



**UNIVERSITI PUTRA MALAYSIA**

***ACCULTURATIVE STRESS LEVEL AND ITS CONTRIBUTING  
FACTORS AMONG INTERNATIONAL POSTGRADUATE  
STUDENTS AT UNIVERSITI PUTRA MALAYSIA, SERDANG***

**YE HUADAN**

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**By**

**YE HUADAN**

**Dissertation Submitted to the Faculty of Medicine and Health Sciences,  
Universiti Putra Malaysia, in Fulfillment of the Requirements for the  
Degree of Master of Public Health**

**August 2017**

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Abstract of dissertation presented to the Department of Community Health,  
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**Introduction:** Acculturative stress among international students is a serious issue. Oversea students face several problems because of the linguistic and cultural differences in their host country. It is important to understand their acculturative stress level and its contributing factors, in order to develop plans and policies and attract international students as well as ease their stay at UPM.

**Methodology:** A cross sectional study was conducted among the international postgraduate students using multistage random sampling proportionate to size from six faculties. Data was collected using a pretested, self-administered questionnaire which consists of three sections i.e., socio-demographic factors, adapted acculturative stressors scale and perceived stress scale. Data was analyzed using IBM Statistical Package for Social Science (SPSS) version 22.0. Descriptive analysis was used to determine the factors contributed to acculturative stress and predictors were explored using hierarchical regressions analysis. P value of less than 0.05 was considered statistically significant.

**Result:** A total of 404 respondents were assessed in this study, with the response rate of 82.1%. The obtained data showed that the prevalence of moderate acculturative stress was 77.7%, with 5.2% high stress. Mean age of the respondents was 32 years ( $M=32$ ,  $SD=6.9$ ), whereas the majority of respondents (75.7%) were male students. Respondents were mainly from Middle East (42.3%) and Africa (37.1%). Hierarchical regression analysis found that the gender ( $p<0.05$ ), religion ( $p<0.05$ ), continent of origin ( $p<0.05$ ), duration of stay ( $p<0.001$ ), academic pressure ( $p<0.001$ ), financial concern ( $p<0.001$ ), and social support ( $p<0.05$ ) were significant predictors.

**Conclusion:** The findings of the study reveal that over four fifths of international postgraduate students in UPM were in moderate to high acculturative stress level. The top three significant predictors of acculturative stress among international postgraduate students were academic pressure, financial concern and social support.

**Key words:** Acculturative stress level, international postgraduate students, contributing factors



Abstrak disertasi yang dikemukakan kepada Jabatan Kesihatan Komuniti,  
Universiti Putra Malaysia sebagai memenuhi keperluan untuk  
Ijazah Sarjana Kesihatan Awam

**PARAS TEKANAN AKUTURATIF DAN FAKTOR PENYUMBANG  
DALAM KALANGAN SISWAZAH ANTARABANGSA  
DI UNIVERSITI PUTRA MALAYSIA, SERDANG**

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**Pendahuluan:** Tekanan akuturatif adalah isu yang serius dalam kalangan siswazah antarabangsa. Siswazah dari luar negara menghadapi beberapa masalah disebabkan perbezaan linguistik dan budaya berbanding dengan negara asal responden. Memahami tahap tekanan akuturatif dan faktor penyumbanganya adalah amat penting untuk membantu dalam pelan perancangan dan polisi dan menarik lebih ramai siswazah antarabangsa dan juga membantu sepanjang sesi pembelajaran di UPM.

**Metodologi:** Kajian bahagian silang telah dijalankan dalam kalangan siswazah antarabangsa dengan penggunaan kaedah pensampelan secara rawak bagi pelbagai tahap daripada setiap fakulti. Data telah dikumpulkan dengan penggunaan pra-uji secara soal selidik yang diisi sendiri dimana ia mengandungi tiga bahagian iaitu faktor sosio-demografik, skala penyesuaian tekanan akuturatif dan skala tekanan persepsi. Analisis data telah dilakukan dengan penggunaan Pakej Statistik untuk Sains Sosial IBM versi 22.0. Analisis deskriptif telah digunakan untuk menentukan faktor yang menyumbang kepada tekanan akuturatif dan nilai jangkaan dieksplorasi dengan penggunaan analisis hierarki regresi. Nilai p bawah 0.05 dianggap sebagai signifikan secara statistik.

**Hasil:** Sejumlah 404 responden telah dikaji dalam kajian ini dan kadar respon adalah 82.1%. Data yang dikumpulkan menunjuk bahawa tekanan akuturatif adalah sederhana iaitu sebanyak 77.7% dan 5.2% daripadanya menunjukkan nilai tekanan pada tahap yang tinggi. Umur purata responden adalah 32 tahun ( $M=32$ ,  $SD=6.9$ ), dan majoriti responden adalah siswazah lelaki. Kebanyakan responden adalah berasal dari Timur Tengah (42.3%) dan Afrika (37.1%). Analisis hierarki regresi menunjukkan bahawa jantina ( $p<0.05$ ), agama ( $p<0.05$ ), kontinen asal ( $p<0.05$ ), tempoh menetap ( $p<0.001$ ),

tekanan akademik ( $p < 0.001$ ), masalah kewangan ( $p < 0.001$ ) dan sokongan sosial ( $p < 0.05$ ) yang signifikan.

**Kesimpulan:** Keputusan kajian ini menunjuk bahawa lebih daripada empat perlima siswazah antarabangsa di UPM mengalami tekanan akuturatif serderhana dan tinggi. Tiga jangkaan yang paling signifikan bagi tekanan akuturatif dalam kalangan siswazah antarabangsa adalah tekanan akademik, masalah kewangan dan sokongan sosial.

**Kata kunci:** Tahap tekanan akuturatif, siswazah antarabangsa, faktor penyumbang



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I certify that a Dissertation Examination Committee has met on 3<sup>rd</sup> August 2017 to conduct the final examination of Ye Huadan on her dissertation entitled “Acculturative Stress Level and its Contributing Factors among International Postgraduate Students at Universiti Putra Malaysia, Serdang” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the degree of Master of Public Health.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background

The development of science and technology has brought the world very close and has eased communication methods. It has also created sources for people to visit different countries for trade, commerce and educations. Recently, education is considered an important contributor of foreign exchange in the economy of the country. Around 14.5 billion USD per year are added in the economy of United States of America by international students and around 8.70 billion USD per year to the economy of UK (de Araujo, 2011). International students have contributed 17.5 billion USD per year to the Australian economy in 2015 (Altbach, 2015). In addition to that, international students from different backgrounds also play an important role in exchanging sciences and techniques, research knowledge, affecting culture and lifestyles in the worldwide (Eustace, 2007). It has been noticed that the population of international students in almost all developed nations is increasing.

There is an increasing evidence showing international students are more likely to encounter extra stressors and particularly susceptible to feelings of acculturative stress, due to limited personal resources when they enter a new country. It is necessary to explain the perception of acculturation, before the origination of a criticism of acculturative stress which impacts international students. The pioneer of acculturation researcher, Berry (2005) has reported that acculturation is twofold encroachment of ethnic and psychosomatic change which occurs due to the contact among two or more ethnic groups and their different members. Acculturative stress is referred to the interrelation with the way of life in a new country, subsequent to encounter with a new cultural patterns (Berry, 2003). Acculturative stress are also related to the aptitude of the individual that he has enough facilities/approaches to overcome the situation or not. It is also a contributing factor for acculturative stress.

The Most common stressors which foreign students face are reduced self-esteem, perceived discrimination, absence of coping strategies, different living condition, limited financial funding, poor social integration, and low language proficiency (Poyrazli & Grahame, 2007), new academic styles, and other daily life events (Mori, 2000). Furthermore, the adjustment problems of international students differ by their race, country of origin, and culture (Wilton & Constantine, 2003). If insufficient managing strategies are involved the acculturative stress and controlling approaches are not adequate to overcome the stressors, the acculturative stress will be higher. Hence, after arriving in the host countries, international students need to cope with various challenging tasks related to acculturation.

Acculturative Stress may have negative and positive impact. Sometimes it helps and contributes people to finish the task and perform well. However, it becomes harmful



when it turns into an over-stress condition. So compared with the domestic students, international students tend to be more vulnerable. For example, Adlaf, Gliksman, Demers and Newton- Taylor (2001) reported that the degree of stress in international students at university is significantly higher among the general Canadians. Some researchers reported that international students face exceptional academic and personal contests than that of the native students (Trice, 2003). Therefore, reports about international students' adjustment and their issues have to be documented, and the perspective of moderating the stress and increasing the constructive sides of their acculturation experience are highlighted by several authors (Ward, Bochner & Furnham, 2008).

The international university students' influence has been known as the key contributor to current economic environment and educational ability of Malaysian industry. In 2007, Malaysia launched National Education Strategic Plan (NESP) for rising internationalization of Higher Education in the Country. This policy was developed to make Malaysia as an educational hub which may provide quality education for the Asian and other developing and underdeveloped countries of the world. It is expected that Malaysia will draw RM60 billion or US\$20 billion with this policy and attract 200,000 international students by 2020 (Chu, Foong, Lai & Pang, 2015). Until 2016, there were 120,000 international students along with 151,000 school children in Malaysia. Over 30,000 international students pursued their postgraduate degrees. Thus they contribute RM7.9 billion in the country's economy. It is estimated that by 2020 it will increase to RM15.6 billion per annum (Malaysia's higher education mid-year report, 2016). The population of international students in University Putra Malaysia (UPM) has also increased considerably since last decade; currently there are 4,686 international students enrolled at UPM.

Several surveys about acculturative stress have been done among international students in Malaysia and the findings support the fact that international students have more chance to encounter higher stress upon arrival to Malaysia compared to host groups of students, as they have to adjust to new environment and face something uncertain. For example, a study involving 233 Iranian international students studying in private and public universities in Malaysia showed that insufficient support and conflict with other students were determined stressors, and those who had ineffective interpersonal support for stress management reported higher stress levels (Malekian & Khan, 2017). A similar study conducted by Chuah and Singh (2016) in 4 different universities of Malaysia found that the international students who pursue their bachelor degrees usually preferred to get social support and other help from local national students. In addition, another study among international students who pursue postgraduate degree at Universiti Kebangsaan Malaysia (UKM) indicated that surroundings and approach were the top two causes of acculturative stress (Desa, Yusoooff, & Kadir, 2012).

Although research on the adopting issues of the international student is conducted by several researchers. And some strategy or measures have been taken to solve their problems. However, the effect and efficiency are not satisfied, and international students still encounter all kinds of acculturative stress. More efforts are still needed to integrate the findings and there is a great room for further understanding the problem. Therefore it is very important to further explore the potential negative factors and de-

termine the acculturative stress level of international students, especially graduate students, and develops some strategies to facilitate international students, hence, they may adopt the new environment in Malaysia and reduce acculturative stress level effectively.

## **1.2 Problem Statement**

Previous studies showed that most of the international students face acculturative stress in a foreign country (Yu, Chen & Li, 2014; Gallagher, 2013). Obviously, the acculturative stress is mainly caused by adapting to an absolutely different social and cultural condition. Psychosocial, physical, and behavioral issues are more significant among foreign students than other sojourners (Yu, et al., 2014; Gallagher, 2013). Simultaneously, these issues can be acute or chronic stressors in these students and may lead to various undesirable health problems, including cardiovascular diseases such as ischemic heart disease and hypertension, diabetes, cancers, neurodegenerative diseases, unhealthy lifestyles (i.e. substance use, alcohol consumption and eating disorders), depression, even suicide, and other health consequences (Ekman & Arnetz, 2006). Along with the severe disease, the stress exposure is the leading cause of heart dysfunction which usually threatens humans' life (Wittstein, Thiemann, Lima, Baughman & Schulman, 2005). In the field of cytology, prolonged stress may be the reason for the disorder of brain, or disturb regular brain functioning, causing neurological and psychological syndromes (Morimoto, 2006). A study conducted in Australia reported that 5.3 percent women and 5.6 percent men had the ideation of commit suicide (Goldney, Wilson, Grande, Fisher, & McFarlane, 2000). Their findings demonstrate that in depression most of the international students reach at extreme levels and that could lead to tragic consequence. Previous studies have summarized a number of unhealthy behaviors correlated to stressors among international students, such as drug abuse, alcohol consumption (Park et al., 2004), severe mental problems (Bovier, Chamot & Perneger, 2004; Zhang, et al., 2012), no adaptive coping strategies (Bittner, Khan, Babu, & Hamed, 2011), decreased social involvement (O'Brien, Cho, Lew, Creed, Ho, et al., 2008) and undesirable academic performance (Sanders & Lushington, 2002).

International students are prone to have less personal and social sources to live in the host country and tend to face relatively more problems acculturating than the established social groups, as a consequence, acculturative stress would be the major problem for them. Even though, several studies on acculturative stress have proved that international students meet all kinds of troubles which affect their physical and mental health, but very few studies have been conducted to examine acculturative stress level and contributing factors among international students. On the other hand, the significant predictors of acculturative stress may vary in different social-cultural environments. For example, report says that apparent discrimination grounds bigger stress, more personality clash, a lesser academic contentment, bigger psycho-social and social adjustment (Leong & Ward, 2000).

In case of Malaysia, a little work has been conducted and there is great room for a study which can provide a detailed information about international students as the re-

mediation measures can be done. Most of the international students in the Malaysian universities are from Asian and African countries. It has been identified that Asian international students seem to be more passive and less assertive than other continental members and more likely to face acculturative stress. In addition, catching up with lecturers and involving in an active discussion in classes would be the most challenging stressors among international students. Among the group of international students, graduate students may be the most susceptible to the acculturative stresses due to high academic requirements. Another reason is that they have to handle these burdens without the same source of support that their family, friends and society would usually provide in their home countries.

### **1.3 Significance of Study**

Unlike the previous studies conducted in advanced countries i.e., USA, German, UK, New Zealand, Australia and so on, this study in Malaysian environs reveals to a quite different viewpoint. So far, no study about acculturative stress among international postgraduate students was done in Universiti Putra Malaysia, so this study can contribute to the body of knowledge. Malaysia possesses multi-cultural characteristics and multi-socializing diversity, as well as the increasing population of enrolled foreign students in different institutes and universities, which makes this study very important. Therefore, the understanding of international students' acculturative stress level and the factors those contributing to acculturative stress make contributions to ease their stay in Malaysia.

This study was conducted to figure out prevalence of the acculturative stress and explore the predictors leading to acculturative stress among international students who pursue postgraduate at UPM. It is expected that the findings of this study would help vulnerable international students to increase the understanding of this issue. At the same, it can help educational settings to prepare program for new students to overcome the challenges, it may also help offices of student service and student affairs organizations in university campuses to provide effective counseling programs to the students who are in troubles and promote constructive international student amendment and broad-based education for the eradication or minimization of adverse effects on them. The findings of this study will also help government to modify plans for National Education Strategic Plan (NESP).

### **1.4 Research Questions**

1.4.1 What is the level of acculturative stress in the international postgraduate students at UPM?

1.4.2 What are the factors which contribute to acculturative stress in the international students pursuing their postgraduate at UPM?

1.4.3 What are the associations between level of acculturative stress with contributing factors?

1.4.4 What are the associations between acculturative stressors with demographic factors?

1.4.5 What are the predictors of high level of acculturative stress?

## **1.5 Objectives of Study**

### **1.5.1 General Objective**

The aim of current study is to identify the level of acculturative stress, and factors which contribute to acculturative stress among international postgraduate students at UPM.

### **1.5.2 Specific Objectives**

1.5.2.1 To determine acculturative stress level in international students who pursue postgraduate degree at UPM.

1.5.2.2 To determine the factors which contribute to acculturative stress level in international postgraduate students.

1.5.2.3 To determine associations between acculturative stress level with contributing factors.

1.5.2.4 To determine association between acculturative stressors with demographic factors.

1.5.2.5 To determine the predictors of high acculturative stress level.

## **1.6 Null Hypothesis**

**Hypothesis 1:** There is no significant association between acculturative stress levels with socio-demographic factors.

**Hypothesis 2:** There is no significant association between acculturative stress levels with acculturative stressors

**Hypothesis 3:** There is no significant predictor with acculturative stress level among international postgraduate students at UPM.

## 1.7 Definition of Important Terms

**1.7.1 Acculturation:** a process of attaining new cultures (such as: principles, beliefs, and phonological), social-specific behaviors (such as: music, clothing, eating, and entertainment), and approaches through collaborations with persons in an accommodating country (Berry, 1992; Berry, Trimble, & Olmedo, 1986).

**1.7.2 Acculturative stress:** stress related to new lifestyle adjustment, resulting from an encounter with new cultural paradigms (Berry, 2003).

**1.7.3 International students:** those who travel to a country different from their own with visa for the purpose of tertiary study, which do not include permanent resident students.

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