has been shown to predict positive work outcomes (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007). Further research has gone beyond the mere presence or absence of social support to investigate the differential influence of various forms of social support and communication networks on organizational turnover. Accordingly, while studying employees at three fast-food restaurants, Krackhardt and Porter (1986) determined that turnover does not occur randomly throughout organizations. Conversely, clusters of high or low turnover are often related to the communication networks formed from work groups within the organization. Specifically, similarities in the roles of employees in a specific communication network was found to have a significant influence on turnover frequency. Employees who shared roles within a communication network and are perceived as similar are more likely to stay or leave together (Krackhardt, & Porter, 1986). These findings make the importance of programs designed to decrease turnover at the group level clear. While organization-wide programs

may be a more frequent strategy, a more effective approach for reducing clusters of high turnover may be the use of interventions that are designed to specifically target different organization levels.

History of Research on Adaptability

The use of cultural learning as a framework for understanding the adjustment of international students in a foreign environment has been investigated for over half a century, when Schild (1962) investigated how international students learn the social cues and norms of the environment. In the study by Schild, the importance of observation and participation when learning the cultural nuances of a foreign environment was made clear. According to Bochner (1972), the reliance on trial-and-error when familiarizing oneself with a foreign environment may often have an adverse impact. As such, it is important that new international students are given an opportunity to be familiarized with the local culture through orientation or training programs without being adversely effected by violations of cultural norms.

For decades, there was little consensus as to what actually constituted cultural adaptability. While attempting to measure the cultural distance between exchange students at Edinburgh University in Scotland and their host-nationals, Babiker, Cox, and Miller (1980) operationalized adaptability using medical outcomes. Specifically, the number of medical consultations and the anxiety level self-reported by international students were used to measure adaptability. A few decades later, Gannon and Poon (1997) defined

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adaptability using variables such as cultural awareness. According to Gannon and Poon (1997), participants' perceptions of their cross-cultural awareness were measured in an attempt to identify their preparedness to work in a foreign environment. In addition to these medical- and awareness-based conceptualizations of adaptability, researchers have chosen to measure adaptability using intrapersonal outcomes (Gmelch, 1997). In a study investigating the adaptability of American students who attended college in Europe, Gmelch (1997) assessed adaptability by observing the personal development of students. This information was more qualitative in nature, being collected using journals provided for the students to record their experiences abroad, as well as informal interviews.

Over time, the desire to come to a consensus on how best to conceptualize cross-cultural adaptability has led to the development of two primary domains: psychological and socio-cultural (Ward & Kennedy, 1999). Specifically, psychological adaptability refers to psychological well-being or satisfaction, while socio-cultural adaptability refers to the ability that an individual demonstrates to "fit in" to the environment. This led Ward (1996) to suggest that psychological adaptability should be measured using a stress and coping framework, and that socio-cultural adaptability should be measured by social skills and cultural learning.

Searle and Ward (1990) made an effort to distinguish between psychological and socio-cultural adaptability by examining the cross-cultural

transition of Malay and Singaporean students in New Zealand. In order to identify unique predictors, participants in the study completed questionnaires measuring their psychological well-being and their socio-cultural competence. It was concluded that predictors of psychological adaptability include satisfaction with relationships with host-nationals, extraversion, life changes, and social difficulty, while predictors of socio-cultural adaptability include cultural distance, expected difficulty, and depression (Searle & Ward, 1990).

Swami (2009) examined potential predictors of the socio-cultural adaptability of international students from Malaysia and China who were studying in Britain. The results of their investigation identified interaction with host-nationals and English language proficiency as predictors of socio-cultural adaptability for both Malay and Chinese participants (Swami, 2009). In addition, certain predictors of socio-cultural adaptability were unique to either Malay or Chinese participants. Specifically, perceived discrimination was the strongest predictor of adaptability among the Malay participants, while failing to significantly predict the adaptability of Chinese participants. Finally, expectation of life in Britain was a significant predictor of adaptability for only the Chinese participants (Swami, 2009).

Support for the distinction of these two conceptualizations of cross-cultural adaptability was provided by predictors distinct to one form of adaptability. According to Ward and Rana-Deuba (1999), psychological adaptability is predicted by proactive personality, life changes, and social

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support, while socio-cultural adaptability was predicted by cultural distance. Further support was provided for the use of English language proficiency and interactions with host-nationals as predictors of socio-cultural adaptability. In contrast to previous research, length of residence was also found to significantly predict the socio-cultural adaptability of participants (Swami, 2009; Ward & Rana-Deuba, 1999).

In a qualitative study, Yan and Berliner (2013) investigated the most commonly cited socio-cultural stressors among Chinese students who are attending college in the United States. According to the responses of participants, the inability to predict the behaviors of others, confusion as to their roles and expected values, and a loss of familiar support systems, were the greatest barriers to socio-cultural adaptation. In addition, despite the identification of interaction with host nationals as the primary predictor of successful adaptation, none of the participants in the study identified host nationals as their primary social network (Bochner, 1981; Yan & Berliner, 2013).

<center>International Exchange Students</center>

International students rely on three specific networks of social support while studying abroad (Bochner, McLeod, & Lin, 1977). The first social network consists of co-nationals who reinforce the same values and norms of the international students' native culture. In the second social network, international students receive more practical support from host-nationals such

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as fellow students, administrators, and counselors. Finally, the third social network consists of host-nationals who provide a more recreational form of support, in the form of common experiences. Although this network is potentially the most beneficial to international students, it is also the least frequently used (Bochner, Hutnik, & Furnham, 1985; Bochner, McLeod, & Lin, 1977). The ways in which these networks are used by international exchange students during the acculturation process are likely to have an immense effect on their adaptability.

International students may use one of four acculturation strategies: integration, assimilation, separation, and marginalization (Berry & Sam, 1997). When employing the strategy of integration, individuals maintain some of their original culture while interacting with other social networks. Individuals who use an assimilation strategy fail to maintain their original cultural values while interacting with other groups. The strategy of separation allows students to maintain their original cultural values while avoiding interactions with foreign social networks. Finally, marginalization occurs when individuals do not maintain their original cultural identity, while failing to interact with other groups.

Of the acculturation strategies presented by Berry and Sam (1997), integration is widely regarded as the most useful strategy for adapting to a foreign culture (Berry et al., 1989; Berry, 2005; Cemalcilar, 2003; Sam & Berry, 2010). Sam and Berry (2010) suggest that this may be a result of the

abundance of social support afforded to individuals who are able to competently interact with peers from two cultures. This notion reinforces the importance of the underutilized social support provided by host-nationals (Bochner, Hutnik, & Furnham, 1985; Bochner, McLeod, & Lin, 1977).

Berry et al. (1989) indicated that integration was the best strategy for improving both the psychological and socio-cultural adaptability of international students. The benefits to socio-cultural adaptability may result from interactions with host-nationals, who may clarify the foreigners' role in the host culture while providing context from the behaviors of others (Yan & Berliner, 2013).

In addition to the social support made available to international students during the acculturation process, their motivation to adapt to their environment has been shown to be a significant predictor of successful cultural adaptability (Geeraert, Demoulin, & Demes, 2014). Accordingly, international exchange students would be expected to demonstrate increased levels of cultural adaptability due to their interest in learning about the host culture and their desire to adapt to the host environment (Richmond, 1993). These students demonstrate their commitment through pre-trip planning, and their invested interest in succeeding academically in the foreign environment.

The role of social support from host-nationals has been a common topic in the literature on cultural adaptability. Specifically, it has been determined that a strong support network from host-nationals is associated with a

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decrease in acculturation stress and an increase in the cultural adaptability of international students (Furnham & Li, 1993; Kashima & Loh, 2006; Searle & Ward, 1990). Kashima and Loh (1993) found that social support from host-nationals increased the psychological adaptability of Asian students in Australia.

In a review of research investigating psychological and socio-cultural adjustment, Zhang and Goodson (2011) assessed the prevalence of predictors by combining the outcomes to create psychosocial adjustment. It was concluded that social support from host nationals, along with self-assessed English proficiency, was the most common as a predictor of cultural adaptability (Zhang & Goodson, 2011). Similarly, social support, in addition to stress level, was the primary predictor of psychological adaptability.

<center>Research on International Exchange Programs</center>

According to an investigation by Goldstein (1992), the approach taken by higher education institutions to facilitate the adaptability of international students varies widely. With the use of an informal telephone interview, Goldstein identified the specific orientation and training programs used by ten institutions with the largest international student populations in the United States. The results of this investigation determined that the institutions lacked a consistent approach, as responses described programs that ranged from a 30-minute discussion on cultural adaptability to a week-long orientation program designed to ease the students' transition into the culture (Goldstein,

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1992). It is safe to assume that the lack of empirical research dedicated to specific programs has contributed to the inconsistent approaches demonstrated by these institutions.

An example of a study that was focused on empirically investigating a specific orientation program is a study conducted by Goldstein and Smith (1999) which was dedicated to a week-long program known as *Discover the United States*. This study measured the adaptability of the program by scores on the Cross Cultural Adaptability Inventory (CCAI). While the investigators were hesitant to provide specific causal explanations for the increase in adaptability scores demonstrated by individuals who participated in the program, they did provide some potential influences. These consisted of the opportunity participants were given to interact with others in a foreign environment, gain knowledge of the host culture, compare their lifestyles with each other and those of American students, receive instruction which put an emphasis on independent action, and to gain knowledge of classroom etiquette. It was suggested that a future study, which utilizes a matched sample, could have the potential to provide a clearer indication of the program's effectiveness.

Smith and Khawaja (2011) provided further support for the empirical testing of interventions designed to assist international students in their attempt to adapt to their college culture in a qualitative review of research investigating acculturation models and predictors of adaptability among

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international college students. In addition to identifying host culture characteristics as an area for future research, the review identified a need to empirically test interventions which incorporate cognitive, behavioral, and psychosocial components to promote the adaptability of college students.

In a study investigating the adaptability of international graduate students, Bang and Montgomery (2013) identified adaptability types which may affect the social and academic success of students in foreign environments. The study by Bang and Montgomery used Q methodology to identify the importance of designing programs geared towards these adaptability types to allow students to develop competencies that can be used to adapt to the foreign culture. Specifically, it was suggested that orientation programs should be designed to build the social, cultural, and communicative competencies of international students by helping them with practical issues such as tax returns, business with international student affairs, and immigration issues, as well as academic issues such as editing and proofreading scholarly material.

The need for orientation programs which provide knowledge of the host culture was further emphasized in a study conducted by Goldstein and Douglas (1999) which investigated the effectiveness of a five-day cross-cultural training program on cultural adaptability. In addition to knowledge of the host culture, the personal autonomy and independent thinking encouraged by the program improved the adaptability displayed by

international students. In addition, the authors of the article called for future research which utilizes matched samples to compare the adaptability of students who attended such programs versus students from the same cohort who received no adaptability training.

The Present Study

The current study will focus on the effectiveness of the 1+2+1 Dual Degree Program at promoting the adaptability of international exchange students in the United States. This program, which is designed to facilitate the successful exchange of two-way students seeking dual degrees from Chinese and American universities, is the largest consortium for educational exchange between Chinese and U.S. Universities. Currently, the program has been adopted by at least 105 U.S. and Chinese universities (20 American Universities and 85 Chinese Universities) that are supported by the American Association of State Colleges and Universities (AASCU) and the China Center for International Educational Exchange (CCIEE).

Undergraduate students who participate in the program are selected from the Chinese-partner University to spend their second and third academic years attending one of the U.S. partner universities. Following the completion of their studies in the United States, students return to finish their undergraduate studies in China. Qualified students will receive bachelor's degrees from both the Chinese and U.S. universities that they attended.

Upon their arrival at the U.S. partner university, students are welcomed by a task force that is designed to provide academic advice while facilitating their integration into the host culture. Accordingly, students are encouraged to select roommates from the host culture in an attempt to encourage interaction with host nationals. This interaction with host nationals has also been identified as a goal of the program following a previous evaluation (Longerbeam, DeStefano, & Lixin, 2013).

The investigation of potential predictors of the successful adaptability of international students within a foreign culture and environment can be used when assessing the effectiveness of the 1+2+1 Dual Degree Program. In the current study, the psychological adaptability, socio-cultural adaptability, and retention rates of international students participating in the 1+2+1 Dual Degree Program will be compared to those of international students who did not participate.

Hypotheses Formation

In reviewing past research on psychological adaptability, predictors have been found to include social support from co-nationals and the use of an integrated acculturation style (Ward & Rana-Deuba, 1999). Students who participate in the 1+2+1 Program share their education experience with a cohort of co-nationals who provide an opportunity for social support. International students who participate in exchange programs seem to be more likely to employ an integrated acculturation strategy than students who do not,

as they will be as invested in adapting to the host-culture while intending to return to their home-culture to complete their degree. For this reason, it would benefit international exchange students to maintain a connection to their home culture while attempting to adapt to their host-culture.

Hypothesis 1: A significantly higher proportion of international students who participate in the 1+2+1 Dual Degree program will use an integration acculturation style than international students who do not participate in the 1+2+1 Dual Degree Program.

The use of an integration acculturation style would also benefit international exchange students by improving their socio-cultural and psychological adaptability in the host-culture (Berry et al., 1989). Due to the limited number of Chinese partner universities for each U.S. university, it is likely that participants in the 1+2+1 Dual Degree Program will have preexisting relationships with others in their cohorts that are not available to other international students. The maintenance of this social support network should improve the socio-cultural adaptability of participants (Yan & Berliner, 2013). An added benefit to participants is the presence of a task force designed to ease their transition into the host culture. This task force, which picks participants up from the airport and takes them shopping for supplies prior to their arrival at the university, should provide interactions from host-nationals that will allow participants to feel that they "fit in" with the host culture (Ward, & Kennedy, 1999; Yan & Berliner, 2013). In addition, a detailed evaluation of the

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program that was conducted in 2010 encouraged universities to facilitate interaction between program participants and host-nationals (Longerbeam, DeStefano, & Lixin, 2013)**.** These aspects of the program led to the formation of the second and third hypotheses in this study.

Hypothesis 2: International students who participate in the 1+2+1 Dual Degree program will display significantly higher levels of psychological adaptability than international students who do not participate in the 1+2+1 Dual Degree Program, after accounting for level of Openness to Experience and perceived social support from host-nationals.

Hypothesis 3: International students who participate in the 1+2+1 Dual Degree program will display significantly higher levels of socio-cultural adaptability than international students who do not participate in the 1+2+1 Dual Degree Program, after accounting for level of Openness to Experience and perceived social support from host-nationals.

Finally, given the research conducted by Krackhardt and Porter (1986) which emphasized the importance of groups composed of individuals who share a similar role within an organization or institution on turnover, participants should stand to benefit. Specifically, experiencing a foreign culture within a cohort comprised of similarly situated international students should improve the second year retention of participants as compared to non-participants. As meta-analyses results have shown a positive relationship between intentions to leave and actually leaving, the withdrawal intentions of

participants would be expected to be lower than the withdrawal intentions of non-participants (Tett & Meyer, 1993).

    Hypothesis 4: International students who participate in the 1+2+1 Dual Degree program will demonstrate significantly lower levels of withdrawal intentions than international students who do not participate in the 1+2+1 Dual Degree program, after accounting for level of Openness to Experience and perceived social support from host-nationals.

CHAPTER TWO

METHODS

Participants

Participants in this study were international students from China (20 participants in the 1+2+1 program; 30 non-participants in the 1+2+1 program) who were actively enrolled during the Spring 2015 term (quarter or semester), Summer 2015 term (quarter or semester) or Fall 2015 term (quarter or semester). Responses were collected from students enrolled at California State University, San Bernardino (CSUSB), Northern Arizona University (NAU), and Coastal Carolina University (CCU). The final sample included 50 students (20 participants in the 1+2+1 program; 30 non-participants in the 1+2+1 program) with an average age of 22 years old and an equal number of women ($n = 25$) and men ($n = 25$). A complete list of demographic information is provided in table one.

Table 1. Demographic Variables

Categorical Variable		1+2+1 Participants		1+2+1 Non-Participants		Total	
		N	%	N	%	N	%
Gender	Male	7	35%	18	60%	25	50%
	Female	13	65%	12	40%	25	50%
Current Living Situation	Living Alone	2	10%	4	13%	6	12%
	Living with one or more co-national roommates	9	45%	17	57%	26	52%
	Living with one or more host-national roommates	6	30%	6	20%	12	24%
	Living with both co-national and host-national roommates	3	15%	3	10%	6	12%
School	CSUSB	16	80%	27	90%	43	86%
	NAU	3	15%	3	10%	6	12%
	CCU	1	5%	0	0%	1	2%
Continuous Variables		Mean		Mean		Mean	
Age		21.15		22.40		21.90	
Months spent studying in the United States		7.45		18.20		13.90	

Measures

<u>Demographics</u>

Participants were asked for information about their age, gender, ethnicity, academic level, length of study in the U.S., housing situation, and satisfaction with their education (See Appendix A).

English Language Proficiency

A single open-ended question was used to determine the English Language proficiency of respondents (See Appendix A). The item, which asked students to describe their satisfaction with the education they have received in the United States, was developed specifically for the current study. Responses were assessed based on the number of grammatical errors present in the two to three sentence response.

Openness to Experience

A 10-item scale from the M5-50 personality questionnaire was used to measure the level of Openness to Experience displayed by respondents (McCord, 2002) (See Appendix A). Respondents were asked to reply to items that may describe their personality on a 5-point Likert-type scale ranging from 1 (inaccurate) to 5 (accurate) with a neutral midpoint. To minimize the effects of response bias (e.g., acquiescence), the scale contains five positively coded items (1, 2, 4, 9, and 10) and five negatively coded items (3, 5, 6, 7, and 8). The scale was determined to be acceptable, as a previous examination by Socha, Cooper, and McCord (2010) reported adequate reliability with a Cronbach's alpha of .778. In the current study, support for the reliability of the scale was further demonstrated by a Cronbach's alpha of .71.

Support from Host-Nationals

The 45-item Social Support Behaviors (SS-B) Scale developed by Vaux, Riedel, and Stewart (1987) was used to measure perceived social

support from host-nationals (See Appendix A). The study used an adapted version of this measure that was previously employed by Komori (2012) to measure respondents' levels of satisfaction with their interactions with co-nationals and host-nationals. This measure contains five subscales designed to measure respective modes of social support: emotional support (10 items), socializing (7 items), practical assistance (8 items), financial assistance (8 items), and advice/guidance (12 items). The measure uses a 5-point Likert-type scale ranging from 1 ("No one would do this") to 5 ("Most Co-Nationals/Host-Nationals would certainly do this"). High scores indicate higher levels of social support from host-nationals/co-nationals. The selection of the scale was justified by previous research that reported a Cronbach's alpha for the total scale of .97 (Komori, 2012). In addition, Komori (2012) provided support for the reliability of the host-national social support mode with Cronbach's alphas ranging from .862 to .944. In the current study, adequate reliability was demonstrated by the total scale, with a Cronbach's alpha value of .96. Similar support for reliability was demonstrated by each subscale, with Cronbach's alpha values ranging from .71 to .89.

Acculturation Style

The Brief Acculturation Orientation Scale developed by Demes and Geeraert (2014) was used to measure the acculturation of the participants (See Appendix A). This measure was used to identify participants' acculturation style, as defined by the four acculturation styles identified by

Berry and Sam (1997). This measure was designed to determine the value that international students place on maintaining their cultural heritage while simultaneously assessing the importance that they place on participating in the host culture during their time studying in the United States. The 8-item measure uses a seven-point Likert rating scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (7). The scale is designed bi-dimensionally, with four items assessing acculturation towards the home culture and four items assessing acculturation to the host culture. Sample items include "It is important for me to take part in Chinese traditions" and "It is important for me to develop my American characteristics". The median will be used as the cutoff criterion to facilitate comparisons (Ward, & Rana-Deuba, 1999). The classification will be as follows: high host national-high co-national identification signifies integration; low host national–low co-national identification signifies marginalization; high host national–low co-national identification signifies assimilation; and low host national–high co-national identification signifies separation. The scale was determined to be acceptable for use, as past research reported acceptable internal consistency reliability of the subscales for home culture and host culture acculturation, with Cronbach's alphas of .79 to .80, respectively (Demes & Geeraert, 2014). In the current study, the subscales for home culture and host culture acculturation demonstrated internal consistency with Cronbach's alphas of .89 to .91, respectively (Demes & Geeraert, 2014).

Socio-cultural Adaptability

Socio-cultural adaptability was measured using the Socio-cultural Adaptation Scale, developed by Ward and Kennedy (1999) (See Appendix A). This scale uses a cultural learning perspective to measure behavioral adaptation and intercultural competence. This 29-item measure uses a 5-point Likert response scale. This scale has demonstrated evidence of adequate reliability and validity in numerous studies investigating diverse samples. Specifically, 16 studies investigating different independent sojourner samples in diverse cultural settings produced alphas ranging from .75-.91 (Ward & Kennedy, 1999). In the current study, further evidence of reliability was provided by a Cronbach's alpha value of .96.

Psychological Adaptability

Psychological adaptability was measured using the Brief Psychological Adaptation Scale developed by Demes and Geeraert (2014) (See Appendix A). This measure quantifies participants' levels of psychological adaptability specific to cultural relocation. Ten items are measured using a seven-point Likert response scale with options ranging from "Never" (1) to "Always" (5). Sample items include "Excited about being in America" and "Frustrated by difficulties adapting to America". On this measure, higher scores indicate higher levels of successful adaptability. Scoring on the scale is accomplished by reverse coding selected items (items 2, 4, 5, 6, 8, and 9), and summing the responses on the scale. The scale was determined to be acceptable, as past

research displayed high levels of internal consistency with a Cronbach's alpha of .72 (Demes & Geeraert, 2014). In the current study, the scale had a Cronbach's alpha value of .70.

<u>Withdrawal Intentions</u>

A single item, previously used by Lounsbury, Saudargas, and Gibson (2004), was used to measure the withdrawal intentions of first-year students (See Appendix A). The original item ("How likely is it that you will withdraw from school in the next 12 months?") was modified for this study. The final item "How likely is it that you will withdraw from study in the United States in the next 12 months?" used a 7-point Likert response scale ranging from "very unlikely" to "almost certain". The 7-point scale was chosen for the purpose of increasing the item variance.

Procedure

Initial contact was made with representatives at the Association of American State Colleges and Universities (AASCU) in an attempt to identify online communities (i.e. listserv, Facebook) that could be used to distribute the survey. After it was clear that no such community existed, an attempt was made to recruit participants from Universities in the United States that currently participate in the 1+2+1 program. Requests for assistance in the data collection process that were sent to employees at Salem State University, George Mason University, the University of North Carolina, Pembroke, the University of Nebraska, Kearney and Troy University were rejected.

Assistance was offered by staff members at California State University, Fresno (CSUF), but attempts to distribute the survey during the Spring 2015 and Fall 2015 quarters provided no complete and useable responses.

Requests for assistance were accepted by representatives with Coastal Carolina University (CCU) and Norther Arizona University (NAU). After making contact with the representatives from NAU, an electronic version of the survey was emailed to eligible students during the Spring 2015, Summer 2015, and Fall 2015 quarters (See Appendix C). The same online version of the survey was distributed to eligible students at CCU during the Fall 2015 quarter.

After emailing an online survey to all international students from China who were enrolled at California State University, San Bernardino (CSUSB) during the Spring 2015 quarter, a small number of useable responses were collected. Further responses were then collected from CSUSB using a paper and pencil format. These paper surveys were distribute to individual classes during the Spring 2015 quarter with the assistance of faculty members who taught courses with a large number of international students. In addition, responses were collected from individual students with the assistance of an advisor of international students at the Office of International Studies and Programs. Finally, responses from CSUSB students were collected at the College of Extended Learning with the assistance of staff members who distributed the online survey to eligible students during the Spring 2015 and Summer 2015 quarters.

In total, 92 responses were collected from students at CSUF, NAU, CCU, and CSUSB. However, due to responses that were incomplete or failed to correctly answer manipulation checks included in the survey, 50 responses were retained. Participants were offered no compensation for their completion of the survey. An informed consent statement was provided for participants to review prior to beginning the survey (Appendix D). The survey took approximately 20 minutes to complete. After completing the survey, participants were thanked and debriefed (Appendix E).

CHAPTER THREE

RESULTS

Prior to the testing of hypotheses, screening was conducted to evaluate completeness of responses, the presence of univariate and multivariate outliers, normality, homoscedasticity, linearity, and multicollinearity. Accordingly, 42 of the 92 original cases were omitted due to incomplete responses or a failure to correctly answer items designed to detect careless responses. The remaining 50 responses were included in the subsequent data screening process.

The continuous variables for psychological adaptability, socio-cultural adaptability, Openness to Experience, withdrawal intentions, and months of study were examined for evidence of univariate outliers and normality using scatterplots and histograms of the standardized distribution of responses. Using the standard of 3.3 standard deviation units from the mean and discontinuous from the distribution, there were no evidence of univariate outliers. The variables for psychological adaptability and Openness to Experience were normally distributed, while the variables for months of study and withdrawal intentions were slightly positively skewed and the variable for sociocultural adaptability was slightly negatively skewed.

An examination of the bivariate correlations and collinearity statistics (i.e., VIF) demonstrated no evidence of multicollinearity. An observation of the distribution of standardized residuals across standardized predicted values

demonstrated a slight positive skew for the psychological adaptability and socio-cultural adaptability variables. An observation of the Mahalanobis distance and Cooks distance scores demonstrate no evidence of multivariate outliers that disproportionately influenced the analysis. A scatterplot of the standardized residual values against the standardized predicted scores on psychological adaptability confirmed that the assumptions of homoscedasticity and linearity were met for all three sequential regression analyses.

Table 2 includes the means, standard deviations, and bivariate correlations among the predictor and criterion variables included in the study.

Table 2. Means, Standard Deviations, and Correlation Matrix

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	-	-												
2. Age	21.9	1.79	-.01											
3. Academic Level	3.32	1.19	.20	.62**										
4. Openness to Experience	34.1	6.26	.47**	.22	.34*									
5. 1+2+1 Participation	-	-	.25	-.34*	-.15	-.03								
6. Psychological Adaptability	42.80	8.70	-.03	.25	.28*	.31*	-.19							
7. Sociocultural Adaptability	102.62	21.97	-.02	.27	.17	.13	.15	.41**						
8. Withdrawal Intentions	3.48	2.11	-.15	.05	-.32*	-.22	-.19	-.24	-.03					
9. Months of Study	13.90	11.32	-.08	.37**	.24	.17	-.47**	.09	.09	.09				
10. Host National Social Support	136.16	29.53	.14	.05	.04	.40**	-.11	.08	-.04	.04	.24			
11. Host Culture Acculturation	17.94	6.12	.05	.25	.26	.59**	.15	.11	.14	-.12	.14	.30*		
12. Home Culture Acculturation	18.12	5.67	.14	.12	.16	.308*	.05	-.25	-.02	.08	.21	.36*	.64**	

*Correlation is significant at the .05 level
**Correlation is significant at the .01 level.

Hypotheses Testing

The first hypothesis was tested using a Chi-Square test of independence to determine if a significantly larger number of 1+2+1 participants demonstrated an integration acculturation orientation than non-participants. A median split was used to categorize participants into the four primary acculturation orientations. An additional regression analysis was performed that used the continuous distributions of responses on the acculturation index to predict psychological and socio-cultural adaptability.

The second, third, and fourth hypotheses were tested by three separate sequential regression analyses. In each analysis, an initial step containing Openness to Experience and host national social support was included to account for any potential influence that these variables may have had on socio-cultural adaptability, psychological adaptability, and withdrawal intentions. In addition, a second step containing the amount of months spent studying in the United States was included due to a significant difference in the responses between participants and non-participants in the 1+2+1 program. Due to the limited statistical power provided by the current sample size and the directional nature of the final three hypotheses, a .10 alpha level was used to identify statistical significance. All analyses were performed using IBM SPSS version 23.

<u>Hypothesis 1</u>

   To test hypothesis 1, a Chi-Square test of independence was conducted to determine if significantly more 1+2+1 participants adopted an integration acculturation style than non 1+2+1 participants. The results of the analysis revealed no statistically significant differences between 1+2+1 participation and acculturation style, X^2 (1) = 0.057, p = .812 with a small effect size (Cramer's V = .034, p = .812). Based on the standardized residuals, 1+2+1 participants were no more likely to adopt an integration acculturation style than non 1+2+1 participants. As a result, Ho1 was not supported.

Table 3. Chi-Square Expected and Observed Counts

1+2+1 Participation		Integration	Non-Integration
Participants	Observed	8	12
	Expected	7.6	12.4
	Percent	40%	60%
	Standardized Residual	0.1	-0.1
Non-Participants	Observed	11	19
	Expected	11.4	18.6
	Percent	37%	63%
	Standardized Residual	-0.1	0.1
Total	Observed	19	31
	Expected	19	31
	Percent	38%	62%

An additional simultaneous regression analysis was conducted to determine whether a continuous operationalization of acculturation could be used to predict socio-cultural adaptability and psychological adaptability (Demes & Geeraert, 2014). To accomplish this, motivation to retain home culture and motivation to adapt to host culture were measured independently on a continuous scale.

According to the results of the first analysis, psychological adaptability can be significantly predicted by a model containing motivation to retain home culture and motivation to adapt to host culture, $R = .423$, $R^2 = .179$, $F (2, 47) = 5.124$, $p = .010$. This model demonstrated medium to large effect size, with motivation to retain home culture and motivation to adapt to host culture explaining 17.9% of the variance in psychological adaptability.

According to the results of the second analysis, socio-cultural adaptability cannot be significantly predicted by a model containing motivation to retain home culture and motivation to adapt to host culture, $R = .192$, $R^2 = .037$, $F (2, 47) = .900$, $p = .414$. This model demonstrated a small effect size, with motivation to retain home culture and motivation to adapt to host culture explaining 3.7% of the variance in socio-cultural adaptability (see Table 4).

Table 4. Multiple Regression Predicting Psychological Adaptability and

Socio-Cultural Adaptability

	Psychological Adaptability			Socio-Cultural Adaptability		
Variable	B	SE	β	B	SE	β
Intercept	46.19	4.07		99.23	11.13	
Home-Culture	-0.82	0.26	-0.53	-0.69	0.72	-0.18
Host-Culture	0.64	0.24	0.45	0.89	0.67	0.25
R^2		0.18			0.04	
F		5.12*			0.90	

*$p < .05$

An additional Chi-Square test of independence was conducted that
considered all four acculturation strategies (integration, separation,
marginalization, and assimilation) while investigating the differences in the
acculturation strategies adopted by participants in the 1+2+1 program versus
non-participants in the 1+2+1 program. As the expected count was fewer than
5 in over 20% of the cells, the likelihood ratio was reported to obtain a more
accurate significance level. The results of the analysis revealed no statistically
significant differences between 1+2+1 participation and acculturation style,
X^2 (3) = 2.65, p = .449 with a small effect size (Cramer's V = .217, p = .501).
Based on the standardized residuals, there were no significant differences in
the acculturation strategies adopted by participants in the 1+2+1 program and
the acculturation strategies adopted by non-participants in the 1+2+1 program.

Table 5. Chi-Square Expected and Observed Counts

1+2+1 Participation		Integration	Separation	Marginalization	Assimilation
Participants	Observed	8	3	8	1
	Expected	7.6	2.4	7.2	2.8
	Percent	40%	15%	40%	5%
	Standardized Residual	0.1	0.4	0.3	-1.1
Non-Participants	Observed	11	3	10	6
	Expected	11.4	3.6	10.8	4.2
	Percent	37%	10%	33%	20%
	Standardized Residual	-0.1	-0.3	-0.2	0.9
Total	Observed	19	6	18	7
	Expected	19	6	18	7
	Percent	38%	12%	36%	14%

Hypothesis 2

Results of the initial model in the sequential regression analysis demonstrated that psychological adaptability can be significantly predicted by Openness to Experience and host national social support, $R = .313$, $R^2 = .098$, $F (2, 47) = 2.544$, $p = .089$. This model demonstrated statistical significance, with Openness to Experience and host national social support explaining 9.8% of the variance in psychological adaptability. Following the addition of a second step in the regression analysis, it was determined that prediction of psychological adaptability cannot be significantly improved by adding months of study in the United States to a model that already includes Openness to

Experience and host-national social support, $\triangle R^2 = .003$,

F change (1, 46) = .148, $p = .702$.

Hypothesis 2 was not supported, as the third model in the sequential regression analysis indicated that prediction of psychological adaptability cannot be significantly improved by adding 1+2+1 program participation to a model that already includes Openness to Experience, host-national social support, and months of study in the United States, $\triangle R^2 = .000$,

F change (1, 45) = .007, $p = .936$. Participation in the 1+2+1 program failed to explain any variance in psychological adaptability above and beyond what was explained by Openness to Experience, host-national social support, and months of study (see Table 6). Furthermore, participation in the 1+2+1 program was negatively correlated with psychological adaptability, indicating that participants in the 1+2+1 program demonstrated lower levels of psychological adaptability (see Table 2).

Table 6. Multiple Regression Results for Predicting Psychological Adaptability

Variable	Step 1			Step 2			Step 3		
	B	SE	β	B	SE	β	B	SE	β
Intercept	29.43	7.40		29.51	7.47		29.15	8.78	
Openness to Experience	0.46	0.21	0.33	0.45	0.21	0.33	0.45	0.22	0.33
Host-National Social Support	-0.02	0.05	-0.06	-0.02	0.05	-0.07	-0.02	0.05	-0.07
Months of Study				0.04	0.11	0.06	0.05	0.13	0.06
Participation in the 1+2+1 Program							0.23	2.82	0.01
R^2		0.10			0.10			0.10	
F		2.54			1.72			1.26	
ΔR^2		0.10			0.00			0.00	
ΔF		2.54			0.15			0.01	

*$p < .05$

Hypothesis 3

According to the results of the first model, socio-cultural adaptability cannot be significantly predicted by Openness to Experience and host national social support, R = .166, R^2 = .028, F (2, 47) = .667, p = .518. Following the addition of a second model in the regression analysis, it was determined that prediction of socio-cultural adaptability cannot be significantly improved by adding months of study in the United States to a model that already includes Openness to Experience and host-national social support, ΔR^2 = .008, F change (1, 46) = .370, p = .546.

The third model of the sequential regression analysis indicated that prediction of socio-cultural adaptability cannot be significantly improved by

adding 1+2+1 program participation to a model that already includes

Openness to Experience, host-national social support, and months of study in

the United States, $\triangle R^2 = .045$, F change (1, 45) = 2.193, $p = .146$. However,

partial support for hypothesis 3 was demonstrates by a small to medium effect

size, as participation in the 1+2+1 program explained 4.5% of the variance in

socio-cultural adaptability above and beyond what was explained by

Openness to Experience, host-national social support, and months of study

(see Table 7).

Table 7. Multiple Regression Results for Predicting Socio-Cultural Adaptability

Variable	Step 1			Step 2			Step 3		
	B	SE	β	B	SE	β	B	SE	β
Intercept	92.54	19.49		92.88	19.63		75.82	22.55	
Openness to Experience	0.62	0.56	0.18	0.56	0.56	0.17	0.55	0.55	0.16
Host-National Social Support	-0.08	0.12	-0.11	-0.10	0.12	-0.13	-0.09	0.12	-0.12
Months of Study				0.18	0.29	0.09	0.40	0.33	0.21
Participation in the 1+2+1 Program							10.73	7.24	0.24
R^2		0.03			0.04			0.08	
F		0.67			0.56			0.98	
$\triangle R^2$		0.03			0.01			0.05	
$\triangle F$		0.67			0.37			2.19	

*$p < .05$

To test hypothesis 4, a three model sequential regression analysis was conducted with withdrawal intentions as the dependent variable. According to the results of the first model, level of withdrawal intentions cannot be significantly predicted by Openness to Experience and host national social support, $R = .257$, $R^2 = .066$, $F (2, 47) = 1.661$, $p = .201$. This model approached statistical significance, with Openness to Experience and host national social support explaining 6.6% of the variance in level of withdrawal intentions. Following the addition of a second model in the regression analysis, it was determined that prediction of withdrawal intentions cannot be significantly improved by adding months of study in the United States to a model that already includes Openness to Experience and host-national social support, $\triangle R^2 = .011$, F change $(1, 46) = .545$, $p = .464$.

Hypothesis 4 was not supported, as the third model of the sequential regression analysis indicated that prediction of withdrawal intentions cannot be significantly improved by adding 1+2+1 program participation to a model that already includes Openness to Experience, host-national social support, and months of study in the United States, $\triangle R^2 = .022$, F change $(1, 45) = 1.116$, $p = .296$. Participation in the 1+2+1 program explained 2.2% of the variance in socio-cultural adaptability above and beyond what was explained by Openness to Experience, host-national social support, and months of study (see Table 8).

Table 8. Multiple Regression Results for Predicting Withdrawal Intentions

Variable	Step 1			Step 2			Step 3		
	B	SE	β	B	SE	β	B	SE	β
Intercept	5.20	1.83		5.24	1.84		6.39	2.13	
Openness to Experience	0.09	0.05	0.28	0.10	0.05	0.29	0.09	0.05	0.28
Host-National Social Support	0.01	0.01	0.15	0.01	0.01	0.13	0.10	0.01	0.13
Months of Study				0.02	0.03	0.11	0.01	0.03	0.03
Participation in the 1+2+1 Program							0.72	0.69	0.17
R^2		0.07			0.08			0.10	
F		1.66			1.28			1.24	
ΔR^2		0.07			0.01			0.02	
ΔF		1.66			0.55			1.12	

*$p < .05$

CHAPTER FOUR

DISCUSSION

The purpose of the present study was to investigate the influence the Sino-American 1+2+1 Dual Degree Program on the acculturation orientation, adaptability, and withdrawal intentions of international students studying in a foreign culture. It was expected that international students participating in exchange programs would be motivated to adapt to the host-culture while simultaneously maintaining aspects of their home-culture in preparation for a return to their native university to complete their degree. For this reason, it was anticipated that a higher proportion of participants in the 1+2+1 program would utilize an integration acculturation style than would non-participants in the 1+2+1 program (Ward & Rana-Deuba, 1999).

An integration acculturation orientation, as well as the presence of strong social support networks, has been found to predict successful socio-cultural and psychological adaptability (Berry et al., 1989; Ward, & Kennedy, 1999; Yan & Berliner, 2013). Therefore, participation in the 1+2+1 program, which welcomes cohorts comprised of familiar co-national students and has a stated goal of promoting interactions between participants and host nationals, was expected to result in higher levels of psychological and socio-cultural adaptability (Longerbeam, DeStefano, & Lixin, 2013). Finally, groups composed of individuals who share a similar role within an organization or institution demonstrate lower levels of turnover (Krackhardt & Porter 1986).

This led to the formation of the final hypothesis that participants in the 1+2+1 program, who have the opportunity to regularly interact with similarly situated international students, would demonstrate lower levels of withdrawal intentions than non-participants.

<div align="center">Findings</div>

<u>Psychological and Socio-Cultural Adaptability</u>

As expected, the current study found Openness to Experience to be a predictor of Psychological Adaptability. This is consistent with past research which has indicated that personality characteristics can predict successful psychological adaptability in international students (Ward & Rana-Deuba, 1999). Furthermore, these results are supported by recent research that found level of Openness to Experience to be a significant predictor of the psychological adaptability in international students (Hirai, Frazier, & Syed, 2015). Specifically, Openness to Experience was found to predict psychological adaptability during the early stages of the cross-cultural transition.

Contrary to previous research, Openness to Experience did not successfully predict socio-cultural adaptability in the current study. This may be partially explained by the relatively brief amount of time spent by participants in the United States. While Openness to Experience may influence the psychological well-being of participants from the beginning of their cross-cultural transition, limited interactions in the host-culture may

prohibit them from acquiring the social skills necessary to interact appropriately (Hirai, Frazier, & Syed, 2015; Swami, 2009; Ward & Rana-Deuba, 1999; Yan & Berliner, 2013). This is further supported by Hirai et al. (2015), who found that socio-cultural adaptability increases slowly after the initial transition to a foreign culture. This would suggest that participants in the current study had not experienced the host-culture long enough to develop the behavioral competence necessary to form necessary social skills.

A surprising result of the current study was the lack of predictive value demonstrated by host-national social support when used to predict psychological and socio-cultural adaptability. This was contrary to what was anticipated, as past research has consistently found social-support from host-nationals to be a strong predictor of both socio-cultural adaptability and psychological adaptability (Searle & Ward, 1990; Swami, 2009; Ward & Rana-Deuba, 1999; Yan & Berliner, 2013). One potential explanation for these results is the nature of the social support networks that were experienced by participants. As demonstrated by Bochner, McLeod, and Lin (1977), the most beneficial form of social support is recreational in nature. In the current study, almost half of the sample received host-national social support from a task force that was formed by the 1+2+1 dual degree program. It is possible that this task force, which had specific goals and was dispatched in highly structured situations, may not provide highly influential host-national social support.

Another unexpected outcome of the current study was that the number of months a student had studied in the United States did not predict their level of psychological adaptability or socio-cultural adaptability. While this outcome was inconsistent with the majority of research related to length of residency and cross-cultural adaptability, Swami (2009) reported similar findings in a study investigating predictors of the socio-cultural adaptability of students studying abroad. Similarities between the current study and that completed by Swami (2009) include the relatively limited amount of time participants had spent in the host-culture. Specifically, only 2% (N = 4) of participants in the current study indicated that they had attended their host College or University for more than 2 years. Had there been a greater disparity in the amount of time students spent studying in the United States, months of study may have proven to be a more influential predictor of successful adaptability

Hypothesis 3 was supported when it was determined that socio-cultural adaptability can be predicted by participation in the Sino-American 1+2+1 Dual Degree Program. Specifically, participants in the program demonstrated higher levels of socio-cultural adaptability than non-participants. This was expected due to the efforts made by program coordinators to facilitate the development of the social skills necessary for students to successfully interact with others in the host environment. This begins prior to the arrival of program participants in the United States, as they are already taking courses that are required by the program curriculum and being advised by employees at their home university

(Longerbeam, DeStefano, & Lixin, 2013). This likely gives them an advantage over non-participants, as the accuracy of expectations that international students have related to the academic difficulty and the nature of life in the host culture has been found to predict socio-cultural adaptability (Searle & Ward, 1990; Swami, 2009). By preparing for the foreign environment prior to the actual transition, program participants are more likely to have more accurate expectations of the host-culture than non-participants who begin their college experience in a foreign environment.

Similar support was not found for hypothesis 2, as participants in the 1+2+1 program did not demonstrate higher levels of psychological adaptability than non-participants. Surprisingly, participants in the 1+2+1 program actually demonstrated slightly lower levels of psychological adaptability than non-participants in the 1+2+1 program. While this result may be a product of the lack of time spent by participants in the host culture or the lack of quality social support offered by the 1+2+1 program, it may also be a product of characteristics common to the sample of non-participants in the 1+2+1 program who provided survey responses in the current study (Searle & Ward, 1990; Zhang, & Goodson, 2011). Specifically, a number of participants from CSUSB were currently enrolled in an English language program with the College of Extended Learning. Their participation in this program, which includes small class sizes and beginner-to-graduate preparatory level courses, may have allowed non-participants in the 1+2+1 program to develop their

English language proficiency to a greater extent than typical international students. This may have had an influence on the level of psychological adaptability reported by non-participants in the 1+2+1 program, as Searle and Ward (1990) identified English language proficiency as one of the most commonly cited predictors of successful adaptability.

<u>Withdrawal Intentions</u>

As was expected given past research, Openness to Experience demonstrated predictive value when used to predict withdrawal intentions. This is consistent with the results of a meta-analysis conducted by Salgado (2002) that analyzed past research that focused on the relationships between the Big Five personality dimensions and job-related behaviors. Specifically, it was found that high levels of Openness to Experience are associated with low levels of turnover (Salgado, 2002). This relationship can most likely be explained by the cultural knowledge that is gained from a willingness to interact with others in foreign settings. This cultural knowledge likely accounts for the predictive value of Openness to Experience in the current study, as this is consistent with past research that found knowledge of host culture to be associated with decreased turnover (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007).

Hypothesis 4 was not supported, as participation in the 1+2+1 program did not predict the level of withdrawal intentions reported by participants. This result was surprising when considering past research that investigated

turnover in professional organizations (Krackhardt, & Porter, 1986).

Specifically, Krackhardt and Porter (1986) demonstrated the benefits of

communication among employees who share a similar role within an

organization. It was found that clusters of similarly situated employees

demonstrated lower levels of turnover than clusters of employees who had

very dissimilar roles. For this reason, it was expected that these results would

generalize to international students who were participating in the 1+2+1

program, as they complete their studies with a cohort of their peers and

therefore have more frequent access to communication networks with

individuals who they perceive to be similar to themselves.

These results may be partially explained by the cultural differences

between the sample of employees used by Krackhardt and Porter (1986) and

the current sample of Chinese international students. While there has been

limited research on the effects of community embeddedness in employees

outside the United States, Zhang, Fried, and Griffeth (2012) argue that the low

levels of individualism and the high levels of long-term goal orientation

demonstrated by China's national culture are likely to influence the effects of

community embeddedness on turnover. Employees from China have been

found to be more resistant to stressors in the workplace than their American

counterparts if they value the perceived long-term benefits the work offers their

families (Wang et al., 2004). This may explain the results of the current study,

as non-participants in the 1+2+1 program may have valued the long-term

benefits of the education that they were receiving, and therefore been resistant to the stressors that result from a lack of communication with similar students.

Acculturation Orientation

Hypothesis 1 was not supported, as 1+2+1 participants were no more likely than non 1+2+1 participants to adopt an integration acculturation orientation. It was expected that 1+2+1 participants would be more likely to use an integration acculturation style as a result of their motivation to succeed academically in the United States while expecting to return to China in the near future. One potential explanation for these findings is the influence of the national identity both 1+2+1 participants and 1+2+1 non-participants maintain towards China. In their research on the relationship between cultural identity, acculturation, and adaptability, Dong et al. (2015) argue that individuals from China are likely to maintain high levels of national identity due to the unified nature of the country. Furthermore, research has shown that high levels of national identity relate to high levels of integration and low levels of separation (Ward, 2006). As both 1+2+1 participants and 1+2+1 non-participants in the current study frequently demonstrate an integration acculturation orientation and infrequently demonstrate a separation acculturation orientation, it is possible that both groups were influenced by high levels of national identity (see Table 5).

A supplemental analysis was conducted to evaluate the predictive value of acculturation orientation when used to predict psychological and

socio-cultural adaptability. This analysis allowed us to evaluate the influence of both host-culture and home-culture orientations while avoiding the artificial categorization of responses into the four acculturation strategies. In addition to providing additional statistical power, this approach made it possible to assess the individual influence of each orientation. While the results demonstrated that acculturation orientations do not predict socio-cultural adaptability, psychological adaptability was found to be negatively related to maintenance of home-culture and positively related to adoption of host-culture. Although the negative influence of maintaining the home-culture was inconsistent with the majority of past research, these findings were consistent with those reported by Demes and Geeraert, (2014) in their recent research on acculturation and cross-cultural adaptability (Berry, 2005). This may be explained by the use of the Brief Psychological Adaptation Scale, which was used in the current study after originally being developed and used in the study by Demes and Geeraert (2014).

Limitations

As a result of the very specific sample required for this study and the limited availability of participants in the 1+2+1 program, the current study analyzed responses from only 50 students. This small sample size resulted in part from the omission of 42 responses that were either missing responses to a significant number of items or contained incorrect responses to items that were designed to detect careless responses. It is possible that the low number

of useable responses obtained in this study resulted from survey fatigue or low levels of English language proficiency among participants in the current sample. This small sample size limited statistical power and, as a result, may have contributed to the lack of statistical significance demonstrated by the results of the current study. Furthermore, the current study used convenience sampling to collect responses from a limited number of participating universities. Given the unavailability of participants from a number of outside universities, the majority of responses came from students who were currently enrolled at CSUSB. Therefore, it is possible that the results of the current study reflect the effects of the 1+2+1 program at CSUSB, and may not generalize to samples from other universities.

To remain consistent with the conceptualization of acculturation orientation strategies in past research, scores on the host-national and co-national orientation scales were dichotomized in order to separate participants based on the four commonly cited acculturation strategies (Berry & Sam, 1997). In addition to decreasing statistical power, this dichotomization inappropriately split distributions that were not naturally dichotomous. As outlined by Demes and Geeraert (2014), this may result in scores that differ more from others in their own quadrant than with certain scores belonging to a different quadrant. In addition, this separates scores that were near the median of the distribution, despite their similar profiles.

While an attempt was made to assess the English language proficiency of participants, a lack of useable responses made it impossible for this to be accounted for in our analyses. With only 42% of respondents answering the open-ended question, we were unable to account for differences in the English language proficiency between 1+2+1 participants and non-participants that may have accounted for the results of the current study. However, it should be noted that there was only one respondent who indicated that they were unsatisfied with their education in the United States. Furthermore, three respondents specifically mentioned an improvement in their English Language proficiency, while only one respondent indicated that a lack of English Language proficiency had hindered their educational experience.

Our inability to account for the English Language proficiency of respondents is a concern, as past research has consistently found English language proficiency to be a predictor of cross-cultural adaptability (Swami, 2009; Ward & Rana-Deuba, 1999; Zhang & Goodson, 2011). Given that several non-participants in the 1+2+1 program were currently enrolled in an English language program, doubts can be cast on the sole influence of 1+2+1 participation in the current study.

CHAPTER FIVE

IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Theoretical Implications

The results of the current study have advanced research in the area of international education and employment. Specifically, the current study represents an empirical evaluation of an exchange program that is designed to facilitate the acculturation of students into their host culture. As noted by Smith and Khawaja (2011), this is an area that must be explored further, and can lead to the systematic improvement of programs that are implemented in academic and professional settings.

In addition, the current study explores the experience of Chinese international students who are studying in the west. This is especially beneficial due to the lack of existing research that specifically examines Chinese international students (Longerbeam, Destefano, & Lixin, 2013). Furthermore, the findings of the current study can be used to advance research on the adaptability of expatriate employees, who share several characteristics and experiences with international students.

The results of the current study have provided further evidence that Openness to Experience can serve as a predictor of psychological adaptability and withdrawal intentions. Specifically, the findings reported by Hirai et al. (2015) in their research on personality characteristics and cross-cultural adaptability have been supported, as high levels of Openness to Experience

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were once again found to result in successful psychological adaptability. In addition, the current study demonstrates that the influence of Openness to Experience on turnover in the workplace can be generalized to withdrawal intentions in academic settings (Salgado, 2002).

The current study also provided results that contradict the findings of past research related to cross-cultural adaptability. While interactions with host-nationals and the social support that they provide have consistently predicted both psychological adaptability and socio-cultural adaptability in the past, no such relationship was found in the current study (Searle & Ward, 1990; Swami, 2009; Ward & Rana-Deuba, 1999; Yan & Berliner, 2013). Furthermore, level of Openness to Experience was not found to predict socio-cultural adaptability. These results suggest that situational factors may influence the generalizability of the predictive relationships reported by past studies.

Practical Implications

In addition to theoretical benefits, the results of the current study provide certain practical benefits to businesses and universities. Specifically, businesses and universities should prioritize communication with employees and students prior to their transition to the host culture. By learning what will be expected and how they should prepare, international students and employees are likely to have more accurate expectations of the transition, and

experience higher levels of socio-cultural adaptability as a result (Searle & Ward, 1990; Swami, 2009).

The results of the current study also provide support for multinational organizations to consider the level of Openness to Experience during the selection process. While the use of personality assessments during the selection process presents inherent disadvantages, such as adverse impact and social desirability responses, it may be worthwhile to supplement other aspects of a selection system with measures of Openness to Experience (Dunlop, Telford, & Morrison, 2012; Risavy, & Hausdorf, 2011). The results of the current study would suggest that this would benefit organizations by allowing them to identify expatriate applicants who are more likely to demonstrate successful psychological adaptability and to be retained following their transition to the host culture.

Given that the current study found that participation in the 1+2+1 program predicted socio-cultural adaptability, support was provided for the use of the 1+2+1 program. This should encourage more participation from universities in the United States. By expanding the number of participating universities in the United States, more students would be allowed the opportunity to study abroad. In addition, multinational organizations may use the 1+2+1 program as a template when implementing future programs.

Directions for Future Research

Future research related to the influence of the 1+2+1 program on the cross-cultural adaptability of international students may explore the generalizability of the results of the current study by collecting responses from several participating universities in the United States. The current study analyzed responses from several CSUSB students, as well as select students from Northern Arizona University and Coastal Carolina University. By obtaining additional responses from students who are currently enrolled at several participating universities, any influences that are unique to CSUSB may be accounted for. Furthermore, an increased sample size would also allow future researchers to confirm that the effects found in the current study are not specific to this sample of participants. Future studies may obtain a higher proportion of useable responses if the surveys that are distributed are partially or completely translated into the native language of participants. In addition, response rates may be increased if future studies receive assistance from representatives at each participating university. Support from these individuals may demonstrate to participants that the survey is legitimate, thereby giving them more motivation to provide complete and accurate responses.

The influence of host-national social support should be a consideration in future research that investigates the 1+2+1 program or similar exchange programs. Specifically, future research can evaluate the formality of the

social-support and interactions that program participants have with individuals from the host culture. As a result, future research may provide a clearer understanding of the amount of recreational host-national social support that is available to program participants.

In addition, future research dedicated to the influence of educational or professional programs on the cross-cultural adaptability of international students or employees should control for factors other than program participation that may have influenced the results of the current study. The consideration of these factors should allow future researchers to better isolate the influence of the program on the psychological or socio-cultural adaptability of participants. Accordingly, future research should account for the English language proficiency of participants when investigating the influence of international programs on the psychological and socio-cultural adaptability of students and employees (Searle & Ward, 1990; Zhang, & Goodson, 2011). In addition, by collecting responses from students and employees who have spent more time in the host culture, future research would be able to identify any long-term changes in psychological and socio-cultural adaptability that may have gone undetected in the current study (Hirai et al., 2015; Swami, 2009; Ward & Rana-Deuba, 1999; Yan & Berliner, 2013). Finally, it is possible that future research can more definitively determine the influence of international programs on withdrawal intentions and turnover if it considers the

social embeddedness of participants that results from the value that they place

on their current education or work (Zhang, Fried, & Griffeth, 2012).

APPENDIX A

SCALES

Demographics Items

1. Sex:
    a. Male
    b. Female

2. Race/Ethnicity:
    a. African American
    b. Asian
    c. Hispanic/Latino
    d. Multicultural
    e. American Hawaiian/Pacific Islander
    f. American Indian/Alaskan Native
    g. Caucasian
    h. Unknown

3. What is your age (In years): _____

4. Which of the following best describes your current living situation (Select One)?
    a. Living Alone
    b. Living with one or more co-national roommates
    c. Living with one or more host-national roommates
    d. Living with both co-national and host-national roommates

5. How long have you resided in the United States (In months)? _____

6. What is your current education level?
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Post-Bach/Graduate

Developed by Michael Colin Rose

English Language Proficiency

1. In two or three sentences, describe your satisfaction with the education you have received in the United States: _____

Developed by Michael Colin Rose

M5-50 Openness to Experience Scale

Instructions: Mark the response that best shows how you really feel or see yourself

1- Inaccurate 2- Moderately Inaccurate 3- Neither 4- Moderately Accurate 5- Accurate

1. Have a vivid imagination (+)

2. Believe in the importance of art (+)

3. Am not interested in abstract ideas (-)

4. Tend to vote for liberal political candidates (+)

5. Do not like art (-)

6. Tend to vote for conservative political candidates (-)

7. Avoid philosophical discussions (-)

8. Do not enjoy going to art museums (-)

9. Carry the conversation to a higher level (+)

10. Enjoy hearing new ideas (+)

McCord, D. M. (2002). *M5-50 Questionnaire* [Administration and scoring materials]. Retrieved from http://paws.wcu.edu/mccord/m5-50/

The Social Support Behaviors from Co-Nationals and Host-Nationals Scale

Instructions: Use the scale below to respond to the following items in reference to your experience with host-nationals.

1 - <u>No one</u> would do this
2 - <u>Someone might</u> do this
3 - <u>Some</u> family member/friend would probably do this
4 - <u>Some</u> family member/friend would certainly do this
5 - <u>Most</u> family members/friends would certainly do this

a) Host-nationals

1	Would suggest doing something, just to take my mind off my problems	1 2 3 4 5
2	Would visit with me, or invite me over	1 2 3 4 5
3	Would comfort me if I was upset	1 2 3 4 5
4	Would give me a ride if I needed one	1 2 3 4 5
5	Would have lunch or dinner with me	1 2 3 4 5
6	Would look after my belonging (house, pets, etc.) for awhile	1 2 3 4 5
7	Would loan me a car if I needed one	1 2 3 4 5
8	Would joke around or suggest doing something to cheer me up	1 2 3 4 5
9	Would go to a movie or concert with me	1 2 3 4 5
10	Would suggest how I could find out more about a situation	1 2 3 4 5
11	Would help me with a move or a big chore	1 2 3 4 5
12	Would listen if I needed to talk about my feelings	1 2 3 4 5
13	Would have a good time with me	1 2 3 4 5
14	Would pay for lunch if I was broke	1 2 3 4 5
15	Would suggest a way I might do something	1 2 3 4 5
16	Would give me encouragement to do something difficult	1 2 3 4 5
17	Would give me advice about what to do	1 2 3 4 5
18	Would chat with me	1 2 3 4 5
19	Would help me figure out what I wanted to do	1 2 3 4 5
20	Would show me that they understood what I wanted to do	1 2 3 4 5
21	Would buy me a drink if I was short of money	1 2 3 4 5
22	Would help me to decide what to do	1 2 3 4 5
23	Would give me a hug or otherwise show me I was cared about	1 2 3 4 5
24	Would call me just to see how I was doing	1 2 3 4 5
25	Would help me figure out what was going on	1 2 3 4 5
26	Would help me out with some necessary purchase	1 2 3 4 5
27	Would not pass judgment on me	1 2 3 4 5
28	Would tell me who to talk to for help	1 2 3 4 5
29	Would loan me money for an indefinite amount of time	1 2 3 4 5
30	Would be sympathetic if I was upset	1 2 3 4 5
31	Would stick by me in a crunch	1 2 3 4 5
32	Would buy me clothes if I was short of money	1 2 3 4 5
33	Would tell me about the available choices and options	1 2 3 4 5
34	Would loan me tools, equipment or appliances if I needed them	1 2 3 4 5
35	Would give me reasons why I should or should not do Something	1 2 3 4 5
36	Would show affection for me	1 2 3 4 5
37	Would show me how to do something I didn't know how to do	1 2 3 4 5
38	Would bring me little presents of things I needed	1 2 3 4 5
39	Would tell me the best way to get something done	1 2 3 4 5
40	Would talk to other people to arrange something for me	1 2 3 4 5
41	Would loan me money and want to —forget about it‖	1 2 3 4 5

42	Would tell me what to do	1 2 3 4 5
43	Would offer me a place to stay for awhile	1 2 3 4 5
44	Would help me think about a problem	1 2 3 4 5
45	Would loan me a fairly large sum of money (say the equivalent of a month's rent or mortgage)	1 2 3 4 5

Vaux, A., Riedel, S., & Stewart, D. (1987). Modes of social support: The social support behaviors (SSB) scale. *American Journal of Community Psychology*, *15*, 209-232. doi. 10.1007/BF00919279

Brief Acculturation Orientation Scale

Please use the scale below to rate your agreement with the following statements.

1 (Strongly Disagree)   2   3   4   5   6   7 (Strongly Agree)

1. It is important for me to have Chinese friends _____

2. It is important for me to take Part in Chinese traditions _____

3. It is important for me to hold on to my Chinese Characteristics _____

4. It is important for me to do things the way Chinese people do _____

5. It is important for me to have American friends _____

6. It is important for me to take part in American traditions _____

7. It is important for me to develop my American characteristics _____

8. It is important for me to do things the way American people do _____

Demes, K., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *Journal of Cross-Cultural Psychology, 45*(1), 91-109. doi. 10.1177/0022022113487590

The Socio-cultural Adaptation Scale

Please indicate how much difficulty you experience at your current university in each of these areas. Use the following 1 to 5 scale.

1- No difficulty 2- slight difficulty 3- moderate difficulty 4- great difficulty 5- extreme difficulty

Question

1   Making friends.
2   Finding food that you enjoy
3   Following rules and regulations.
4   Dealing with people in authority.
5   Taking a local perspective on the culture.
6   Using the transport system.
7   Dealing with bureaucracy
8   Understanding the local value system.
9   Making yourself understood.
10 Seeing things from a locals' point of view.
11 Going shopping.
12 Dealing with someone who is unpleasant.
13 Understanding jokes and humor.
14 Accommodation.
15 Going to social gatherings.
16 Dealing with people staring at you.
17 Communicating with people of a different ethnic group.
18 Understanding ethnic or cultural differences.
19 Dealing with unsatisfactory service.
20 Worshipping.
21 Relating to members of the opposite sex.
22 Finding your way around.
23 Understanding the locals' political system.
24 Talking about yourself with others.
25 Dealing with the climate.
26 Understanding the locals' world view.
27 Family relationships.
28 The pace of life.
29 Being able to see two sides of an inter-cultural issue.

Ward, C., & Kennedy, A. (1999). The measurement of socio-cultural adaptation. *International Journal of Intercultural Relations*, *23*(4), 659-677. doi. 10.1016/S0147-1767(99)00014-0

The Brief Psychological Adaptation Scale

Think about living in the United States. In the last 2 weeks, how often have you felt...

1 (Never)   2   3   4   5   6   7 (Always)

1. Excited about being in America _____ (+)

2. Out of place, like you don't fit into American culture _____ (-)

3. A sense of freedom being away from China _____ (+)

4. Sad to be away from China _____ (-)

5. Nervous about how to behave in certain situations _____ (-)

6. Lonely without you Chinese family and friends around you _____ (-)

7. Curious about things that are different in America _____ (+)

8. Homesick when you think of China _____ (-)

9. Frustrated by difficulties adapting to America _____ (-)

10. Happy with your day-to-day life in America _____ (+)

Demes, K., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *Journal of Cross-Cultural Psychology, 45*(1), 91-109. doi. 10.1177/0022022113487590

Withdrawal Intentions Item

Please answer the following question using this 7 point scale:

1	2	3	4	5	6	7
"Very Unlikely"						"Almost Certain"

How likely is it that you will withdraw from study in the United States in the next 12 months?

Lounsbury, J. W., Saudargas, R. A., & Gibson, L. W. (2004). An Investigation of personality traits in relation to intentions to withdraw from college. *Journal of College Student Development*, *45*(5), 517-534. doi. 10.1353/csd.2004.0059
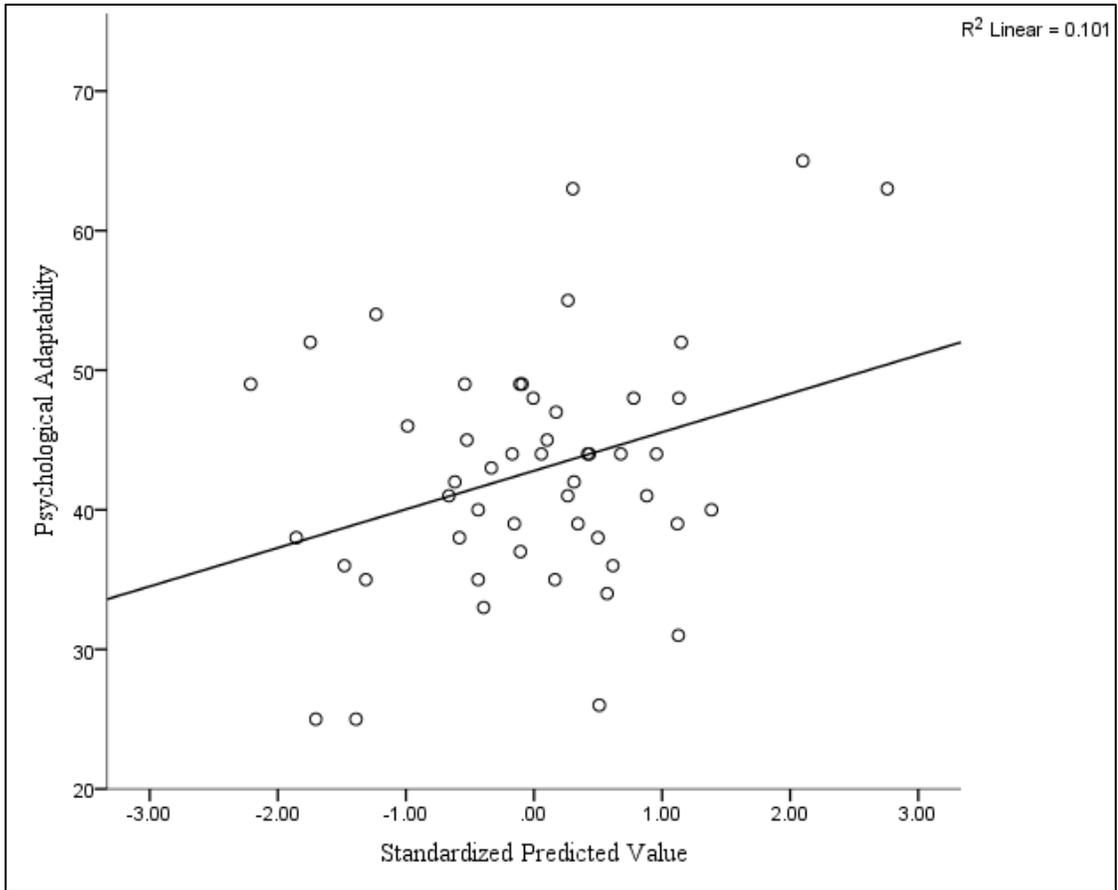
APPENDIX B

REGRESSION ANALYSES

Figure 1. Sequential Regression Analysis Predicting Psychological
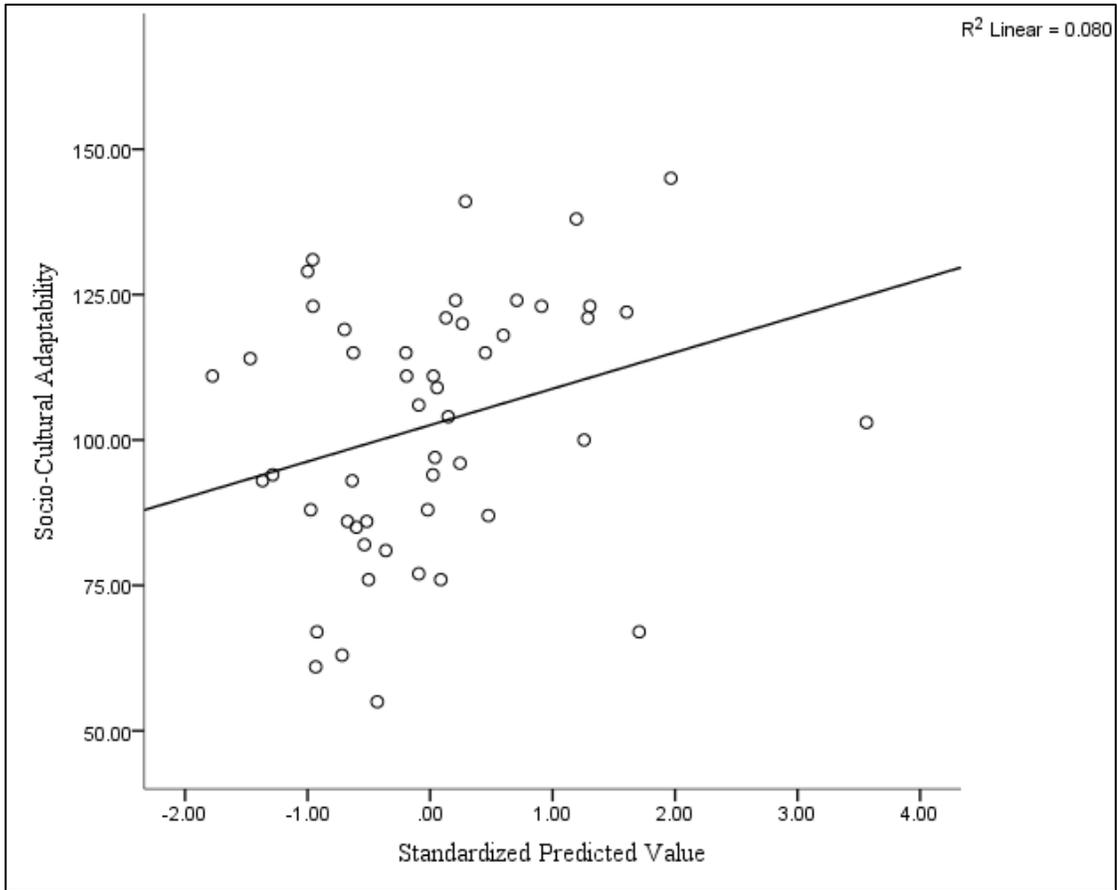
Adaptability

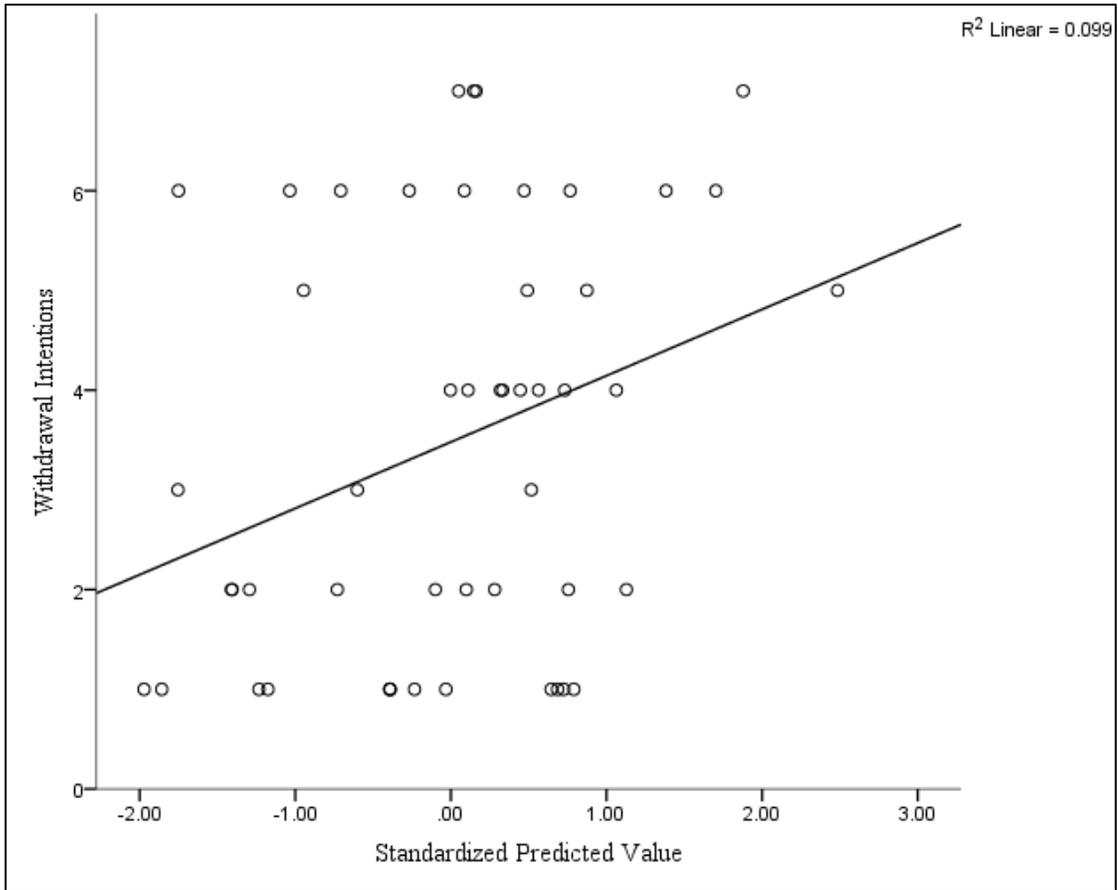*Figure 2*. Sequential Regression Analysis Predicting Socio-Cultural

Adaptability

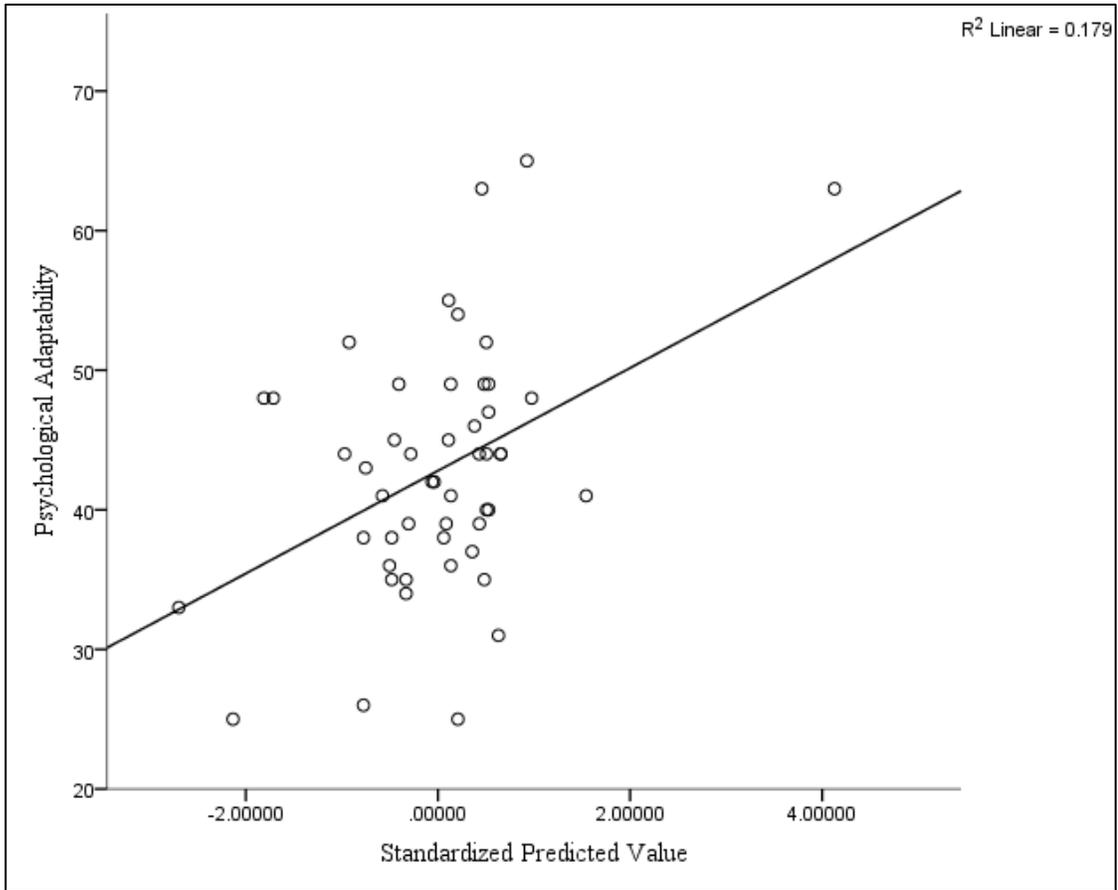*Figure 3.* Sequential Regression Analysis Predicting Withdrawal Intentions

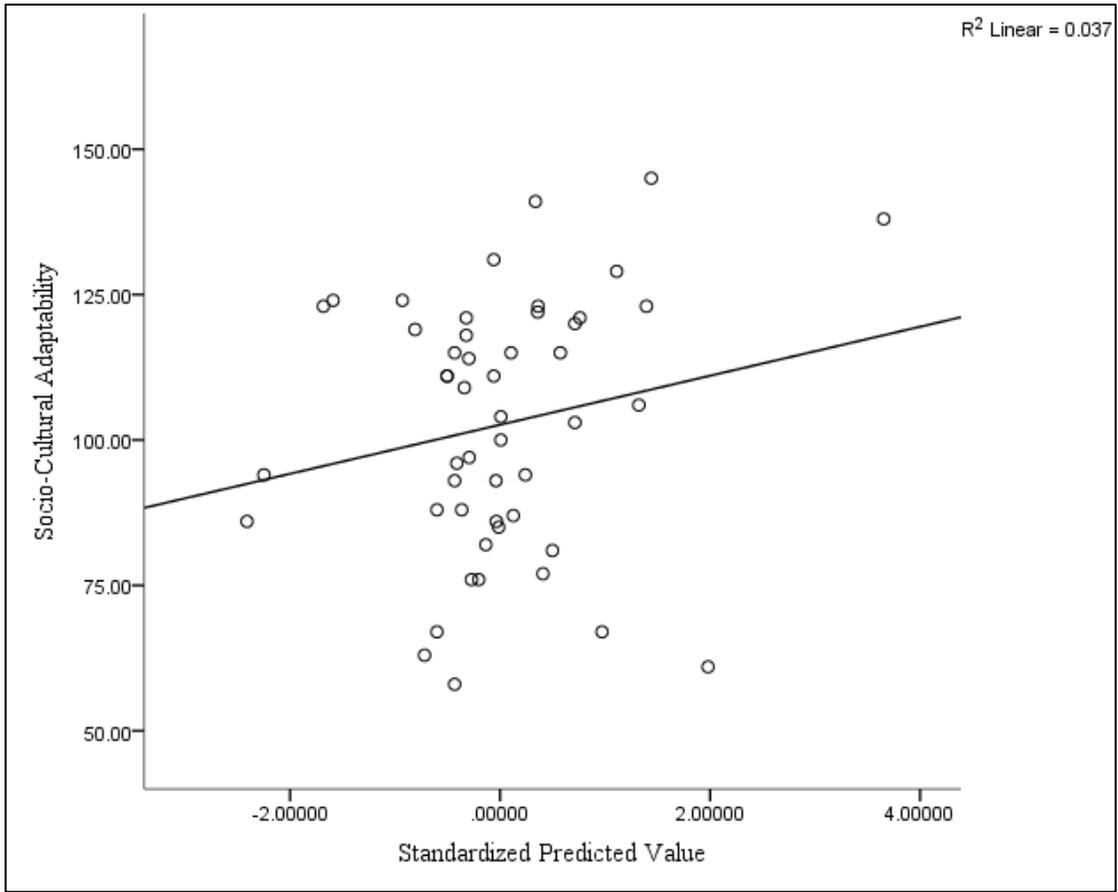*Figure 4.* Acculturation Orientation Predicting Psychological Adaptability

Figure 5. Acculturation Orientation Predicting Socio-Cultural Adaptability

APPENDIX C

SAMPLE RECRUITMENT EMAIL

亲爱的中国项目同学：

我们真诚邀请你参加下面的调查问卷。你的回答对于我们继续建设中国留学项目、提高学生满意度有很大帮助。你所有的答案都是保密的。点击"Begin Survey"开始问卷。

Dear Student,

As an international student who is currently studying in the United States, you qualify to participate in our brief survey designed to investigate cross-cultural adaptability. Your responses will provide us with valuable information that we can use to help future students successfully adapt to studying abroad.

Your response will be entriely confidential. The survey should take approximately 15-20 minutes to complete.

You can complete the survey by clicking on the link below.

Begin Survey

APPENDIX D

INFORMED CONSENT

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

College of Social and Behavioral Sciences
Department of Psychology

INFORMED CONSENT

The study in which you are being asked to participate is designed to investigate the aspects of acculturation and cross-cultural adaptability. This study is being conducted by Michael Rose under the supervision of Dr. Kenneth Shultz, Professor of Psychology, California State University, San Bernardino. This study has been approved by Psychology Department sub-committee of the University Institutional Review Board, California State University, San Bernardino. A copy of the approval stamp appears at the bottom of the page.

You will be given a list of items to assess an individuals acculturation style, as well as their level of psychological adaptability, socio-cultural adaptability, and withdrawal intentions. You will be asked to evaluate these items based on your own experience while studying in the United States.

Altogether the survey will take approximately 15-20 minutes to complete. This study involves no risks beyond those routinely econountered in daily life, nor any direct benefits to you as a participant.
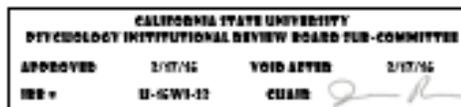
Your participation is this study is entirely voluntary. You are free to withdraw your participation at any time during the study, or refuse to answer any questions, without penalty or withdrawal of benefit to which you are otherwise entitled.

As no identifying information will be collected, your name cannot be connected with your responses and hence your data will remain completely anonymous.
The data will be stored in password protected computers and only the researchers will be able to access the data. The results from this study will be included in a Graduate level thesis project and considered for submition for publication to a scientific journal. The data will be destroyed 5 years after publication.

Results from the study will be available from Michael Rose at (951) 823-2408 after June 1, 2015. If you have questions or concerns regarding this study, please feel fre to contact the Department of Psychology Institutional Review Board Subcommittee at psyc.irb@csusb.edu. You may also contact the Human Subjects office at California State University, San Bernardino at (909) 537-7588 if you have any further questions or concerns about this study.

It is very unlikely that any psychological harm will result from participation in this study. However, if you would like to discuss any distress you have experienced, do not hesitate to contact the CSUSB Psychological Counseling Center (909) 537-5040.

By clicking continue, I acknowledge that I am at least 18 years old and voluntarily consent to participate in this study. Thank you very much.

<table>
<tr><td colspan="4">CALIFORNIA STATE UNIVERSITY
PSYCHOLOGY INSTITUTIONAL REVIEW BOARD SUB-COMMITTEE</td></tr>
<tr><td>APPROVED</td><td>2/17/15</td><td>VOID AFTER</td><td>2/17/16</td></tr>
<tr><td>IRB #</td><td>H-SW1-13</td><td>CHAIR</td><td></td></tr>
</table>

The California State University
Bakersfield • Channel Islands • Chico • Dominguez Hills • East Bay • Fresno • Fullerton • Humboldt • Long Beach • Los Angeles • Maritime Academy
Monterey Bay • Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San Jose • San Luis Obispo • San Marcos • Sonoma • Stanislaus

APPENDIX E

DEBRIEFING STATEMENT

Debriefing Statement

The results of the survey that you have completed will be used to attempt to assess issues of acculturation and cross-cultural adaptability. In addition to providing demographic information that will be used during data analysis, you have completed a survey designed to identify acculturation styles, and measure levels of withdrawal intentions, psychological adaptability, socio-cultural adaptability. Participants in the study were Chinese international students who were currently enrolled at a College or University in the United States. If you feel the need to discuss any distress you have experienced, do not hesitate to contact the CSUSB Psychological Counseling Center (909) 537-5040.

APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

Human Subjects Review Board
Department of Psychology
California State University,
San Bernardino

PI: Ken Shultz and Michael Rose

From: Jason Reimer

Project Title: International Student Adaptability: The Influence of the Sino-American 1+2+1 Dual Degree Program

Project ID: H-15WI-23

Date: 3/17/2015

Disposition: Administrative Review

Your IRB proposal is approved. This approval is valid until 3/17/2016.

Good luck with your research!

Jason Reimer, Co-Chair
Psychology IRB Sub-Committee

REFERENCES

Babiker, I. E., Cox, J. L., & Miller, P. (1980). The measurement of cultural distance and its relationship to medical consultations, symptomatology and examination of the performance of overseas students at Edinburgh University. *Social Psychology and Psychiatric Epidemiology*, *15*(3), 109-116. doi. 10.1007/BF00578141

Bang, H., & Montgomery, D. (2013). Understanding international graduate students' acculturation using Q methodology. *Journal of College Student Development, 54*(4), 343-360.

Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007) Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. Journal of Applied Psychology*, 92*(3), 707-721. doi. 10.1037/0021-9010.92.3.707

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, *29*, 697-712. doi: 10.1016/j.ijintrel.2005.07.013

Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology. An International Review*, *38*, 135-186.

Berry, J. W, & Sam, D. (1997). Acculturation and adaptation. In J. W. Berry, M. H., Segall, & Kagitcibasi (Eds.), *Handbook of cross-cultural psychology: Volume3. Social behavior and applications* (pp. 291-326). Needham Heights, MA: Allyn & Bacon.

Bochner, S. (1972) Problems in culture learning. In S. Bochner, & P. Wicks (Eds.), *Overseas students in Australia*. Randwick, N.S.W.: New South Wales University Press.

Bochner, S. (1981). The social psychology of cultural mediation. In S. Bochner (Ed.), *The mediating person: Bridges between cultures*. Cambridge, MA: Schenman.

Bochner, S., Hutnik, N., & Furnham, A. (1985). The friendship patterns of overseas and host students in an Oxford student residence. *The Journal of Social Psychology*, *125*, 689-694. doi. 10.1080/00224545.1985.9713540

Bochner, S., McLeod, B. M., & Lin, A. (1977). Friendship patterns of overseas students: A functional model. *International Journal of Psychology*, *12*(4), 277-294. doi.10.1080/00207597708247396

Cemalcilar, Z. (2003). Role of computer-mediated communication technologies in international students' cross-cultural transition (Doctoral dissertation, University of Texas, 2003). Dissertation Abstracts International Section A: Humanities and Social Sciences, 64, 12-A.

Demes, K., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *Journal of Cross-Cultural Psychology*, *45*(1), 91-109. doi. 10.1177/0022022113487590

Dong, L., Lin, C., Li, T., Dou, D., & Zhou, L. (2015). The relationship between cultural identity and self-esteem among Chinese Uyghur college students: The mediating role of acculturation attitudes. *Psychological Reports*, *117*(1), 302-318. doi. 10.2466/17.07.PRO.117c12z8

Dunlop, P. D., Telford, A. D., & Morrison, D. L. (2012). Not too little, but not too much: The perceived desirability of responses to personality items. *Journal of Research in Personality*, *46*(1), 8-18. doi. 10.1016/j.jrp.2011.10.004

Firth, B. M., Chen, G., Kirkman, B. L., & Kim, K. (2014). Newcomers abroad: Expatriate adaptation during early phases of international assignments. *Academy of Management Journal*, *57*(1), 280-300. doi.10.5465/amj.2011.0574

Furnham, A., & Li, Y. H. (1993). The psychological adjustment of the Chinese community in Britain: A study of two generations. *The British Journal of Psychiatry*, *162*, 109-113. doi. 10.1192/bjp.162.1.109

Gannon, M. J., & Poon, J. M. L. (1997). Effects of alternative instructional approaches on cross-cultural training outcomes. *International Journal of Intercultural Relations*, *21*(4), 429-446. doi. 10.1016/S0147-1767(96)00035-1

Geeraert, N., Demoulin, S., & Demes, K. A. (2014). Choose your (international) contacts wisely: A multilevel analysis on the impact of intergroup contact while living abroad. *International Journal of Intercultural Relations*, *38*, 86-96. doi. 10.1177/00220221134478656

Gmelch, G. (1997). Crossing cultures: Student travel and personal development. International Journal of Intercultural Relations, *21*(4), 475-490. doi. 10.1016/S0147-1767(97)00021-7

Goldstein, D. (1992). *A comparison of the effects of experiential training on sojourners cross-cultural adaptability*. Unpublished doctoral dissertation. Miami, FL: Florida International University.

Goldstein, D. L., & Douglas, H. S. (1999). The Analysis of the effects of experimental training on sojourners cross-cultural adaptability. *International Journal of Intercultural Relations, 23*(1), 157-173. doi. 10.1016/S0147-1767(98)00030-3

Goldstein, D., & Smith, H. S. (1999). The analysis of the effects of experiential training on sojourners cross-cultural adaptability*. International Journal of Intercultural Relations, 23*(1), 157-173. doi. 10.1016/S0147-1767(98)00030-3

Hirai, R., Frazier, P., & Syed, M. (2015). Psychological and sociocultural adjustment of first-year international students: Trajectories and predictors. *Journal of Counseling Psychology*, *62*(3), 438-452. doi. 10.1037/cou0000085

Institute of International Education (2013). Open doors 2013 fast facts. Retrieved on July, 18, 2014. From http://www.opendoors.iienetwork.org/file_depot/0-10000000/0-10000/3390/folder/68485/Open+Doors+Fast+Facts=2013.pdf"2013.pdf

Kashima, E. S., & Loh, E. (2006). International students' acculturation: Effects of International. Conational, and local ties and need for closure. *International Journal of Intercultural Relations*, *30*(4), 471-485. doi. 10.1016/j.ijintrel.2005.12.003

Komori, H. (2012). *Role of computer-mediated communication, host language proficiency and host-family*. Unpublished Master's Thesis. San Bernardino, CA: California State University, San Bernardino.

Krackhardt, D., & Porter, L. W. (1986). The snowball effect: Turnover embedded in communication networks. *Journal of Applied Psychology*, *71*(1), 50-55. doi. 10.1037/0021-9010.71.1.50

Longerbeam, S. D., DeStefano, T. J., & Lixin, Y. (2013). "We cannot reach them": Chinese undergraduate student perceptions of the U.S. campus climate. *Journal of Student Affairs Research and Practice*, *50*(3), 326-344. doi. 10.1515/jsarp-2013-0023

Lounsbury, J. W., Saudargas, R. A., & Gibson, L. W. (2004). An Investigation of personality traits in relation to intentions to withdraw from college. *Journal of College Student Development*, *45*(5), 517-534. doi. 10.1353/csd.2004.0059

McCord, D. M. (2002). *M5-50 Questionnaire* [Administration and scoring materials]. Retrieved from http://paws.wcu.edu/mccord/m5-50/

Pattie, M., & Parks, P. (2011). Adjustment, turnover, and performance: The deployment of minority expatriates. *The International Journal of Human Resource Management*, *22*(10), 2262-2280. doi. 2011-15291-012

Richmond, A. H. (1993). Reactive migration: Sociological perspectives on refugee movements. *Journal of Refugee Studies*, *6*, 7-24.

Risavy, S. D., & Hausdorf, P. A. (2011). Personality testing in personnel selection: Adverse impact and differential hiring rates. *International Journal of Selection and Assessment, 19*(1), 18-30. doi. 10.1111/j.1468-2389.2011.00531.x

Salgado, J. (2002). The big five personality dimensions and counterproductive behaviors. *International Journal of Selection and Assessment*, *10*(1-2), 117-125. doi. 10.1111/1468-2389.00198

Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different cultural backgrounds meet. *Perspectives of Psychological Science*, *5*(4), 472-481. doi. 10.1177/1745691610370075

Schild, E. O. The foreign student as a stranger learning the norms of the host culture. *Journal of Social Issues*, 1962, *18*(1), 41-54. doi. 10.1111/j.1540-4560.1962.tb02570.x

Scott, J. C., & Reynolds, D. H. (Eds.). (2010). *Handbook of workplace assessment: Evidence-based practices for selecting and developing organizational talent*. San Francisco: Jopssey-Bass. [ISBN 9780401316].

Searle, W., & Ward, C. (1990). The prediction of psychological and socio-cultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, *14*(4), 449-464. doi. 10.1016/0147-1767(90)90030-Z

Shin, S., Morgeson, F., & Campion. (2007). What you do depends on where you are: understanding how domestic and expatriate work requirements depend upon the cultural context. *Journal of International Business Studies*, *38*, 64-83. doi. 10.1057/palgrave.jibs.8400247

Smith, A. S., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*(6), 699-713. doi. 10.1016/j.ijintrel.2011.08.004

Socha, A., Cooper, C., & McCord, D. (2010). Confirmatory factor analysis of the M5–50: An implementation of the International Personality Item Pool item set. *Psychological Assessment*, *22*(1), 43–49. doi. 10.1037/a0017371.

Swami, V. (2009). Predictors of socio-cultural adjustment among sojourning Malysian students in Britain. *International Journal of Psychology*, *44*(4), 266-273. doi. 10.1080/00207590801888745.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover, Path analyses based on meta-analytic findings. *Personnel Psychology*, *46*(2), 259-293. ISBN [1744-6570].

Vaux, A., Riedel, S., & Stewart, D. (1987). Modes of social support: The social support behaviors (SSB) scale. *American Journal of Community Psychology*, *15*, 209-232. doi. 10.1007/BF00919279

Wang, P., Lawler, J. J., Walumbwa, F. O., & Shie, K. (2004). Work-family conflict and job withdrawal intentions: The moderating effect of cultural differences. *International Journal of Stress Management*, *11*(4), 392-412. doi. 10.1037/1072-5245.11.4.392

Ward, C., & Kennedy, A. (1999). The measurement of socio-cultural adaptation. *International Journal of Intercultural Relations*, *23*(4), 659-677. doi. 10.1016/S0147-1767(99)00014-0

Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology*, *30*(4), 422-442, doi. 10.1177/0022022199030004003

Yan, K., & Berliner, D. C. (2013). Chinese international students' personal and sociocultural stressors in the United States. *Journal of College Students Development*, *54*(1), 62-84.

Zhang, J., & Goodson, P. (2011). Predictors of international students' psychological adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, *35*(2), 139-162. doi. 10.1016/j.ijintrel.2010.11.011

Zhang, M., Fried, D. D., & Griffeth, R. W. (2012). A review of job embeddedness: Conceptual, measurement issues, and directions for future research. *Human Resource Management Review*, *22*(3), 220-231. doi. 10.1016/j.hrmr.2012.02.004

Zhou, J. (2014). Persistence motivations of Chinese doctoral students in science, technology, engineering, and math. *Journal of Diversity in Higher Education*, *7*(3), 177-193. doi. 10.1037/a0037196