Exploring the Adjustment Problems among International Graduate Students in Hawaii

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Abstract   Due to the advance of technology, the American society has become more diverse. A huge population of international students in the U.S. faces unique issues. According to the existing literature, the top-rated anxieties international student faces are generally caused by language anxiety, cultural adjustments, and learning differences and barriers. In the university campus that is being studied in Hawaii, the highest population of students is Asian. As a matter of fact, Hawaii is the only state in USA that does not have a majority of white population. This research study examined anxiety levels as international graduate students living in Hawaii, U.S. This study emphasizes on the wide variety of factors and whether it has an influence on the predicators of anxiety. Learning difficulties and life challenges for international graduate students in Hawaii were also examined. "Communication ability", "interactions with professors", "limited course options", and "course content difficulty" were the most experienced learning difficulties. "Financial crisis", "quality of accommodation", "relationship with people", and "language" were the most experienced life challenges. Understanding the experiences of the international graduate students is important on creating supporting programs to help them personally and academically to fit in the environment.

Keywords   Anxiety, International, Graduate, Student

1. Introduction

The issue

Pursuing a higher-education degree provides the student an opportunity to broaden their knowledge of other cultures and the ability to speak the language. The experience of studying abroad also enhances the students' competitiveness in the global labor industry. It is inevitable to say that studying abroad is a desirable experience for most students. Regardless of the educational and social strengths, studying abroad also brings economic impacts to the host countries. Enrolling international students not only raise revenues, but also present a broader strategy on recruiting well-trained and highly skilled immigrants [1]. In 2013, almost 4.3 million students were enrolled in academic institutions outside of their home country [1]. The Organization for Economic Co-operation and Development (OECD) noted that Australia, Germany, France, Canada, the United Kingdom and the United States receive more than 50% of all foreign-student population worldwide.

Purpose of study

The purpose of this study is to document the empirical predictors of anxieties that international graduate students experience throughout their learning period in Hawaii, which hopes to fill in the literature gap. Currently, there are no studies shown that investigate in the experience of international graduate student living in Hawaii. According to Open Doors Report [2], there are nearly 4,500 foreign students in Hawaii. The top three leading places of the origins of the foreign students are Japan, South Korea, and China. In addition, as the only Asian plurality state, the research based on the university campus in Hawaii will discover different college experiences and anxieties for the international graduate students. With the wide range of culture and ethnic groups within the population, Hawaii is a very unique environment that is believed to have a great difference when compared to other states. It is to believe that the present study will distinct widely from the previous existing literatures that are conducted in other states.

Research questions

This study is specifically interested in the following research question.

1. What are the most common challenges of studying and living in Hawaii that are most encountered by international graduate students?

2. Literature Review

What is anxiety?

According to Kim [3], anxiety is the subjective and physiological concomitants of anticipation of future danger

or fear of consequences of current behavior. There are various evidences to show the relationship between biological factors and psychological issues. For example, Bremmer [4] reported that the hippocampus, which has the capacity to regenerate neurons and involves with memory and emotion in the brain, can be damaged by extreme stressors such as child abuse. This creates the lasting effect of psychological trauma that may produce anxiety. Feldman [5] also pointed out that there are some personality characteristics that have genetic factors and a specific gene that has great influences in determining risk-taking behavior. Anxiety can be categorized into various forms. From Alpert and Haber's [6] study, there are two types of anxieties that will make big difference to individual's learning, which are facilitating and debilitating anxiety. They pointed out that facilitating anxiety is motivational and beneficial, which will help promote better performance. On the other hand, debilitating anxiety has a negative effect on students, which will likely cause detrimental influences on the performance.

Language anxiety

Language anxiety is defined as a complicated psychological phenomenon that is unusual to language learning" [7], and a response to a condition which the external element presents a demand that threatens to exceed the student's capabilities and resources for meeting it [8]. The anxiety of speaking another language is reported to be one of the most serious problems for English as a Foreign Language (EFL) and English as a Second Language (ESL) student [9]. International students who study abroad often experience anxiety when communicating with the host in the broken target language, which means being unsure about the host people's behavior.

MacIntyre and Gardner [10] proposed a theory which provides the outline of the development of language anxiety. The model, which language anxiety might be developed, started in the beginning of learning the targeted language, when learners have difficulties in grammar and pronunciation. If the language learners are anxious and uncomfortable about making mistakes, anxiety occurs [11]. After a few repeating experiences of similar situations of language anxiety, this will influence the performance of language learning. The language learners will start to have negative thoughts and develop worries about their own performance and learning status. "Thoughts of failure, worry over how one is performing in the situation, and self-deprecating thoughts" [10] are the general arousals of anxiety.

Anxiety is the emotional equivalent of uncertainty, and individuals experience some degree of anxiety any time when communicating with the native speakers [12]. Many researchers have different perspectives on the components of language anxiety. Horwitz, et al.'s [13] theory of Foreign Language Classroom Anxiety consisted of three elements: communication apprehension, fear of negative evaluation, and test anxiety. However in 1994, it has shown that test anxiety was not a factor that contributes to language anxiety

[14]. Young [15] reported that communication apprehension, social anxiety, and low self-esteem are essential components that cause language anxiety. From the previous literature on language anxiety, there are three main factors that cause language anxiety: students' fear of negative evaluations, self-confidence, and language ego.

Cultural adjustments

As more international students begin to attend higher education systems, it is likely that they will face challenges that will have influence their emotions, which will affect them academically. Learning a foreign or second language includes learning the culture that goes along with that language [11] However, many international students still face various cultural problems, regardless of their English proficiency. In the influential study by Kwon [16], they randomly selected 165 international students and pointed out that regardless of language proficiency, all students from different ethnic groups experienced overwhelming feelings of loneliness, stress, and homesickness. A major part of homesickness results from culture shock. Even though international students are exposed to American movies and Internet material back in their home country, they still experience culture shock, which can be defined as helplessness and depression when adapting to a new cultural environment [17]. Thus, it is necessary for international students to have social interaction with local students, which will help them blend into the culture easier.

Social support is nevertheless an important factor to assist international students' adjustment to the new culture. Cheng [18] reported that international students suffer anxiety from being sick in a foreign country. The study found that international students may endure pain until it either passes or they return home for treatment, due to their frustration and feelings of inadequacy towards their lack of information or choices regarding health care. Cheng's study showed that international students worry about "being labeled and/or treated as foreign burdens and as lesser humans" (p. 85). If they were to go to a health care center, they would make choices on whether to go to their school's health care center based on their knowledge of health care in their native country or third party experiences about the school's health center. Therefore, social support is very important for international students to feel secure when they face problems, such as health issues.

Learning differences and barriers

Beyond adjusting to a new culture and language environment, international students face learning differences and barriers in the classroom. According to Kingston and Forland [19], international students can easily lose confidence in their academic ability in the new environment, even if they were academically successful in their country. There are many contributors that cause challenges and adjustments for the international students to make. Unfortunately according to Chan [20], Western educators still lack the understanding of Asian students who are likely

to be less spontaneous and conform to their instructors. The five factors of learning differences and issues are cultural learning differences, style of obtaining knowledge, creativity, academic overload and restrictions, and advisers-students relationship.

3. Methodology

Sample survey design

The survey data was collected in one major university campus in Oahu, Hawaii during January and April in 2014. The goal of this project is to determine the recruited participants' level of anxiety and investigate the various reasons that contribute to experienced anxiety.

Participants

A total of 110 international students who hold either F-1 or J-1 student visas will participate in this study. They are studying at a university campus located at Oahu, Hawaii. The educational level of participants will be a mixture of doctorate and masters students. The goal on gathering the participants is to complete and investigate as many nationalities and races the university provides education to.

Data collection instruments

A questionnaire is developed on asking the participants' living experience in Hawaii and it is designed to ascertain the students' gender, age, marital status, educational background, nationality, race, financial status, length of stay in the United States, and experience in Hawaii. Students will be asked to rate their language ability in areas such as speaking, reading, listening, and writing from *no knowledge at all* to *excellent*. They will also be asked to report their social network and contact pattern in order to see whom they socialize most with. The "*Types of learning difficulties and challenges faced in Hawaii*" was a multiple response questions (click all that apply) including "communication ability", "course content difficulty", "limited course options", and "interactions with professors" and so on. The "*Challenges faced in Hawaii*" was also a multiple response questions (click all that apply) including "financial crisis", "quality of accommodation", "relationship with people" and so on.

Procedures

The participants will be recruited from one university campus located in Oahu, Hawaii. Approximately all international students, around 1000 people, will be contacted via e-mail through the help of the student housing service on campus. The e-mail will include information about the purpose of this study. Students will be asked to go to a designed website to complete the questionnaire. It is impossible to determine how many of all 1000 students will actually receive this information. However, hopefully there will be at least 100 students will be willing to participate in this research.

Data analysis

Gender, marital status, language proficiency, race/ethnicity, length of stay, social network, education background, and financial status will be investigated for their contributions to anxiety levels of international students. We used SPSS 18.0 to analyze data and adapt descriptive statistics and cross table to answer research question.

4. Results

Data information

There are a total of 110 participants. According to different background variables, the data information is listed below:

Research question:

What are the most common challenges of studying and living in Hawaii that are most encountered by international graduate students?

H: "Communication ability" is hypothesized to be chosen as one of the learning difficulties. As for living challenges faced in Hawaii, it is hypothesized that "financial crisis" will be the most difficult problem for international graduate students that are living in Hawaii.

Multiple choice survey analyses.

Types of learning difficulties and challenges faced in Hawaii. From the survey responses, "communication ability", "course content difficulty", "limited course options", and "interactions with professors" were chosen the most (Table 2). Cross sectional analysis of gender and learning problems was also manipulated. According the analyses, $p > .05$ shows that gender does not have a significant difference on learning problems.

Challenges faced in Hawaii. From the responses of international graduate students, most of them reported facing challenges of "financial crisis", "quality of accommodation", "relationship with people", and language (table 3). Cross-sectional analysis of gender and challenges faced while studying in Hawaii was also manipulated. Out of the eight given choices of challenges, "financial crisis" showed a significant difference between male and female respondents. The Pearson coefficient for correlation was 4.35 with a p-value of .037 ($p < .05$) (table 5). Moreover, the contingency coefficient value is .216 (table 6), gender is moderately correlated to the feeling of facing financial crisis. From the further analyses in cross-sectional analysis, more female international graduate students (n=26) reported facing financial crisis than male students (n=11).

Table 1. Background variables description of samples

Background variable	Code	group	number	percent (%)
Gender	1	Male	51	46.4
	0	Female (reference group)	59	53.6
Marital status	0	Married (reference group)	18	16.4
	1	Single	88	80.0
	2	Others : engaged, almost married, divorced	4	3.6
What year were you born?	0	Before 1969 (reference group)	3	2.7
	1	1970-1979	24	21.8
	2	1980-1989	77	70
	3	After 1990	6	65.5
Aside from USA, have you ever studied abroad for more than half a year?	1	Yes	29	26.4
	0	No (reference group)	81	73.6
What is the highest level of education you have completed before coming to Hawaii?	0	Bachelor (reference group)	38	34.5
	1	Master	60	54.5
	2	Doctorate	7	6.4
	3	Others	5	4.5
GPA	1	below 3	2	1.8
	2	3.1-3.5	21	19.1
	3	3.6-4.0	79	71.8
	4	above 4.1	2	1.8
	—	Missing data	6	5.5
English ability	—	No knowledge at all	0	0
	0	Not good (reference group)	7	6.4
	1	Average	27	24.5
	2	Above average	50	45.5
	3	Excellent	26	23.6
Have you joined any foreign student associations?	1	Yes	40	36.4
	0	No (reference group)	70	63.6
In general, how often do you keep in touch with your family/friends at your place of residence?	0	Never (reference group)	2	1.8
	1	Seldom	9	8.2
	2	Sometimes	44	40.0
	3	Often	55	50.0
	—	Everyday	0	0
Have you ever encountered any financial problems while studying in Hawaii?	1	Yes	49	44.5
	0	No (reference group)	58	52.7
	—	Missing data	3	3.7
On the whole, have you ever encountered any learning problem while studying in Hawaii?	1	Yes	71	64.5
	0	No (reference group)	39	35.5

Table 2. Frequencies of learning problem

$Learning_problems Frequencies

		Responses N	Responses Percent	Percent of Cases
$Learning_problems[a]	Communication_ability	37	20.4%	43.0%
	Interactions_with_classmates	22	12.2%	25.6%
	Interactions_with_professors	27	14.9%	31.4%
	Limited_course_options	28	15.5%	32.6%
	Quality_of_training_not_as_good_as_expected	19	10.5%	22.1%
	Limited_research_resources	19	10.5%	22.1%
	Course_content_difficulty	29	16.0%	33.7%
Total		181	100.0%	210.5%

a. Dichotomy group tabulated at value 1.

Table 3. Frequencies of challenges while studying in Hawaii

$challenges_while_studying_in_Hawaii Frequencies

		Responses		Percent of Cases
		N	Percent	
$challenges_while_studying_in_Hawaii[a]	Relationship_with_people	33	16.3%	36.7%
	Financial_crisis	37	18.3%	41.1%
	Language	29	14.4%	32.2%
	Quality_of_accomodation	36	17.8%	40.0%
	Traffic	16	7.9%	17.8%
	Lifestyle	17	8.4%	18.9%
	Food	20	9.9%	22.2%
	Culture	14	6.9%	15.6%
Total		202	100.0%	224.4%

a. Dichotomy group tabulated at value 1.

Table 4. Descriptive gender statistics

Crosstab

Count

		Financial_crisis		Total
		.00	1.00	
What is your gender?	0	25	26	51
	1	27	11	38
Total		52	37	89

Table 5. Analysis of variance for gender and financial crisis

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.352[a]	1	.037		
Continuity Correction[b]	3.492	1	.062		
Likelihood Ratio	4.431	1	.035		
Fisher's Exact Test				.051	.030
Linear-by-Linear Association	4.303	1	.038		
McNemar Test				1.000[c]	
N of Valid Cases	89				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.80.

b. Computed only for a 2x2 table

c. Binomial distribution used.

Table 6. Symmetric measures regarding gender and financial crisis

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	-.221			.037
	Cramer's V	.221			.037
	Contingency Coefficient	.216			.037
Interval by Interval	Pearson's R	-.221	.102	-2.115	.037[c]
Ordinal by Ordinal	Spearman Correlation	-.221	.102	-2.115	.037[c]
Measure of Agreement	Kappa	-.221	.102	-2.086	.037
N of Valid Cases		89			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

5. Conclusions

In this study, the learning difficulties for the participants, most of them reported facing problems with "communication ability", "interactions with professors", "limited course options", and "course content difficulty". As for living challenges in Hawaii, "financial crisis", "quality of accommodation", "relationship with people", and "language" were chosen the most. As a result, female international graduate students are more prone to experience financial difficulties and should be aware that it may lead to significant anxiousness. International graduate students should keep in mind that before their arrival, the challenges mentioned above are possible to experience during their stay in Hawaii. School administrators and teachers also need to pay more concern to provide assistance to avoid adjustment problems from happening.

Limitations and recommendations for future research

Due to the smaller sample size, the researcher would highly recommend to gather more samples in order to find more significant relationships from the data. Statistical tests normally require a larger sample size to ensure that it represents the general population. The timing of when the study is distributed will also greatly affect the response rate. For studies on students, it is recommended to avoid periods when students tend to be more overwhelmed with academic work. Another limitation was that all of the study measures were self-reported and were therefore susceptible to common method biases and inflation of correlations owing to spurious variables such as momentary moods or test-taking attitudes. Thus, in future study, we recommend regular follow-ups and tracking to understand the development situation of the participating cases. This may provide a better understanding of the international students' cultural emotional change and learning impact in a new environment.

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