Acculturation and self-esteem as predictors of acculturative stress among international students at the University of Wollongong

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ACCULTURATION AND SELF-ESTEEM AS PREDICTORS OF ACCULTURATIVE STRESS AMONG INTERNATIONAL STUDENTS AT THE UNIVERSITY OF WOLLONGONG

A thesis submitted in partial fulfilment of the requirements for the award of the degree of

Doctor of Public Health

from

UNIVERSITY OF WOLLONGONG

by

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Department of Public Health and Nutrition

December 1995
DECLARATION

I certify that this thesis is carried out by me and it does not have any material previously published or written by another person except where due reference is made in this thesis.

Signed.

Date: December, 1995
ACNOWLEDGMENT

I wish to thank the following people who have been integral to the preparation of this thesis.

• First of all to my supervisor professor Ross Harris who his constructive criticism and support have lead me to complete this thesis.

• I would like to gratefully thank Hazel England for her helpful comments, editorial assistance, and most importantly her unwaivering emotional and academic encouragement.

• Special thanks to Marcella Carfield for her kindness of spirit, generosity of time and ever faithful offers for typing assistance.

• I would like to thank lecturers and staff of the Department of Public Health in the University of Wollongong for their academic knowledge which provided the foundation which enabled the completion of this work.

• Thank also to the International Office staff in the University of Wollongong for their assistance with the data collection.

• I also wish to thank Dr M. T., Iman for his comments and consultation with the computerized data analysis.

• Specific thanks must be given to my research participants who gave their time without hesitation.

• Last, but not least, I would like to thank my daughters Rozhia and Hanieh for their patience and support during my study period.

Without those named above, I would not have been able to complete this thesis. For this I am deeply grateful.
ABSTRACT

International students travel from their homelands in search of continuing education in overseas countries and there is a general expectation that they will encounter acculturative stress.

This study highlights variables such as acculturation, self-esteem and socio-demographic factors which play an important role in the acculturative stress of international students at The University of Wollongong, in Australia.

One hundred and seventy-three international students from 11 nationalities at Wollongong University completed a questionnaire which assesses acculturative stress in relationship to acculturation, self-esteem and socio-demographic variables.

The results indicated that acculturation, self-esteem and nationality are the best predictors of acculturative stress. Multiple regression analysis indicated that these variables account for 59% of the variance in acculturative stress. As hypothesised, higher levels of acculturative stress are associated with lower levels of acculturation and self-esteem. Furthermore, the associations between acculturative stress and age, financial situation, visiting home, place of residence, language background and religion are significant. The study results pointed out that acculturative stress is not significantly associated with marital status, faculty, duration of stay in Australia, sex or fees payment.

The findings of this study suggest that it would be important for educators and target group assessors in the field of mental health to give special attention to international students in Australia.
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CHAPTER 1

INTRODUCTION

1.1. Introduction

Today's international education exchange and the movement of students and scholars across national boundaries is a common phenomenon throughout the world. Paige (1990) states that upwards of 1 million students annually are studying in countries other than their own and the number is increasing. The dynamic flow of international students is a very important aspect of a world in transition. Students all over the globe increasingly travel from their home countries to other countries for all/part of their education and training. The main student flows are from developing countries to developed countries.

Australia has received students from overseas since the beginning of this century. Currently, international students comprise a significant proportion of Australia's population and the numbers are increasing (Barker, et al., 1991). The Department of Employment, Education, and Training and The Department of Foreign Affairs and Trade state that there was a total of 18,121 overseas students engaged in post secondary or tertiary programs in 1988.

It has been asserted that movement from one culture to another is fraught with challenge, stress and the risk of negative consequences. Environmental change, whether temporary or permanent, is always a form of stress. Stress is an unpleasant experience of over or under stimulation which may actually or potentially lead to ill health (Alsop W. McCaffrey, 1993). Smith (1993) points out that up to 80 percent of all illness may well be stress-related. Thus, stress may be a threat to one's quality of life, including physical and psychological well-being.
A considerable amount of evidence indicates that international students are indeed stressed by cultural change (Berry, 1980; Brislin, 1981; Church, 1982; Dyal & Chan, 1985). International students who face a new culture in a host country experience stressful events which may be closely associated with the process of acculturation. Acculturation refers to the changes in behaviour and values made by members of one culture as a result of contact with another culture (Mainous III, 1989). International students experience a process of cultural adjustment, which at the time may be stressful and difficult to handle (Bennett, 1986); this process of adjustment to a new culture is known as 'Acculturation'. The most obvious negative consequences of acculturation at the individual level are hostility, uncertainty, identity confusion and depression (Berry, 1991). Stress in which the stressors are identified as having their source in the process of acculturation is 'Acculturative Stress' (Berry, 1991). It has been hypothesised that acculturative stress is a phenomenon that may undermine an individual's health status, including physical, psychological and social aspects. These health changes should be related in a systematic way to the known features of the acculturation process experienced by the individual.

The new society's language, social mores and role expectations may be unfamiliar to the international students, and could predispose them to mental health problems during their acculturation. The process of acculturation may also produce a loss of traditional language and values, accompanied by deterioration in psychological functioning (Mann, 1986). International students bring their own cultural orientation with them: values, beliefs and patterns of behaviour as well as ways of learning and thinking. Some of these are in sharp contrast to those of the host culture and can cause communication and interaction problems between international students and their host. Many overseas students want to participate in and learn as much as possible about the host culture, but they do not want to lose their sense of cultural identity. Their response may be frustration, anxiety, uncertainty, anger, extreme home sickness and depression (Paige, 1990).
Another factor which seems to be important in the detection of acculturative stress among students in host countries, and which plays a key role in determining their behaviour, is self-esteem. Padilla (1980), Pearlin et al.(1981), and Abramson et al (1978) discuss self-esteem related to the experience of stress among immigrants. Problems faced in a new culture reduce the international students ability to function according to the expected proficiency level and they begin to lose self-esteem.

Many international students have difficulty adjusting to Australian attitudes and customs; some experience a degree of inability to express their opinions and a reluctance to speak out or to challenge others in order to deal effectively in various social situations (Barker, et al., 1991). Pe-Pua (1994) points out that the overseas students claimed that attitudes of the Australian students prevented their successful integration into the two groups. They saw the Australian students were not interested in the culture of international students. The 'international student's' eagerness to learn about the Australian culture was not reciprocated by a similar interest in their own culture. Moreover, Australian students were seen to expect overseas students to assimilate and to live by Australian 'rules'; they hesitated having an Asian student as a group member because they felt that Asians were inferior to themselves, due to language inadequacy (Pe-Pua, 1994). The Committee of Review of Private Student Policy Australia (1984) indicates that at a personal level, satisfactory social and intercultural relationships are an important part of an international student's life in Australia.

Upon arrival in Australia, foreign students encounter many norm conflicts and cultural misunderstandings. Sometimes their stresses, combined with academic failure, social isolation and the strains of living may lead to emotional disturbances (Hodgkin, 1978). Overseas students have a deficiency of family or community support, while coping with a cultural difference which may become a serious barrier to successful course completion. Acculturation practitioners such as student services staff should understand that some international students will strongly resist the pressures to conform to the host
culture; yet, they will need assistance in the adjustment to a new society and academic environment (Paige, 1990).

Many universities have developed sophisticated cross-cultural orientation programs for international students. Acculturation and acculturative stress student advisers will often encourage international students to seek a balance between participation in the new culture and the maintenance of their own cultural identities. Programs that allow international students to serve as resources of learning for host students have successfully assisted with both promoting the integration of overseas students into the academic community and raising their self-esteem (Paige, 1990).

Various support systems have been created in Australia to assist international students, such as the university union and different ethnic club information services. At the University of Wollongong there are several support services used by the international students. These support services are either University-controlled or University-coordinated to encourage and provide information to the overseas students as they adjust to life in a new society, cope with various social problems, and become more integrated in the host community. Apparently difficulties faced by many overseas students can be solved if they are successfully adapting to the integration aspect of acculturation with the host society. Integration may increase academic progress, reduce conflict with the host community, and improve adjustment levels. Westwood and Barker (1990) believe that academic success is related to the adjustment of international students in the host society. Social contact with the host culture is also related to the enhancement of social adjustment. The sojourners' transition experiences dictate the relative strength between their psychological and socio-cultural adaptation; their transition experiences include acculturation strategies and potential for integration into the host culture (Ward and Kennedy, 1993).

While some of the problems of international students are well-known, few systematic ideas are available for designing a supportive policy for these students in Australia.
Given the impact of international students on the Australian educational system, it becomes necessary to understand the factors which affect their mental health status. This study attempts to conceptualise and operationalise 'acculturative stress', 'acculturation' and 'self-esteem' as three inter-related concepts which are relevant to international students. It focuses on the currently enrolled international students at the University of Wollongong in 1995. Their total number is 1421 and the majority of them are Asian. This study assumes that research on acculturation and related concepts of acculturative stress and self-esteem can assist universities and governments to choose more supportive strategies to assist international students and migrants.

1.2. The Purpose of This Study

The principal aim of this study is to investigate factors influential on the acculturative stress levels among the international students at The University of Wollongong.

In detail, the purposes of this research are:

1 - To examine the relationship between acculturation and acculturative stress among international students at the University of Wollongong.

2 - To explore the self-esteem of this group of students in relation to acculturative stress.

3 - To determine socio-demographic factors likely to affect acculturative stress.

1.3. The Significance of This Study

This study will enable the university to more effectively serve the needs of international students, through a better understanding of factors important for the successful integration and adaptation of international students into the new society.
As well, this study increases the body of knowledge relating to the acculturative stress, acculturation and self-esteem of international students. It examines several independent variables in relation to the acculturative stress of international students.

The results of the present study may be helpful for the university and other organisations to facilitate the planning of improved acculturation programs. These programs would serve the newly arrived international students and should address their various difficulties arising from life in a new society. The University of Wollongong could also develop student policies and programs based on these findings, and may also attempt to educate the host population. This information can be used by educators, counsellors, and psychologists working with international students.

The findings of this study can help the international students who are themselves in a situation of cultural contact and change. They could be provided with information, counselling, and other forms of psychological assistance based on this data.

In addition, the results may direct the host society towards an increased understanding of international students and encourage suitable relationships with them. Added satisfaction in the new society, plus academic success will motivate more international student-interest in the community; consequently, both the host university society and the international students will benefit.

On the one hand, these findings may assist host governments by providing them with the identification of factors which contribute to the stress of international students, and by suggesting ways to decrease or avoid the problems that they face in the new society. On the other hand, this research can help the countries of origin to understand their students' needs and the conditions of acculturation in their students' country of destination.
The present study's information may also be used in future studies, researching the international students' needs in host societies.

1.4. The Outline of the Chapters

The following chapters are included in this Thesis:

Chapter One deals with the introduction, the purpose of the study, the significance of the study and the arrangement of the thesis. Chapter Two theoretically describes the concepts of acculturation, acculturative stress, self-esteem and it discusses the study's theoretical framework, in terms of Berry and Kim, Minde and Mok's 'Acculturative Stress' model. Chapter Three operationalises relevant variables and introduces the data collection sampling procedure technique, levels of measurement, hypotheses and statistical techniques for analysing the data. In Chapter Four, descriptive and inferential statistics are employed in order to describe the socio-demographic characteristics of the samples and to determine the relationship of acculturative stress with acculturation, self-esteem and the socio-demographic variables. The discussion and limitations of this study, are explained in Chapter Five. Chapter Six describes conclusion.
CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The review of the literature is a systematic and critical review of the important published, unpublished data based literature and conceptual literature on a particular topic. The main goal is to develop a sound study that will contribute to further knowledge development for theory, research, education, and process (Wood, Haber, 1994).

The intention of this chapter is to present concepts of acculturation, acculturative stress, self-esteem and the theoretical framework which has been used in this study.

2.2. Acculturation

The assessment of individual behaviour across cultures is plagued by numerous complexities. The problem area addressed by this study is that behaviour is both influenced by the culture of early upbringing (enculturation), and it is affected by other cultures (acculturation). Unless the researcher can gauge acculturative influence, inappropriate conclusions could be drawn about the origins of behaviour. While work on acculturation was initially carried out almost entirely within the discipline of anthropology, it is now an important concept in the fields of ethnic studies, social psychiatry, and cross-cultural psychology.

The term 'acculturation' has been used during the 20th century in reference to what may be considered one of the more elusive, and ambiguous constructs in the behavioural sciences. In the mid-1930s the Social Science Research Council appointed a subcommittee on acculturation composed of three distinguished anthropologists (Redfield, Linton, and Herskovitz), and appointed it with the task of analysing and defining the parameters for this new field of inquiry within the scope of cultural
anthropology (Olmedo, 1979). The efforts of the committee resulted in the formal adoption of acculturation as a legitimate area of study dealing with "those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original pattern of either or both groups" (Redfield, Linton and Herskovitz, 1936: 149).

From an historical perspective, most research on acculturation has been anthropological in nature and has focused on the acculturation of third world nations to the industrialised western societies. Psychologists are generally newcomers to the field of acculturation. Most of the relevant psychological literature has emerged within the last decade, and then only within the more established field of cross-cultural psychology (Berry & Annis, 1974; Brislin, Lonner, and Thorndike, 1973). For the most part, this body of knowledge has not been integrated within the mainstream of American psychology. But there is evidence of a change toward the marriage of psychology and anthropology, and as Price-Williams pointed out, "despite undoubted differences in definitions of basic concepts and in methods used, the tendency at the present time is toward integration of the two disciplines" (Price-Williams, 1975: 17).

Before approaching a proper definition of acculturation, it is necessary to accurately describe it's major element, which is culture. What is 'culture?' It is often assumed to be 'natural' behaviour. Driving on the left-hand side of the road, knocking before entering a room, and waving good-bye are a few examples of culturally determined practices that become part of an individual's social repertoire. Consequently, they appear in a particular set of social rules and roles, and we often accept them without conscious reflection (Harre and Secord, 1972). Many social rules and roles which govern our behaviour are implicit and accepted knowledge, and it is only when we move out of our cultural context into another that we begin to notice them. For an immigrant, the difficulties arise when an individual recognises that previously 'natural' attitude and behaviour patterns are no longer seen as 'natural'. One must learn a new
set of attitude and behaviour patterns that are once again seen as 'natural' by oneself and by others.

To use slightly more technical language, culture refers to widely shared ideals, values, formations and uses of categories, assumptions about life, and goal-directed activities that become unconsciously or subconsciously accepted as "right" and "correct" by people who identify themselves as members of a society (Harre and Secord, 1972).

Herskovits (1948) defines culture as the man-made part of human environment. This definition, according to Triandis (1980) includes "both physical objects (road, buildings, and tools) that constitute physical culture, and subjective responses to what is man-made (myths, roles, values, and attitudes), which constitute subjective culture." Subjective responses, however, may also be toward the natural environment (mountains, rivers, deserts, and so on). This definition of culture and its physical and subjective dimensions reveals a very close relationship with the environment. White (1949) emphasises symbolic behaviour and particularly language which helps in the communication of wisdom related to skills for coping with the environment. Culture appears in people's perceptions, beliefs, values, norms, customs, and behaviour, as well as in objects and in the physical environment. Home designs, layout of villages, communities and cities, public buildings and places reflect the value and beliefs of a culture. So, the concepts of culture indicate ways of behaving and relating to the environment.

Different Culture is characterised on the basis of many dimensions. Out of the scores of such dimensions, individualism and collectivism are the most promising, in the sense that they are likely to account for a great deal of social behaviour (Triandis, 1984). People in every culture have both collectivist and individualistic tendencies, but the relative emphasis is toward individualism in the West and toward collectivism in the East and South (for example, Africa). Hofstade (1980) identifies this dimension in a study of several thousand IBM employees in 66 countries. Since then, others, such as
Bond, working with the values of college students in 21 countries, have found it (Triandis 1984). Some characteristics of this dimension are as follows:

(1) In collective cultures, behaviour is regulated largely by in-group norms, while in individualistic cultures, it is related largely by individual likes and dislikes and cost-benefit analysis. Thus far 'traditional' behaviour norms (for example, having children) should be more important in collectivist cultures, and attitudes should be more important in individualistic cultures.

(2) In collectivist cultures, in-group goals have priority over individual goals. In individualistic cultures, personal goals have precedence over in-group goals.

(3) Collectivists emphasise hierarchy. Usually the father is the boss and men are superordinate to women. This is not nearly as often the case among individualists, Furthermore, harmony and saving face are important attributes among collectivists, who favour homogenous in-groups and insist that no disagreements would be known to out-groups. In individualistic cultures, confrontations within the in-group are acceptable and are supposed to be desirable because they "clear the air".

(4) In individualistic cultures, child-rearing practices emphasise the child's autonomy, self-reliance and independence. In collectivist cultures, we find emphasis on obedience, duty and sacrifice for the in-group (Berry, 1979) because it is more functional to conform to authority while public works are being performed.

(5) Collectivists behave more intimately toward their friends and coworkers and less intimately toward their out-groups than the individualists do. Collectivists prefer to resolve conflicts amicably to a greater extent than individualists do (Leung, 1987). Because individualists must enter and leave many in-groups, they develop superb skills for superficial interaction, but they do not have very good skills for intimate behaviours (Triandis, 1989, Triandis, Bontempo, et al., 1986; and Triandis, Brislin, Hui, 1988).
There is a tendency for collectivist cultures to rely on an ideological framework when they communicate. That is, they use a framework from a religious system or Marxism or some other ideological framework as part of their communication.

In short, individualism and collectivism as major dimensions of culture are relevant to cultural identity of different groups and nations. They also play a major role in the process of acculturation and determine the variation of acculturation levels in different minority groups. A broader understanding of the role of culture in the process of acculturation is needed to clarify the definition and performance of acculturation.

Two classic statements about acculturation were made decades ago. Redfield, Linton, and Herskovitz argue that "acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups....". Under this definition acculturation is distinguished from culture change, which is but one aspect, and from assimilation, which is sometimes a phase of acculturation. It is also to be differentiated from diffusion which while always occurring in acculturation, is a phenomenon which frequently takes place without the occurrence of the types of people contact specified in the definition above, but also constitutes only an aspect of the process of acculturation (Redfield, Linton, and Herskovits, 1936).

In later literature, acculturation is defined as "....culture change that is initiated by the conjunction of two or more autonomous cultural systems. Acculturative change may be the consequence of direct cultural transmission. It may be derived from non cultural causes, such as ecological or demographic modification included by an impinging culture; it may be delayed, as with internal adjustments following upon the acceptance of alien traits or patterns, or it may be a reactive adaptation of traditional modes of life. It's dynamics can be seen as the selective adaptation of value systems, the process of integration and differentiation, the generation of developmental sequences, and the
operation of role determinants and personality factors" (Social Science Research Council, 1954: 974).

To these early formulations (which are concerned mainly with cultural phenomena), there is added a psychological component: the changes which individuals undergo during the acculturation of their groups. This is referred to as psychological acculturation by Graves (1967).

From the definitions of acculturation, some key elements that are usually studied in cross-cultural psychology can be identified. Firstly, there needs to be contact or interaction between cultures that is continuous and first-hand; this rules out short-term, accidental contact, and it rules out diffusion of single cultural practices over long distances. Secondly, the result must be a change in the cultural or psychological phenomena among the people in contact, usually continuing for many generations. Thirdly, taking these two aspects together, Berry et al. (1987) distinguish between process and state: there is activity during and after contact that is dynamic, and there is a result of the process that may be relatively stable. This outcome may include not only changes in existing phenomena, but also in new phenomena generated by the process of cultural interaction.

Theoretically, changes which are the result of the acculturation can occur in either of the two groups in contact, but in practice one group comes to dominate another and exerts a greater cultural influence (Berry, 1980). The dominant group provides a context of acculturation by creating a standard of what is to be accepted, tolerated and encouraged. It is not a balanced, homeostatic cultural interchange, but rather the dominant group sets up limitations, boundaries, goals, and the end-point of acculturation. Members of acculturating groups under such conditions can adjust, adopt, reject or change the given set of circumstances.

The kinds of changes that individuals within an acculturative group may undergo can be categorised into five different types: physical, biological, cultural, social and
psychological (Berry, et al., 1985). First, physical changes may occur such as a new place to live, new housing, and a new climate. Second, biological changes may occur such as a new nutritional status and new diseases. Third, a new set of social relationships may be formed including a reclassification of in-group and out-group. Fourth, cultural changes may occur as the original political, economic, religious and social institutions become altered or replaced. Fifth and finally, psychological changes may occur, including shifts in attitudes, values, beliefs and in mental health status.

In the study of acculturation and the cultural changes which occur in this process, two implied models of research are used: one is the 'mainstream-minority' model and the other is the 'multicultural' model. In the first, there is assumed to be a single dominant culture (the 'mainstream'), and a number of subordinate groups ('minorities'), and perhaps some fringe groups (such as native people or refugees). In the second 'multicultural' model there is an assumption of a more complex pattern in which no single group is dominant in all regions (or in all social spheres); smaller groups are incorporated (and involved) with other groups in a variety of complex ways.

The first essential point to make is that the generally accepted model which all researchers apply should match as closely as possible to the social and cultural reality in which they work. Obviously, it would be inappropriate to study any research related to immigrants in Australia as a multicultural society from the 'mainstream-minority' model. In the 'mainstream-minority' model, studies usually analyse the 'mainstream' attitude to 'minorities'; 'minorities' attitudes to the 'mainstream' or to another 'minority' are rarely evidenced in the literature. In the 'multicultural' model, there should be a full matrix of attitudes assessed. Each group is capable of holding attitudes towards all groups (including self), and these should be fully represented in the research. Similarly, in acculturation research from the 'mainstream-minority' point of view, studies usually limit themselves to examining the change in the 'minority' group as it gradually becomes more like the 'mainstream'. In contrast, in the 'multicultural' model, mutual influences leading to change in both contact groups should be allowed.
Therefore, the 'multicultural' model is employed in this research for analysing acculturation among international students in Australia as a multicultural society.

There are concrete examples of individuals experiencing psychological change as a result of belong to a changing cultural group. A category of such individuals could be immigrants who are moving to set up a new life in another country. This would be an example of acculturation, because external cultural contact is involved, followed by both cultural and individual changes. The decision to emigrate is often based upon some prior contact, knowledge, and influence. In emigration the notion of 'push' and 'pull' factors may be useful. 'Push' factors are those that have negative valence in one's own situation (eg, poverty, persecution). 'Pull' factors are those that have positive valence in the new society, leading to a decision to migrate in order to obtain a more attractive situation (eg, economic gains, personal freedom). Sometimes family members have already settled in the new country, and this has led to changes in the home culture, such as a foreign language being taught in school, new industries being established, and the presence of mass media explaining about life in the new country.

Upon immigration to the new country, there can be some dramatic and overwhelming contact experiences followed by psychological reactions, differences in climate, language, work habits, religion and dress. All of these abrupt changes can challenge the immigrant, and responses are required. These cultural differences may be accepted, interpreted, or denied, and the individual may ride with them or be run over by them in the process of acculturation.(Berry 1980).

Both Lee (1966) and Peterson (1978) claim that emigrants do not share their home country's culture; they are most likely to be locally, rather than nationally oriented in their home countries, and are pre-socialised considerably according to the characteristics of their host culture. Lee asserts that "the characteristics of migrants tend to be intermediate between the characteristics of the population at origin and the population at destination (Lee, 1966: 57)."
The adaptation of immigrants to a new culture has been conceived as a re-socialisation process involving many aspects of psychological functioning (Taft 1985, 1986). Changes in attitudes and values and in cultural identification, acquiring new skills, placement within a new reference group as well as acceptance of the new environment are all seen as part of the many-sided process of acculturation. It is assumed that the ease or difficulty of adaptation will depend on the extent to which the original culture is similar to the same areas in the new culture.

In appraising the acculturation of immigrants and their relations with the native-born population, one may consider either the collective or the individual unit of analysis. From the collective perspective, the community of foreign immigrants is seen as a relatively homogenous group surrounded by a dominant culture of native-born people. Contact between the two is seen as a confrontation of two cultures, each providing more-or-less consistent 'rules of behaviour' (Argyle, 1982; Liu, 1986). Various outcomes of this contact may be anticipated which Berry (1980) identifies as assimilation, separation, integration, and deculturation. Assimilation entails the adoption of the majority culture by the minority; separation is defined as a parallel existence of the two distinct cultures, with neither affecting the other; integration refers to a blending of the two cultures in some balanced fashion, while deculturation describes the loss of the minority culture. Which of these outcomes occurs (Berry, 1980) depends on the jointing of attitudes in the two groups towards their own and the alternative culture, and on the subordinate group having the option of culture retention.

The perspective of individual acculturation, for use here, is adapted to the concept of 'psychological acculturation' as used by Berry and Kim (1988): the acquisition by an individual of a second culture. According to this view, when immigrants are compared with native-born, cultural component parts such as language, food, religion, and sex-role differentiation are likely to vary, but they are not necessarily highly correlated, and may gradually diminish in the new country. This means that various aspects of the ethnic 'culture' tend to break apart, while for the dominant group, various aspects of
the traditional culture also tend to diverge, as individual members in contact with new practices adopt them into their own repertoires and dilute the 'dominant culture pattern'. Just as the degree of cultural uniformity and direction of change may vary considerably with individuals and collectivities and stages of culture contact, individuals also may differ in their degrees of exposure to and combining with dominant cultural attributes. This variance appears as individual differences in 'cultural competence' (Argyle, 1982), which is said to depend on such personal qualities as effective communication, interpersonal competence, and the capacity for stress management.

The individual perspective regards assimilation as a metaphor suggesting that the person becomes more like an average member of the dominant group. Individual assimilation has different aspects which have been distinguished by some scholars. Eisentadt (1955) has identified two aspects as "cultural assimilation" (adoption of new culture norms and behaviour patterns by the assimilating individual) and "social assimilation" (absorption into primary groups of the local society). The former refers to what the immigrant does, and the latter to the dominant society's response to the immigrant. Johnstan (1972) divides the immigrant's contribution into 'subjective' and 'external' assimilation. The former refers to identification with the new country and the latter to the acquisition of outward manifestations so that distinctive ethnic status is not obvious. Richardson (1974) distinguishes a sequence of assimilation beginning with the immigrant's satisfaction in the new circumstances, followed by identification with the new country, which finally leads to acculturation.

The level or degree of acculturation depends on the cultural competence of the migrant, because cultural competence refers to the potential for acculturation. It is an ability to perform the necessary skills in order to adapt to a culture, which is required for satisfactory adjustment. In the definition of cultural competence, Taft believes that "the potential for learning the new culture and for adopting its behavioural requirements is related to immigrants' abilities, early training, and personality traits, and it is reflected in their acculturation achievements relative to their goals and opportunities. These
achievements include linguistic, economic, and social success, and in the case of school children, academic performance" (Taft, 1985: 376). It is clear that cultural competence can best be defined by its external manifestations, and some of the studies of immigrants in Australia (e.g., Johnston, 1972, Richardson, 1974, Scott and Stumpf, 1984) have used simple tests of language and other culturally relevant competence, as well as ratings of various areas of competence made by both observers and informants.

In the scheme employed for this study, personality characteristics function as intervening variables, produced by a set of demographic and background characteristics, in connection with cultural competence and family relations, and therefore effecting many kinds of subjective adaptations and role performances. It is common to distinguish cognitive, emotional, and motivational components of personality, by following the ancient philosophical distinctions between knowing, feeling, and willing. Such processes are presumed to lie behind and to cause behaviour, in conjunction with situational influences at the point of action. In personality theory, the most attention has been focused on emotional and motivational processes, with the cognitive process largely left to other theoretical analysis. In the arrangement of this study, following conventional practice, cultural competence is treated like intelligence or a set of determinants set apart from other aspects of personality.

In research on immigrants, personality constructs such as self-esteem, anxiety, hardiness, and traditionalism have been associated with adaptation of one kind or another (Spielberger, Gorsuch, and Lushene, 1970; Padilla, Wagatsuma, and Lindholm, 1985). In this survey, self-esteem is employed as a major construct of personality to determine the variation of acculturation scores among the respondents.

The sample for this study are international student; they are a subgroup of sojourners who constitute one of the five different types of acculturating groups. The others are:
ethnic groups, immigrants, native peoples, and refugees (Berry and Kim, 1986). They differ in terms of mobility, permanence of contact and voluntariness of contact. Watson (1977) indicates the vague, subjective nature of the condition by defining a "sojourner" as one who is mentally oriented toward the home country, though spending most of life abroad, as sometimes occurs amongst "educational transients".

International students in this study are defined as individuals who temporarily reside in a country other than their country of citizenship or permanent residency, in order to participate in international educational exchange as students, teachers, and researchers. They are also distinguishable by virtue of being culturally different from their hosts. International students are a relatively mobile, temporary and voluntary group living between their home country's culture and the culture of their destination. They have to make contact with the native people of their destination and they must also maintain their relationship and interaction with the home country.

International students bring their cultural orientations with them: values, beliefs, patterns of behaviour, ways of learning and ways of thinking. Some of these contrast sharply with those of the host culture and can cause serious communication and interaction problems between internationals and their hosts. Many features of the new culture are also subtle and difficult to recognise, leaving international students in a state of ambiguity and uncertainty. The sojourner's responses - frustration, anxiety, uncertainty, anger, extreme homesickness, and depression - are popularly referred to by the term, 'cultural shock', and in the theoretical literature as 'cultural adjustment', and in the process of acculturation, as 'cultural learning' (Paige, 1990).

In the process of acculturation, international students want to participate in, and learn as much as possible about the host culture, but they do not want to lose their sense of cultural identity. They are also concerned about becoming culturally marginal; that is, conversant in both cultures but not fully accepted by either. Marginalisation becomes more severe when (a) there is pressure to conform to the new culture, (b) the new
culture limits international students from full participation, (c) the students desire to become integrated into the new culture, (d) the students desire to maintain their own cultural identity, and (e) the students’ own cultural views return with suspicion (Paige 1990).

Thus, international students enter into a specific stage or phase of acculturation which is different from permanent migrants. For example, the stage of assimilation is applicable for permanent migrants while the integration stage is relevant for temporary migrants (eg, students). The stages or phases of acculturation are discussed in Chapter five.

By treating the individual as a unit of analysis, it is possible to describe and empathise with the international students' plight of being in regular contact with stressful life events - stressful because they are new and unexpected. The international student's plight is not different from that of the native-born person who has socialised more gradually with each new cultural demand posing stress. It is just that the student confronts many more novel experiences, creating what Oberg (1960) has called "cultural shock". The stress of acculturation can be expected to produce accompanying strains, including a lowering of thresholds for physical disease and mental disorder. Thus, mental illness may be seen as one response to acculturation. The stress of acculturation in this survey is termed 'acculturative stress', which is discussed in this Chapter.
2.3. Acculturative Stress

2.3.1. Overview of Stress

Understanding and predicting positive health behaviors are major concerns of health promotion professionals. One of the factors that has been suggested as important to the understanding of health behavior is stress. The concept of stress has been used in recent psychological and medical literature (for example Smith 1993 Lazarus, 1984 and Selye 1979). The study of stress has become a popular topic in magazines and newspapers, and also is of significance in psychology textbooks. An enormous body of theory and research points to the cost of stress on health, productivity and well-being. Stress is an important component of heart disease, cancer, respiratory disorders, ulcers, alcoholism, accidents and drug-abuse; indeed, of all leading causes of death in the West. According to Smith (1993), stress can reduce productivity, creativity and the ability to enjoy oneself. Stress has been estimated to cost industry up to 150 million dollars each year (Smith, 1993).

It has been proposed that 'stress' is best used as a general term for the total process linking demands to reactions and other outcomes (Lazarus and Folkman, 1984). Stress can be described in terms of physical, psychological and social levels. Physical stress occurs when certain demands strain or exceed the body's resources to adapt, thus contributing to physical wear and tear, lowered resistance and so on. Illness, heat, cold, war and worry can be physically stressful. "Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus and Folkman, 1984, p.19). Social stress occurs when demands threaten the functioning and the stability of society or of a social group. For example, discrimination threatens the viability of minority subcultures (Smith 1993).
By definition, a "stressor" is an environmental influence or agent that produces a stress response in the organism. The range of stressors is extremely wide and includes severe illness, natural disasters, bereavements, divorce, unemployment, retirement, financial difficulties, and migration. The relationship between stressors and their responses is more complex than this list suggests. For example, the same event might cause stress in one individual but not in another; also as Parkes (1971) points out, stress can arise from usually positive experiences such as promotions and engagements; individuals vary in the ways that they cope with and adapt to these life changes. In both cases, as The World Health Organisation states: stress and the diseases that result from it—represent "an unsuccessful attempt on the part of the body to deal with adverse factors in the environment." Also, some situations may cause a stress response in one person but not in another. As Steptoe (cited in Carroll, 1992) indicated, there are at least three basic routes by which stress can contribute to ill-health. First of all, stress can disrupt physiological homeostasis, thus causing reactions in various biological systems. Second stress can also influence at the behavioural level. Certain stress-related behaviours such as cigarette smoking, excessive alcohol consumption, extreme dietary habits, low level of physical activity and exercise, have all been identified as contributing negatively to physical health and as positive risk factors for a range of diseases. Finally, stress may influence an individual's understanding of his/her symptomatology, sometimes called "illness behaviour"

2.3.2. Change and stress

Today, more than ever before, we are experiencing some dramatic changes. Change moves us into new technologies, new social structures, new values, new policies and new human relations (Kim 1988). More than ever before, today's changes are swift and fundamental, and disturbing even the most basic human conditions. It has effected nearly every stable pattern of life-cultural values, the structure of family functions, and the relationship between generations, even in traditional societies. Toffler (1970)
coined the term "future shock" to describe the stress and disorientation which many people experience while coping with excessive change.

Accompanying this technological-cultural change is the increasing movement of individuals from one society to another. Today, international educational exchange—the movement of students and scholars across national boundaries—is a growing phenomenon in countries throughout the world. According to Paige (1990), every year more than 1 million students are studying in countries other than their own and the number is increasing. The flow of international students is illustrative of a very dynamic and important aspect of a world in transition (Paige 1990). By 1986, approximately 75 per cent of all international students were from the developing nations of Africa, Asia, Latin America and the Middle East. Significantly, 75 per cent of them were studying in Europe and North America (Paige 1990).

These international students enter an unfamiliar culture from the comfortable cultural communication that they have known in their home country. Intercultural encounters provide situations contrasting to that which is familiar, assumed or taken-for-granted. Acculturation of strangers specifically involves the cultural patterns established in the host society at large and regarded by the majority of people as the standard of that society. In many multi-cultural societies, the standard cultural patterns refer mainly to those of the dominant culture. Although acquiring minority cultural patterns is a part of the overall adaptation process of newcomers, the most compelling pressure to conform comes from the dominant elements of the host society (Kim 1988). In this process strangers are reenculturated, only this time it is into the host society. This second-time enculturation does not occur as smoothly as their childhood enculturation because of the distinct cultural identity and communication patterns learned in childhood. As acculturation occurs in the strangers, there is unlearning of at least some of the old cultural patterns (Thayer, 1975). In this dynamic interplay of acculturation and deculturation, strangers gradually undergo an adaptive transformation in their communication system. Ultimately the new cultural patterns replace many of the old
patterns and the overall transformation of strangers becomes noticeable, particularly to others (Kim 1988).

Schuetz (1944, cited in Kim, 1988) discusses that human systems are characteristically unchanging and attempt to hold many variables constant in their internal structure, so as to achieve an ordered whole. When individuals receive messages that disrupt their existing internal order, they experience imbalance. In this state of imbalance (disequilibrium), the individual meets stress. Thus strangers inevitably experience acute stress as they go through the experiences of acculturation and deculturation. They lack "intersubjective understanding" of the social world inhabited by the members of the host society. For the natives, then, every social situation brings together not only roles and identities, but also shared realities—the intersubjective structure of consciousness. What is taken for granted by the native is problematic to the stranger. In a familiar world, people live through the day by responding to daily routine without questioning or reflection. To strangers, however, because every situation is new; it is a crisis experience (Herlz, 1988, p. 13).

As long as there are differences between the demands of the host environment and the capacities of the strangers' internal communication to meet those demands, the strangers must adjust and readjust themselves to better function in the host society (Kim 1988). Everyone requires on-going proof or validation of his or her place in a given environment, and the ability or inability to meet this basic human need can lead to symptoms of mental, emotional, and physical disturbance (Berger & Kellner 1970). When experiencing internal stress or disequilibrium, strangers instinctively react to maintain or restore their inner balance and stability. Through various psychological manoeuvres, they temporarily escape from the necessity of having to deal with stressful conditions. Sometimes the problem solving approach is rigid, however, and less than adequate attempts are made to protect feelings or to master the situation. Consequently, strangers may become hostile toward the new country, attacking its values, customs, food, climate, and so on. As coping mechanisms, they may desire for home, become
dependent on others, be excessively concerned with unimportant details, rationalise their inability, or simply avoid problematic situations by ignoring them (Lazarus and Folkman, 1984).

Unfortunately, these defensive reactions do not facilitate learning about a new environment. Although defensive reactions to stressful situations may reduce inner tension and anxiety, strangers cannot avoid the necessity to face and cope with the host environment if they are to perform satisfactorily. Even though internal protective reactions are frequently necessary for strangers, sooner or later the strangers must stop their protective reactions which merely postpone confronting the impending problems and adaptation. As long as they remain in the host society, the quality of their performance in the host society depends on how well they can communicate with host nationals (Kim, 1988). They eventually must gain the information that will improve their acceptance in relating with the host environment.

To acquire the necessary communication skills of the host society means going through many stressful emotional "lows". Strangers must accept internal conflicts (conflicts between their original cultural patterns and the host cultural patterns) through active communication in the host society. In this process, stress is inevitably present; it is part-and-parcel of the stress-adaptation cycle (Ruben, 1983).

The psychological changes within an individual's internal system towards new dimensions of perception and experience may well produce forms of temporary personality disintegration, or even "breakdown" in some extreme cases. Stress, in the present context, can be viewed as the internal resistance of the human organism against it's own cultural evolution (Kim, 1988).

As strangers face the demands of the host environment and cope with the accompanying stress, parts of their internal organisation undergo small changes. The interior organisation of strangers is changing as they continue to communicate with and adapt to the host environment.
According to Kim (1988) the stress-adaptation-growth cycle involves communication activities that alternate between outward-looking information-seeking behaviour and tension-reducing retreat, which results in the capacity to see a situation with new eyes.

Stress is said to be responsible for suffering, frustration, and anxiety; but it must also be credited as a force in learning, growth and creativity for the individual. The stress of meeting with new cultural elements lays the groundwork for later adaptation. Ruben (1983) suggests that the Canadians in Kenya, who could ultimately be the most effective in adapting to the new culture, underwent the most intense cultural shock during the transition period. Other acculturation studies of immigrants and foreign students in the United States have shown that once the initial phase has been successfully managed, individuals demonstrate an increased cognitive complexity, and a positive attitude toward the host environment and toward themselves along with their capacities to communicate with the native (Torbiorn 1982).

It must be pointed out that not all individuals are equally successful in their attempts to cope with stress. A minority of individuals may strongly resist such change, thereby increasing the stress level and making the stress-adaptive-growth cycle intensely difficult. Some may not be able to cope with intense stress experiences, due to lack of psychological strength. Others may find themselves in situations that present an insurmountable challenge (Kim 1988). According to Cockershaw (1986) people in social situations have different skills and abilities to cope with problems; not everyone has an equal degree of control in using emotional defences, or has the same motivation and personal involvement in a situation.

The extent of physiological damage or change within an individual depends on:

1. The stimulus situation, which includes the importance of the situation to the individual and the extent of his or her motivation,
(2) An individual's capacity to deal with the stimulus situation including the influence of genetic factors, personal skills, innate abilities, and past experiences,

(3) The individual's preparation by the society to meet problems, and

(4) The influence of society's acceptable modes of behaviour (Cockershaw 1986).

The movement from one environment to another can be considered a crisis situation and the stresses following transition can affect coping patterns and promote maladaptation (Herlz 1988), which in turn could be main causes of some social and psychological problems. He pointed out that migration from one culture to another is a stressful experience involving major disruptions in the individual's "life space."

Torbiorn (1982) discusses several factors such as loss of control, a feeling of helplessness, and lack of self-confidence—all associated with living in a new country. KyungRinShin (1993) states that conflicts in values between the two original and host cultures identify confusion, communication problems and the experience of prejudice and discrimination as stressors which are important causes of psychological symptoms experienced by migrants.

Social change can also lead to stress by making new demands on people, producing the loss of what is predictable or familiar, creating a sense of isolation, posing new threats and new social rules, and creating constant demands for change at the individual level (Lazarus and Folkman 1984). It is obvious that within a culture there are changes and structured deviations producing conflict in values and in action patterns. These conflict processes create difficulties in adjustment, particularly when people find themselves in an unfamiliar situation and are inadequately informed regarding social behaviour. Consequently they might suffer mental stress and be unable to cope (Hodgkin 1978).
deculturation of the original cultural communication patterns. In this interplay of acculturation-deculturation, strangers experience stress caused by the discrepancy between their internal condition and the conditions of the host environment.

Padilla et al. (1985) argues that experiences of stressful life events among immigrants have been closely associated with the process of acculturation. Among immigrants, acculturation introduces potential sources of conflict and stress, often including values and role conflicts between the native and host cultures which may present stressful situations (Torbiorn, 1982).

The strains accumulate in an unfamiliar and unpredictable environment that uncontrollably impinges on everyday life. The absence of instrumental skills, such as knowledge of English, keeps the unfamiliar world from becoming familiar and controllable. This predicament lowers self-esteem and eventually gives rise to symptomatic behaviour (Rogler et al, 1991). In the present instance acculturation is conceived as an exogenous. The reality of being a foreigner makes living hard in a strange land where a person must make a number of personal, social, and environmental changes upon arrival (Altbach, et al., 1985). The international students are a high-risk group who have more psychological problems than their peers (Sandhu and Asrabadi 1994) Pederson and Chisholm (1983) summed up the situation in their statement that "International students are likely to experience more problems than students in general, and have access to fewer resources to help them "(p. 26).

A variety of reasons have been suggested as contributing to the psychological problems of international students. Language barriers and problems related to culture shock and social adjustment are obviously the current themes (Church 1982 and Rubin 1993). Several authors have attempted to study the nature of the psychological problems of international students. In one of the earliest studies concerned about international students, Hull (1978) identified personal depression, homesickness and loneliness as the major concerns. Many other writers postulate the major concerns as high anxiety
(Pederson 1991), stress, frustration, fear, and pessimism (Dillard and Chisolm, 1983), and perceived alienation and racial discrimination and loneliness. The research conducted on the psychological problems of international students is isolated, sporadic, inconsistent, varied, and desultory in nature. Most of the psychological problems of the international students have been described with very little supporting empirical data (Sandhu and Asrabadi, 1994).

2.3.3. Acculturation and Stress

Acculturation and stress is related to the process in which an individual born and raised in one culture adapts to a new culture as a sojourner or as an immigrant. Kim (1988) indicates that enculturation is an individual's encounter and adaptation to a new culture which necessitates the acculturation of the host cultural communication patterns, as well as the deculturation of the original cultural communication patterns. In this interplay of acculturation-deculturation, strangers experience stress caused by the discrepancy between their internal condition and the host cultural environment.

Padilla et al. (1985) argues that experiences of stressful life events among immigrants have been closely associated with the process of acculturation. Acculturation introduces potential sources of conflict and stress, as well as values and role conflicts between the native and host cultures which may present stressful situations to immigrants (Torbiorn 1982).

The strains accumulate in an unfamiliar and unpredictable environment that greatly effect everyday life. The absence of instrumental skills such as knowledge of English, keeps the unfamiliar world from becoming familiar and controllable. The predicament lowers self-esteem and eventually allows the emergence of symptomatic behaviour (Rogler et al, 1991). Acculturation is described as an exogenous force shaping psychological distress: changes of acculturation result in changes of the person's relationship to the effective environment, which then impinges in new ways upon his or her psychological well-being.
One view of the relationship between acculturation and psychological distress, among Mexican Americans, holds that the level of distress may be higher among the less acculturated than among the more acculturated. The less acculturated individual is still intimately tied to Mexican culture, is exposed to conflicting beliefs, attitudes, and practices of the new culture, but she/he is not equipped with strategic traits to obtain the goals valued in that new culture (Kaplan and Marks, 1990). There are also several reports of positive correlations between acculturation and emotional well-being among Chinese women in New York City (Change 1980), South East Asian refugees in the U.S.A. (Nicassio, 1985; Nicassio, Solomon, Guest and Mc Cullough 1986), and Indian immigrants in the U.K. (Cochrane 1983). The levels of stress experienced by South East Asian Refugees and by Japanese-Americans of first, second, and later generations were negatively correlated with their levels of acculturation (Nicassia et al, 1986; Padilla et al, 1985).

The phenomenon of acculturative stress has been exclusively described by anthropologists and sociologists for a long time (Dyal & Dyal 1981). During the last decade the importance of stressful life events used as predictors of mental health status has been strongly asserted by researchers from several disciplines concerned with public health. There are many methodological problems, both psychometric and conceptual, which still plague the "stressful life events" approach; nevertheless, it is now clear that this approach offers promise in evaluating life changes as they relate to psychological stress (Dyal & Dyal 1981). However, according to Taft (1974), when people are required to adjust to a foreign socio cultural environment over an extended period, they need to learn a new cultural repertoire and competency. Adaptation to an unfamiliar culture requires changes in cognition, attitude and behaviour; otherwise culture shock and acculturative stress are likely to increase.

So acculturative stress is composed of those stresses that are theoretically or empirically linked to acculturation (Berry and Annis 1974). For this study’s purposes, acculturative stress refers to a particular kind of stress: that in which the stressors are
identified as having their source in the process of acculturation. As Berry et al. (1989) indicate, there is often a particular set of stress behaviours that occur during acculturation, such as confusion, anxiety, depression), feelings of marginality and alienation, a heightened psychosomatic symptom level, and identity confusion. In addition, acculturative stress includes issues such as language problems, perceived discriminations, perceived cultural incompatibilities, commitment or lack of commitment to culturally defined values or behaviours such as familiarisation and cultural pride (Vega et al, 1993).

Many researchers have characterised international students as a high risk group regarding acculturative stress for example (Alexander, Workney, Klein,and Miller 1976 ). Comparisons of acculturative stress among immigrants, refugees, native peoples, sojourners and ethnic groups in Canada were made by Berry and Kim (Berry and Kim 1986). The results have shown that the sojourner's stress level is higher than other immigrant and ethnic groups (Berry and Kim 1986). As a sub-group of immigrants, overseas students experience that differences in climate, food, living conditions, living standards, social values, ways of behaving, styles of learning, and modes of communication can be very stressful. New experiences such as these often result in a loss of culture and of personal identity. Therefore stress, frustration, anger, fear, or depression can be a common experience for the sojourner (Church 1982). Westwood and Barker (1990) indicate that foreign students experience the same problems as local students, and in addition they face problems that arise from adjusting to a new culture and functioning in an unfamiliar educational setting.

2.3.4. Moderating factors

Relationships between acculturation and stress depend upon a number of moderating factors, including cultural distance, social interaction and communication, cultural competence, generation status, and adaptive resources.
2.3.4.1. Cultural distance

The concept of cultural distance has been introduced to account for the amount of distress experienced by a student from one culture, while studying in another. Babiker et al., (1980) hypothesised that the degree of psychological distress in an international student sample was a function of the distance between the students' own culture and the host culture. They produced a culture distance index to provide objective assessment of the disparity between the two cultures uncontaminated by the subject's perception of the differences or his/her feeling about them. Their items included climate, clothes, religion, food, and family structure. The instrument was then used on 121 foreign students at Edinburgh University to investigate the possible associations among culture distance and medical consultations, symptoms, and examination success. Correlation analysis showed that culture distance was significantly related to anxiety during the Easter term and the total number of medical consultations during the year, but not related to academic success.

Furnham and Bochner (1986) found that the degree of difficulty experienced by sojourners was directly related to the cultural distance between the sojourners' culture and the host society. They attribute this to the fact that students from cultures very different to the host culture simply did not have the requisite social skills to negotiate situations or to form relationships with the host country's students. Many of the foreign students did not seek out host culture friends from whom they might have been better able to learn the appropriate social skills necessary for a satisfying student life. Hull (1978) pointed out that acculturation would be more difficult for students coming from home cultures that are very different from the host culture.

According to Kim (1988) one source of adaptive predisposition is the degree of similarity between the strangers and the host cultures in political, linguistic, economic, religious, technological, and other experimental backgrounds. Strangers whose
cultural background is similar to the host culture would begin their adaptation with greater ease.

Almost all studies conducted in the United States examining the interpersonal relationship pattern of foreign students have reported that European students interacted with Americans more extensively than students from Asia. Sewell and Davidson (1961) for example, describe Scandinavian students as having little difficulty in adjusting to life in the United States, while they reported considerable difficulty on the part of students from India and Japan. Similar results have been reported by Furnham and Bochner (1982) for foreign students in England. Many culture shock studies further agree that an effective indicator of sojourners' intensity of stress reactions is the degree of difference between the sojourners' home culture and the host culture (David 1971).

Referring to cultural differences, Hodgkin (1978) states that there are great difficulties for a person who moves from one society to another. Where cultures are similar, these difficulties may be minimal. When a person moves from a non advanced society to a more advanced and complex one, the possibility of change in attitudes, values, and beliefs are greater. These changes as stressors result in loneliness, depression, and anxiety. Lee (1988) describes the cultural conflict facing Asian-American women. He notes that Eastern Culture demands conformity and obedience to family needs and societal norms, according to Confucian ideology. In contrast, Western Culture demands individualism and personal success.

Murphy has indicated that stress is more likely to occur if the tempo of change is accelerated when reorientation of basic values is needed. An individual has uncertainties and frustration relating to the future, if new roles and values are incompatible with those of a his/her previous socio cultural system (Hodgkin 1978). For example, for those who move from a developing Asian country into a western-type community, these stress factors are likely to be present in some degree (Hodgkin
1978). However, the stress might occur because of the heterogeneity of the new environment as well as because of alteration in values or in individual behaviour.

David (1971) suggests that cultural similarity is assumed to be related to sojourner adjustment and immigrant acculturation. Cultural similarity, however, appears to be inversely related to the difficulty which strangers experience in new cultures; the more similar the host and native culture, the less difficulty experienced (Furnham and Bochner 1986). Furnham and Bochner (1986) discuss that the level of cultural similarity has a differential impact on uncertainty-reduction processes in different relationships; and increase in the similarity between the host and native culture will produce an increase in the accuracy of strangers’ predictions and explanations of the behaviour of host nationals, as well as produce a decrease in the stress that strangers experience upon entering the host culture.

Burstall (1975) states that the degree of similarity between the host and native cultures is associated positively with strangers’ shared network with host nationals; experience in the host culture facilitates learning the language of that culture. There is also data to indicate that the more similar the native and host cultures, the easier it is for a stranger to learn the host language (Gudykunst and Hammer 1984). According to Dressler and Bernal (1982), one of the extents to which the migrant will experience cultural incongruity is dependent on the cultural homogeneity of the host environment; that is, on whether or not the migrant must be assimilated into the host culture or can maintain a traditional lifestyle by living in an ethnic enclave. Both social learning and stress coping theories suggest that successful adaptation during cross cultural transitions is more difficult when large, rather than small differences exist between original and host cultures (Ward, Kennedy 1993). Brein and David (1971) believe that the effective interpersonal functioning of the sojourner is dependent on the development of understanding between himself and his host.
Social interaction between individuals from countries whose social systems are in different phases of development could result in numerous misunderstandings with consequent difficulties in social/personal adjustment for the sojourner (Brein and David 1971).

Many investigators have suggested that differences between cultures may hinder effective intercultural communication (Brein and David 1971). The level of social interaction between the host national and the sojourner has been found to be related to the sojourner's adjustment. For example, he found that the volumes, range, and depth of social interactions of foreign students in the United States were significantly related to their satisfaction with their sojourns (Brein and David 1971).

Ethnic, cultural and linguistic similarity may facilitate reliance on the host culture as the primary environment for social interaction. In terms of cultural distance, Malaysia students in Singapore compared to Malaysia and Singapore students in New Zealand, would be more able and more likely to integrate into the host culture. Situations factors, however, are likely to affect relations with members of the host culture. For example, it was previously noted that the Malaysia and Singapore students in New Zealand are a visible minority and are largely dependent on a strong co-national social support system. This may discourage reliance on members of the host culture for increased social interaction (Ward and Kennedy 1993).

2.3.4.2. Differences in values

Values are generalised and relatively enduring beliefs concerning what is desirable or undesirable; they also differ across cultures. For example, Chinese, Australian, and American cultures differ in the values ascribed to personal freedom, conformity, collective welfare, obedience and respect for parents and maintaining harmony (Bond 1988; Feather 1980, 1986; Poole 1986; Rokeach 1973; as quoted in Rosenthal and Feldman 1991). Values are recognised as the main motives of humans' behaviour. It is
assumed that different types of behaviour therefore it seems plausible that they could be
source of either conflict or adjustment among new comers.

Farnham and Bochner (1986) state that differences in values between host nationals
and expatriates are a prime source of adjustment difficulties in sojourners. They
examine value differences among foreign students in the United Kingdom and show
that European students have values most similar to the British controls, African
students least similar, and Asian students scoring between the two extremes. The
investigators suggest that differences in values may prompt psychological distress in
sojourners.

The relationship between values and attitudes toward the host culture and social
interaction with host nationals is examined by researchers. Feather (1980 in Ward and
Searle, 1981) finds some support for an association between social interaction and
perceived value similarities of Papua New Guinea and Australian students, and he
document a relationship between positive perceptions of the host culture and the
greater acceptance of the host country's values. Interaction with host nationals may also
produce differential effects on cross-cultural adjustment, depending on the host
culture's receptivity to foreigners. According to Gudykunst (1991), host-culture's
perceptions of and reactions to foreign residents are likely to affect the cross-cultural
adjustment process.

The degree of cultural homogeneity and direction of change may vary substantially
between individuals and stages of culture contact (Argyle et al., 1980). Therefore
individuals may differ in their degrees of exposure to, and use of alternative cultural
components. Minde (1985) examines the difference in stress levels according to the
country of origin. He finds that students from the United States have the lowest stress
level followed by students from the United Kingdom, India, Africa, South America
and students from Hong Kong. Analysis of variance has revealed a significant effect
across countries of origin. Individualism, uncertainty, avoidance, and masculinity
which was proposed by Hofstede (1980) were considered as four important dimensions of cultural differences. Hofstede finds cultural difference in levels of power distance, individualism, uncertainty, and avoidance. Among different students from different societies, Australian scores are very high on individualism, midrange on uncertainty, avoidance, and relatively low on power distance (Barker et al., 1991). In contrast, students who came to study in Australia from Asian countries such as Malaysia and Singapore, have obtained high scores in uncertainty avoidance, collectivism and power distance. Accordingly it can concluded that, differences in values systems may displayed different approaches to certain cultural and behavioral issues.

2.3.4.3. Nature of original society

Depending on the nature of the original society of the students, their reaction to the new environment and their acculturation process, differs substantially. In collectivist societies, people live as members of cohesive groups. In return for their loyalty and obedience to the family or company, they can expect life-long support and protection. In contrast to individualistic societies like Australia, Asian collectivistic societies avoid interpersonal conflict. In Asian communities, people adhere to rules and philosophies that minimise the likelihood of being placed in novel or threatening situations.

Differences in social rule usually cause problems for overseas students. For instance, in more collectivistic cultures, there are rules about obedience to and respect for authority. There is an emphasis on avoiding embarrassment, maintaining group harmony, and preventing public expression of emotions (Argyle et al., 1980). When Asian students come to Australia (an individualistic society), they are more likely to find themselves in an egalitarian society, rather than in an autonomous or unequal power or status. Therefore there may be considerable ambiguity about the appropriate roles, high level of informality, and greater emphasis on people looking after their own interests (Barke et al., 1991, p. 79).
The values and thought patterns of the migrant might not be appropriate to the social role expectations of the new environment. This kind of "cultural incongruity" is assumed to be stressful for the migrant and to contribute to a poorer health status (Dressler 1982). According to Paddila et al. (1985), role expectations in the new social environment may differ from those of the immigrant's native society; differences in role expectations between the two social systems may create conflict. By adhering to the role expectations of the homeland, the immigrants may not fulfil the role expectations of the new socio-environment. As a result, they are left with only one social system or they must compromise.

Dyal and Dyal (1981) suggest that when feedback is obscured because of either a verbal or nonverbal communication barrier, stress is likely to occur. For immigrants, interpersonal feedback and social comparison may be especially important and relates to stress and adaptation. Thus, unfamiliar norms of behaviour and ambiguous cues in a new social environment may present a stressful situation for them. Intra familial role conflicts in self-and-family-role perception are also been associated with different levels of acculturation; role conflicts are one source of stress among immigrants (Kurtines and Miranda 1980). Ward and Searle (1991) report that those individuals who perceive more dissimilarity between original and host cultures experience more social difficulty during cross-cultural transitions.

2.3.4.4. Social interaction, communication and acculturative stress

Kwan (1965, cited in Kim 1988) argues that the extent to which members of a minority group become acculturated to the way of life of the dominant group depends upon the extent of their verbal interaction with the group leaders. Studies of sojourners and immigrants have shown that individuals who are more active in interpersonal communication with members of the host society are better adjusted psychologically (Kim 1980). For sojourners, however, the interpretive frames need to be learned and internalised (acculturation) and at the same time, some of their original cultural
communication patterns must be unlearned (deculturation). Although frequently experiencing stress or despair, they are able to gradually transform their personal communication patterns and achieve an increasing level of host communication competence (Kim 1988).

The strangers gradually become less reliant on others for protection and correction of their behaviour in managing their daily activities, and feel a greater sense of belonging to the host society. The strangers' host communication competence facilitates the process of achieving the ultimate goal and outcome of cross-cultural adaptation: increased functional fitness and decreased cross-cultural stress (Kim 1988).

Many researchers conclude that positive interaction with host nationals is a necessary condition for sojourner adjustment. Similarly, studies of immigrant acculturation suggest that acculturation is a function of immigrants' communication with members of the host culture (Kim 1977). Lack of interaction with host nationals is associated with high levels of anxiety (Gullahorn and Gullahorn, as cited by Gudykunst and Hammer, 1988).

Writers in the area of intercultural communication have defined many of the barriers to effective and positive communication between members of different cultures. Some verbal examples are knowledge of latent and connotative meanings in the host language, language-conditioned differences in categories of experience. Nonverbal examples include body movements, posture, facial expressions, gestures, eye movement, physical appearance, and proxemics (Ekman 1972, Hall 1959; Sitaram 1972 as cited in Church 1982). Status differentials, ethnocentric attitudes and stereotypes, evaluative or judgmental perceptions, cultural ignorance, different definitions and norms for friendship, fear of rejection from co-nationals, and the high level of anxiety and threat to self-esteem often associated with intercultural encounters also inhibit positive social interaction with host nationals (Barna 1970; Miller et al., 1971, Porter 1972, Wedge 1972 as cited in Church 1982).
Because of the anxieties associated with immersing oneself in the social environment of the host culture, many sojourners form enclaves of fellow nationals that largely determine the living arrangements, friendship patterns and organisational affiliations of the sojourners involved. These enclaves exist in a variety of national groups including Indians, East Asians, Americans, former colonials in Britain, and a variety of other nationalities. The formation of enclaves, at least in the United States, appears to be most typical of Indians and Asians and less frequent among Canadians and some western Europeans. Hull (1978) concludes on the basis of questionnaires and interviews with 100 Far Eastern students, that social isolation from Americans is a way of life for the majority of these students. This isolation becomes accepted and is highly resistant to change. Ami (1969) concludes that conditions favourable for reducing prejudice and increasing positive attitudes include status relationships between the ethnic groups, the intimacy and pleasure of the inter group contact, and the opportunities for working on common or super-ordinate goals that are important for each group.

Hull (1978) finds support for a general "modified culture contact" hypothesis that not only relates increased social interaction to more favourable attitudes, but also to better personal adjustment and general sojourner satisfaction. In Hull's study, these sojourners who are more satisfied with their frequency of contact with Americans are more likely to be found with host students, to report having made good friends, to report less loneliness and home sickness, and to have more favourable sojourner attitudes in general. Those sojourners who report loneliness and homesickness very often are found to be isolated from Americans as indexed by several contact variables used in the study. Relationships between the amount of social interaction with host nationals and more general adjustment or sojourner satisfaction are reported by many researchers such as Morris (1960), Deutsch (1970), and Sellitz et al., (1963) as cited in Church (1982). They point out the reciprocal nature of this social interaction; it is a positive adjustment relationship whereby "social relations and adjustment reinforce
each other, with social relations easing adjustment and greater adjustment freeing the student to enter more fully into social relations (Church 1982).

The attitudes of strangers toward the host culture as well as the attitudes of host nationals toward strangers, influence the degree of anxiety that strangers experience (Dyal and Dyal 1981). An increase in negative inter-group attitudes by prejudice and ethnocentrism will produce a decrease in the accuracy of strangers' predictions and explanations about the behaviour of host nationals. Also, negative inter-group attitudes by strangers or by host nationals to each other, will produce stress (Gudykunst and Hammer 1988).

Favourable contact is associated positively with strangers developing intimate relationships with host nationals, and with pluralist tendencies in the host culture. Moreover, favourable contact is associated inversely with negative inter-group attitudes held by host nationals. When contact occurs under favourable conditions, however, understanding should develop. This is supported by Stephan and Stephen (1984), in their study of Anglo-Saxon attitudes toward Chilians. Their research reveals that contact with Chilians under favourable conditions influences positively the Anglo-Saxon's knowledge of Chilian culture and knowledge, which in turn influences attitudes positively. Study results relating nationality to attitudes toward the host country are less consistent, although there is some evidence that Western European students express more negative attitudes toward the United States than other students do. This finding illustrates the importance of specifying one's operationalisation of adjustment (Church 1982).

Kim (1988) points out that two environmental conditions that are directly pertinent to cultural contact are receptivity toward strangers and conformity pressure. The first condition, receptivity, refers to the degree that a given host environment shows openness and acceptance toward strangers. The second condition, conformity pressure, refers to the degree which the environment overtly or covertly expects or demands that
strangers follow its normative cultural and communication patterns. According to Kim (1984) the cultural backgrounds of strangers are often directed into different levels of status or prestige, which influence their communication experiences with host nationals. Many societies favour different groups of the world. When negative out-group perceptions are directed toward a particular cultural or racial group, such perceptions are likely to discourage the participation of strangers to that group in the host communication processes. On the other hand, strangers from a group favoured by the natives are likely to enjoy a higher "standing" and a greater acceptance.

Ward and Searle (1991) attempt to measure the quality and quantity of interpersonal relations with host and co-nationals, attitudes toward hosts, cultural distance, expectations about the new culture, personality, and life events (changes). Among Malaysia and Singaporian students in New Zealand the studies' results indicate that sociocultural adjustment is mediated by cultural distance, expectations, and psychological adjustment: in other words, similarities between host and home cultures, positive expectations, and low incidence of depressive symptoms. The study shows that psychological well-being and socio cultural communication success are related, but are predicted by different variables. It also suggests that psychological adjustment may be best understood within a stress and coping framework by which the impact of life changes (cross cultural transition) may be mediated by personality and social support factors. However, sociocultural adaptation is more appropriately examined together with social learning and cognitive perspective.

Language is one of the basic means of communication, and it plays a major part in the difficult process of adaptation to the new environment. Stress occurs when a person's language skills are not sufficient for him or her to successfully cope with demanding situations (Dornic 1986). Some studies indicate that a second language compensates an individual's ability to cope with uncertainty (Frohlich et al., 1978 in Gudykunst and Hammer, 1988). According to Gudykunst and Hammer (1988) an increase in the second language competence of strangers will produce an increase in the accuracy of
their predictions and explanations of the behaviour of host nationals and a decrease in the anxiety experienced when entering the host culture. Moreover, the ability and motivation of strangers to use and/or study the host language is a function of the degree to which they desire to integrate into the host culture.

Evidence indicates that language difficulty could cause the user to be less successful and less able to cope with a task; this can become quite a powerful source of stress. For example, students at foreign universities attempt unsuccessfully to account for what they have learned (Domic 1986).

When an individual uses a deficient communication tool, his information processing capacity is reduced. Human resources for adequate perception, attention, learning, decision-making, interpretation, storage and usage of information from our physical and social environment are limited.

Stress-language generates difficulties including two general effects: stress tends to (a) disrupt performance, and (b) increase effort necessary for a certain performance level. Because of their poor communication capacity, immigrants should generally be considered as a risk group exposed to more daily stress than individuals living in their own language arena. Language is the most important communication means and plays a decisive role in social adaptation and social functioning. As is the case with other types of stress, the consequences of language stress can be serious (Domic 1986, p. 157).

Human beings tend to avoid stress, mental load and effort. Language-related stress tends to give rise to situations with potential stress, mental load and effort. Avoidance of these potential areas might in turn contribute to social isolation of the immigrants. In one of Domic et al.'s studies, (1986) a substantial majority of immigrants in several industrial countries admitted "rather poor" social contacts following six or more years of residence in the host country. Nearly 70% of them pointed to their insufficient language ability as a more important cause of their relative social isolation, than
differences in attitudes, customs, habits, social norms and values. Verbal communication occurs nearly always in a social context.

In a stress-language situation, the stress increases not only as a result of using a weak language, but because of the actual or expected consequences: if a bilingual fails to explain his/her opinion, describe his/her problem, formulate his point of view, defend himself against suspicions or accusations, or if he/she fails to understand exactly what other people try to say to him, any of these failures will considerably add to his/her stress.

Dornic (1986), performed an investigation on a large group of immigrant students; their most frequently reported stressful situations are those characterised by achievement demands such as public speaking, group discussions, and stress-provoking situations. The feared consequences are a negative social rating, personal insufficiency, and failure. The other large group of social situations that is reported as stress-and-anxiety provoking is when those with a weak language try to express his/her opinion, feelings, or belief in a fairly complex way. Often in a fairly complex way. These people mostly fear the risk of being misunderstood, underestimated, and socially refused. Some individuals in such situations feel "kind of paralysed" and unable to communicate, while others tend to avoid such situations at all cost. Contact with authorities and health services were frequently mentioned as stressful when using a weak language (Dornic 1986, p. 157).

It is obvious that people experience many stressful or threatening situations which provoke stress and anxiety even if the individual tries to cope by means of a language which he/she speaks fluently. The reaction will then depend mainly on the individual's personality traits, stress tolerance and so on. But stress and anxiety reactions simply become more pronounced and more intense when a weak language is used (Dornic 1986, p. 157).
2.3.4.5. Cultural competence

The speed at which a newcomer will acquire culturally relevant knowledge and skills is a function of many variables: prior knowledge, learning ability, motivation to learn, the ability to use and to create opportunities to acculturate, the distance between the prior culture and the new one, opportunities to learn, incentives, social pressure, the availability of cultural mediators, and so on (Furham and Bochner 1982). Cultural competence is the potential for learning the new culture and for adopting it's behavioural requirements; this is related to newcomers' abilities, early training, and personality traits and it is reflected in their acculturation achievements which relate to their goals and opportunities (Farnham and Bochner 1982). Cultural competence requires knowledge about the host community's culture, the building of a communication network and familiarity with the host language.

2.3.4.6. Knowledge of the host culture

Knowledge of the host culture is one of the predictors of social difficulty and stress (Ward and Searle, 1991). Nicassio and Pate's studies of 32 problems encountered by Indo-Chinese refugees in the United States, identifies understanding American Culture as a factor which may be clearly recognised as one of the problems of acculturation (Scott and Scott, 1989). In social encounters when one lacks information about the other's culture, the lack of familiarity creates discomfort and interpersonal anxiety; members of an outgroup or groups that are different from one's group of origin are often considered more aggressive and viewed less favourably (Anderson 1991). Some researchers argue that strangers are physically present and participating in the host culture, but at the same time are outside of the situation because they are from a different culture. The initial experiences of strangers in the host culture are manifested as a series of crises; they are not cognitively sure of how to behave and they experience the feeling of stress (Gudykunst and Hammer 1988).
2.3.4.7. Knowledge of the host communication system

Knowledge of the host communication systems refers to the capacity of strangers to identify and understand messages in different situations of interaction with the host environment. Effective co-orientation refers to motivational readiness and emotional participation in the culture, values, attitudes, and emotional experiences of the host culture. This factor deepens strangers' understanding of the subtle feelings and attitudes embedded in various messages from the host environment (Kim 1988). Campbell (1984 as cited in Kim, 1988) pointed out that communication between strangers and host nationals becomes possible only when both sides understand the other's messages by sharing common perception and interpretation.

Typically, however, strangers are faced with high degrees of uncertainty. They are unfamiliar with various aspects of the new cultural environment, particularly the "mentality" of the natives. Their initial perception of the unfamiliar host environment tends to be simple, often dictated by gross stereotypes relating to the environment, rather than accurate insights (Kim 1988). In an uncertain situation, securing adequate information about the environment is an obvious necessity for the adaptive process. Actions can be carried out most successfully when the strangers have acquired sufficient information about the host environment. As articulated by Gudykunst (1988), strangers' adaptation is essentially a process of reducing the unpredictable elements of the host society by increasing their knowledge about the environment.

One of the most important reasons why real life event uncertainty can be stressful, is that it has an immobilising effect, anticipating coping processes. When one cannot decide on a path of action, and closure is unavailable, then fear, excessive worry and rumination and stress can result (Breznitz 1971).

Gudykunst and Hammer (1988), argued sojourners and other travellers are strangers when they enter a host culture for the first time. They are not cognitively sure of how to
behave and they experience the feeling of anxiety. Miller and Sunafrank (1982) indicate that knowledge about host culture—it's language, dominant values, beliefs and prevailing ideology, often permits predictions of a person's response to certain messages.

2.3.4.8. **Knowledge of the host language**

Knowledge of the host language is perhaps the most critical, and certainly the most obvious aspect of host communication competence.

The critical importance of host language knowledge in cross-cultural adaptation can be explained in terms of its central role to all communication activities involving spoken or written messages. Strangers cannot communicate with the natives effectively unless they utilise the group-accepted language in a way that the natives can recognise, understand and respond to. Without the host language knowledge, they are unable to participate in direct native encounters or in host mass communication processes Kim (1988).

Host language competence is not limited to simply acquiring the ability to express and understand verbal messages. It also enables the cultural stranger to think in the way that the native speakers think, because language patterns and thought patterns are closely interrelated. In addition, the host language is an instrument of status and power for strangers. As Bourdieu (1979) points out, a person speaks not only to be understood but also to be believed, obeyed, respected, and distinguished.

2.3.4.9. **Role acculturation**

This refers to changes in behaviour brought about by contact with the new culture, as well as new knowledge and the adoption of the attitudes, beliefs, and values of the host group. According to Richardson (1974) there are three types of acculturation: obligatory, advantageous and optional. Obligatory acculturation is any change that is necessary for the newcomer to make in order to obtain the satisfaction of salient needs;
for example, in order to resume a professional career, an immigrant must learn the necessary rules for practicing in the host environment and adhere to them. Advantageous acculturation refers to behaviour which is not essential to appropriate role performance, but it is advisable or appropriate for social approval; and optional acculturation refers to model forms which may be adopted according to the immigrant's preference. Optional acculturation is the form of external conformity which best expresses the internal side of acculturation and is the most highly correlated with ethnic identification.

There are often situations reasons such as compulsions or behaviour advantages, which explain why internal aspects of acculturation are not related to the external appearance. The relationship between the internal and external is sometimes mediated by competence; thus an immigrant may prefer to use English, but cannot do so because of lack of skill (Taft and Bodi 1980). Cultural competence seems to be accounted for more by cognitive factors than by emotional. The desire for acculturation is more related to ethnic identification than to competence.

2.3.4.10. Generation status

Stressors experienced by immigrants, may differ in accordance to the differing degree of acculturation level achieved by each generation group. Padilla, et al. (1983), in a study using university students, found that different generation status groups had significantly different levels of stress, hassles, self-esteem, and locus of control. In this study, late immigrants (those who migrated after the age of 14) and second-generation subjects experienced the most stress. Early immigrants (those who immigrated before the age of 14) and third/later generation subjects had the least stress. Therefore this evidence suggests that the length of residence in the new environment and generation status are important factors in determining the levels of stress perceived by an ethnic group undergoing acculturation (Padilla 1984).
2.3.4.11. Adaptive resources

Environment demands and pressures may produce stress in many people, but the degree and type of reaction differs from individual to individual. For example, some may respond with anger or anxiety; some may turn to isolation and others may not be threatened at all (Lazarus and Folkman, 1984). The amount of stress and strain people experience is dependent on the specific characteristics of the individual, his or her internal and external mediating sources of stress, the supportiveness of the environment, and the timing, duration, and nature of the life event.

Dressler and Bernal (1982) discusses that acculturative stress occurs when an individual's adaptive resources are insufficient to support adjustment to a new cultural environment. He indicates that acculturation is only potentially stressful, and the degree to which it is stressful depends on the individual's resources for coping. These resources are both personal and social.

According to Mitchel and Hodson (1986) resource effectiveness is situation dependent, and so more varied resource repertoires will better insure coping in different stressful situations. Resource effectiveness is related to the

(a) Availability of resources

(b) Fit of resources to situations demand

(c) Time since the event and stage in individual development

(d) Extent of personal and cultural values and

(e) perceptions regarding the degree of threat and assessment of resources availability (Hobfall 1986)
2.3.4.12. External mediators

According to Smith (1985), external mediators of social stress include:

1. Social class membership

2. Social support.

The day-to-day experiences of people from lower socio economic backgrounds are more likely to involve exposure to stress-including events, than the experiences of the middle class (Smith 1985). Myers et al. (1974) found that the relationship between class and impairment could be explained appreciably by using a class distribution of life events weighted for desirability and life change units. Lazarus and Folkman (1984), argued that the importance of social class is it's relationship to the expectation that one's decisions and actions have consequences. A higher-class position is associated with the expectation that one's actions can make an important difference, while a lower class expectation is that one is at the mercy of people and forces beyond one's control or even one's understanding.

One of the most influential hypotheses in the literature on life stress has assumed that social support mitigates the effects of stressful life events (Smith 1985). Social support is a term that has been widely used to refer to the mechanisms by which interpersonal relationships, presumably protect people from the deleterious effects of stress (Dyal and Dyal 1981). Social support systems help people to organise their skills and resources for coping with the stressful life events, share the burdens of the stress, and give emotional and instrumental support (Caplan, 1975, as cited in Smith, 1985). Although the nature, meaning and measurement of social support are still being well debated in the literature, investigators have come to appreciate the need for more systematic and precise conceptualisation of the construction. Of some concern are the structural aspects of relationships, such as living arrangements (eg., living alone or with others), frequency of social contact, participation in social activities or
involvement in a social network (for example, a group of people who may have varying degrees of contact with one another). Investigators also identify several different functions that support may provide, such as expression of positive effect or emotional support, expression of agreement with a person's beliefs or feelings, encouraging the expression or ventilation of feelings, provision of advice or information, and the provision of material aid (Dyal and Dyal 1981).

Warheit et al (1982) examine the interpersonal coping network, and mental health problems among blacks, whites, and Mexican Americans. They find that having family members nearby is, in itself, significantly related to lower levels of psychiatric systems. Also, the availability of geographically close friends is associated with significantly lower systems. In regard to the relation between social support and stress, Lin et al. (1979), find that among Chinese Americans in Washington DC., the impact of stressor stimuli is negligible when social support is high. Also, the importance of social support factors remains significant even when the investigators control marital status and occupation.

2.3.4.13. Internal mediators

Personality factors such as psychological defence, coping responses, and personal predisposition are internal mediators of stress that may influence an individual's response to stressful life events, and may put him/her at risk of developing psychiatric symptomatology. (Smith 1985). Smither and Rodriguez-Gieghling (1982) compare personality factors, age, and level of education as predictors of acculturation. Results show that personality factors are better predictors in the Vietnamese group with regard to demographics.

Smith (1993), discusses that people differ in how they view the content of an event and the available coping resources. The perceived magnitude of an event, it's undesirability, and it's context, are determined by a host of personal factors including beliefs, values, and commitments as well as coping resources. Carroll (1992) indicates
that the way psychological stress affects us depends on our biological, psychological and social vulnerability and the resources we have at our disposal to combat stress.

The way that a person copes is determined in part by his or her resources. Pearlin and Schooler (1978), have pointed out that control over life events is an important coping resource. He described the healthy coper as higher in "hardiness." Hardy individuals were found to have a stronger commitment to themselves, an attitude of vigorousness toward the environment, a sense of meaningfulness, and an internal locus of control. According to Smith (1985) one of the important qualities of control is that a person has perceived resources for coping with the life event and it's consequences. Badmra has termed an individual's perceived resources for coping as a feeling of "self-efficacy." "It is mainly perceived inefficacy in coping with potentially aversive events that make them fearsome. To the extent one can prevent, terminate, or lessen the severity of aversive events, there is little reason to fear them" (Badura, 1982, p. 36). Thompson (1981) defines control, and retrospective control as "behavioural control, cognitive control, information control, and retrospective control." He maintains that control is related to the meaning the individual gives to an event and that cognitive control has a significant effect on how one experiences a stressful life event (page 555).

According to Lazarus and Folkman (1984) cognitive appraisal processes are largely responsible for the varying response patterns among individuals under similar circumstances. Cognitive appraisal, as they define it, is the process of categorising an encounter or event as to it's effect on well-being (Harari et al 1988). Lazarus and Folkman (1984) have suggested that stress is dependent on cognitive processes related to individuals' perceptions of events and their meanings for them. Individuals' perceptions of events may lead some to view an event as stressful, whereas others may not view it that way. The degree of stressfulness of any event depends on the meaning the individual gives to it. When the person perceives something in the environment that is relevant to his or her commitments and beliefs, then his personal characteristics selectively influence the appraisal.
Commitments express what is important to the person and what has meaning for him or her; they determine what is at stake in a specific stressful encounter. Commitments determine appraisal through numerous mechanisms (Wrubel et al., 1981). They guide people into and away from situations that can challenge or threaten, benefit or harm them. Lazarus and Folkman (1984) expressed that commitments affect appraisal by guiding people into or away from situations that threaten, harm, or benefit them and by shaping cue-sensitivity. Commitments also influence appraisal through their impact on vulnerability. The deeper a person’s commitment, the greater the potential for threat and challenge; yet at the same time, the depth of commitment can also push a person toward improved action and help to sustain hope.

Belief usually operates at a tacit level to shape a person's perception although an appraiser may be unaware of it's influence. However, it's impact on appraisal becomes evident when there is a sudden loss of belief or a conversion to a dramatically different belief system. In appraisal, beliefs determine what is fact, that is, "how things are" in the environment, and they shape the understanding of the environment's meaning (Wrubel et al, 1981).

When belief is lost, hope may be replaced by hopelessness. In the case of conversion, that which previously might have been threatening can become benign, and that which was considered benign can become threatening. If the loss of an old belief and/or the adoption of a new one causes a shift in the person's characteristic way of relating to others or to the environment, then observers are also likely to become aware of the person's changed belief and it's influence (Lazarus and Folkman 1984).

Social skills are one of the important resources because of the pervasive role of social functioning in human adaptation. They are the ability to communicate and behave with others in ways that are socially appropriate and effective. Social skills facilitate problem solving in conjunction with other people, increase the likelihood of being able to enlist
cooperation or support, and in general give the individual greater control over social interactions (Lazarus and Folkman, 1984)

According to Lazarus and Folkman (1984) the importance of social skills as a resource is evident in many areas, including therapeutic programs that help the individual better manage the problems of daily living and organisational training programs to improve interpersonal communication skills.

Although each individual person is shaped by the social system and through multiple forms of influence, yet each individual's experience and biological make-up is to some extent unique. People must act out both their social and individual destinies. This juxtaposition of individual and social identities inevitably creates some degree of mismatch between the individual and portions of the social system, and even within the individual. Stress, then, is the product of conflict, among relationships, aroused in the course of living (Lazarus and Folkman, 1984).
2.4. Self-Esteem

Psychological theories of the self developed in the west and on the dominant view of the self as an autonomous and separat individual consistently ignore both the socio-psychological and historical context (Kalliopuska 1990).

Self-esteem is one important factor associated with the emergence of acculturative stress among newcomers in host countries. Self esteem is also one of the most important and heuristic concepts for the study of personality (MacFalin and Blasovich 1981). According to Taylor and Brown (1988), self-esteem is widely recognised as a central aspect of psychological functioning and it is strongly related to many other variables, including general satisfaction with one's life. "Self-esteem means a global evaluation of the self, and it is typically measured by the degree to which the person endorses various evaluative statements about the self" (Baumeister, et al., as quoted in Zuckerman, 1989, p. 450). This concerns one's own value, importance, and competence in one's own estimation (Kalliopuska 1990).

According to Kalliopuska (1990), self-esteem is part of the individual's identity which is not static; but rather, it is always susceptible to internal and external influences. He suggests that the development of positive self-esteem is thought to result from parental acceptance of a child during early in childhood. A child's self-esteem may further increase by successes or may decrease by failures and frustration as he grows older. Therefore, it is also affected by the evaluations of other people. Self-esteem is an internal sense of self-regard, which includes confidence in one's own abilities and judgements; and it serves as a measure of the self-praise and the favourableness which a person attributes to himself. Estimates of self-esteem generally rise when the person has self-reliance, confident awareness of his own powers and resources, and has self-determination, defined as inner control, self-regulation and self-discipline. Self-control over one's actions and
feelings requires an awareness of them in current situations, reflection on their consequences for self and others, and self discipline in subsequent situations. Naturally, no one is totally self-sufficient. Interdependence among persons is a condition of social life; but recognising one's separateness (and independence) is an important aspect of self identity (Reynold, Cormack 1990).

The major sources of self-esteem are achievement and recognition by one's self and others, of socially acceptable accomplishments which result from using one's own capabilities.

Two components of self-esteem have been carefully described. One is global or chronic self-esteem involving the relatively enduring perception of overall worth or competence that an individual has of his or her self. The second is situational self-esteem, which involves an individual's own perception of worth or competence within the context of a specific task or setting (McFarlin and Blascovich 1981). Cohen (1959) argues that chronic self-esteem involves expectancies for success and failure based on past experience. According to him, a person with high self-esteem tends to deal with life confidently and values self highly. On the other hand, a person with low self-esteem tends to deal with life less confidently and places a low value on self. Perhaps the most important aspect of our self esteem concept is our personal judgement of our own worth. Self-esteem is often reflected in statements to ourselves such as "I'm a success," or "I'm a failure," and these verbal mediation responses play an important part in determining future behaviours. So if we see ourselves as failures, then we will expect failure and we are more likely to engage in behaviours that will lead to failure (Goodstein and Lanyon 1975).

People who have high self-esteem are those who attend to and emphasise their abilities, strengths, and good qualities. Individuals with low self-esteem are those who focus on and emphasise their deficiencies, weakness, and negative qualities. Kalliopuska (1990) discusses individuals with high self-esteem as opposite to those
with low self-esteem; they respect and accept themselves in a realistic way despite their negative and positive characteristics. They are not continuously comparing themselves with others, but instead they compete with themselves. Also, they are able to notice their own mental development. They communicate clearly, form warm relationships, and tend to express their opinions openly.

Cooper-Smith (1990) argued that the high self-esteem person has been conceptualised as liking or valuing himself, as well as seeing himself as competent in dealing with the world as he sees it. The low self-esteem person is seen as disliking and devaluing himself, and generally judging himself as not competent to deal effectively with his environment.

It is obvious that high self-esteem individuals have learning histories that involve mostly positive rewards for their behaviour but low self-esteem individuals have long histories of failure.

Individuals do prefer success to failure regardless of their chronic levels of self esteem (McFarlin and Blascovich 1981). Schlenker et al (1976) suggests that individuals with high self-esteem are used to experiencing personal success, prefer positive feedback about themselves from others, and will probably reject negative feedback. Individuals with low self-esteem are accustomed to experiencing failure, are willing to accept negative feedback, and can reject positive feedback. According to a self-enhancement theory, individuals try to improve their self-esteem; that is, individuals have a need to see themselves as favourably as possible. This may result in an increase or a maintenance of self-worth feelings, competence, satisfaction, and so on with respect to the self. If this need is not satisfied, it becomes stronger. Therefore, the self-enhancement theory indicates that individuals with any level of chronic self-esteem should react more favourably to positive evaluations even if unexpected, and less favourably to negative evaluations even if expected. In addition, individuals with low self-esteem and therefore a greater need for
favourable self-perceptions, should react most favourably to positive evaluations and least favourably to negative evaluations (McFarlin and Blascovich 1981).

The self-consistency theory assumes that individuals strive to maintain consistent attitudes toward themselves. So a performance evaluation that is inconsistent with these attitudes should produce a negative reaction. Accordingly, individuals with high self-esteem should respond more favourably to a positive (success) evaluation and less favourably to a negative (failure) evaluation than individuals with low self-esteem (McFarlin and Blascovich 1981). According to Cooper-Smith (1990), positive feelings about oneself appear to be one of the feeling states that increases involvement and successful performance.

2.4.1. Self-esteem as a personal resource

Self-esteem may be considered a personal resource in coping with stress. Beliefs about self and relationships are an important source of feedback by which people assess themselves. Clinicians have long understood that involvement in meaningful and fulfilling relationships is related to self-esteem.

A number of theorists have proposed that positive feedback about self-worth is certainly one way in which social support contributes to positive outcomes; those who feel that others care about them are encouraged to see themselves as worthwhile and capable people. Likewise, those who have the skill to enter into good relationships are more likely than others to understand their own ability and so, see themselves in a positive way. These relational skills will no doubt indirectly effect self-beliefs; this occurs because they are more likely to receive positive feedback from the good relationships.

Relationships, then, are important for the development of many positive beliefs about oneself. Several such beliefs stand out because of their demonstrated importance in the literature on coping; self-esteem and mastery have been shown to
be important personal coping resources (Pearlin and Schooler 1978). Those who have a general sense of self-worth appear to view stressors as less threatening, mostly because they believe that they are capable of handling the demands of the situation. Similarly Bandura (1977) has shown that self-efficacy, or the belief in one's ability to deal with a particular demand is related to a reduced stress response and more positive outcomes.

According to Pearlin et al., (1981) self-esteem is a coping resource that aides in stress resistance at the time of an event. Generally, any coping resource will show a positive stress-resistance effect in studies using stressful life-event surveys, because each resource in studies using stressful life events will affect some individuals in some situations. High self-esteem hardiness maybe more generalised than social support, financial status, or exercise, but this does not mean that they are always affective. Hobfoll and Leiberman (1987) have examined the relationship between personality and continued stress resistance among women. Results show that self-esteem is a coping resource that aids stress resistance at event occurrence, and it appears to be a more situation-independent resource. Billings and Moos (1982) investigates the role of self-esteem in stress resistance, focusing on depressed mood, physical symptoms and alcohol consumption to lower subsequent depression. This study is done among men who are high in self-esteem and who also utilise more approach coping (ie., directly facing their problems), whereas men who were low in self-esteem used more avoidance coping.

Control over a stressor may also reduce or modify the stressor. People who feel in control believe that they will overcome current failures or tragedies, whereas people who feel helpless become overwhelmed and without a coping strategy when faced with life stressors (Abramson et al., 1978). High self-esteem may effect how individuals view the stressful event and it's reflection on their sense of self-worth. People may feel high in self-esteem whether they feel directly in control or whether they have placed control in the hands of another person, or into the hands of a God.
(Hobfoll and Leiberman 1987). In the few studies examining immediate reactions to crisis, women high in self-esteem were found to have an enduring sense of their own worth. This positive self-evaluation led to stress resistance (Hobfoll and London 1986).

High self-esteem is immediately and continuously available to individuals who possess it and it is perceived as coincidental and outside the individual's control (Pearlin et al., 1981). In the population at large, self-esteem is the extent to which a person feels good about, like, and respects himself/herself. This has been shown to aid one's ability to cope with stress (Anderson 1991).

Nadler et al., (1985) examine and discuss that a recipient's self-esteem plays a major role in determining his sensitivity to self-threat, in a situation of receiving aid. It seems that high self-esteem individuals are more sensitive than low self-esteem persons, to the self-threatening elements of relative inferiority and inadequacy, which are often associated with seeking and receiving help. Billings and Moos (1982) hypothesise that low self-esteem may cause depression because of failure to cope. They discuss self-esteem, interpersonal self-confidence, and coping as associated with depression, anxiety, withdrawal, and anger when they are under stress.

2.4.2. Self-esteem, self-presentation, and future interaction

The person with high self-esteem expects respect and admiration; the person with low self-esteem anticipates disapproval and rejection. Confidence increases the willingness to take risks. People who generally expect others to like them, will be more willing than others to own favourable attributes, despite the risk of embarrassment. Moreover, confidence in one's self and in one's own judgement makes one willing to behave in an autonomous fashion, independent of the expectations and influences of others. Research has shown that lack of self-esteem
increases susceptibility to external influence (Cohen 1959; Janis 1954, 1955 as cited in Baumeister, 1982).

The self-presentation of the person with high self-esteem may be partly based on the belief that others will generally respect him/her. Persons high in self-esteem should expect the audience to agree with their good opinion of themselves as the audience learns more about them. So, when confronted with an audience that regards them unfavourably, they would be willing to make positive claims about themselves despite their expectation of future interaction—because of their hopeful expectation of future interactions which will vindicate their self-enhancing claims. Compensatory self-enhancement is a predictable strategy used by high self-esteem persons. In the same situation, however, persons with low self-esteem lack the confidence that future interactions will compensate for previous social embarrassment (Jones 1973). They do not believe that they have many excellent qualities, and so they may be reluctant to pretend otherwise just for the sake of their public appearance.

Peer pressure or self-presentation constraints implied by reputation are obeyed by both high and low self-esteem persons, but it seems that people respond to these constrains individually as a function of their self-esteem. Individuals who always expect successful and self-enhancing interaction with others appear to be guided by the desire to benefit themselves by material gain and by impressing others as favourably as possible. They seem to take note of such constraints as public knowledge only in order to better devise their strategies, and they apparently feel free to differ from specific public behavioural expectancies. On the other hand, those who always expect failure, rejection or humiliation appear reluctant to oppose public behavioural expectancies and generally behave as if they experienced the situation more as a constraint and guideline, rather than as a source of opportunity.
The results are consistent with the model proposing that high self-esteem makes individuals willing to make self-aggrandising statements even when their reputations are unfavourable; and it makes individuals willing to deviate from the behaviours that others expect of them. Low self-esteem apparently leaves people unwilling to take the risk of contradicting others and of making unverified claims about their positive qualities (Baumeister 1982).

Gergen (1971), argued that the feelings that we have for ourselves are fundamental to the feelings we have for others. Depending on our self-esteem, we may be predisposed not only to feel confident about certain approaches to others, but also to respond favourably or unfavourably to their actions toward us.

2.4.3. Affirmative self/other attitudes

According to Kim (1988), the attitude orientation of strangers is closely related to their adaptive motivation toward themselves and the host environment. Strangers cannot be highly motivated to adapt to the host environment unless they accept it with an affirming attitude. As Amir (1969) pointed out, inter-group contact is clearly related to the attitude which then influences the outcome of the cross-cultural interaction. The affirmative attitude often becomes the ability to delay evaluation, avoid cultural absolutism, and accept rather than reject. In addition, it leads to the development of the capacity to participate in the host culture (Kim 1988). The positive or negative attitude orientation of strangers toward their host environment is understood to be closely associated with a positive or negative attitude toward themselves. The more accepting they are of the host society, the more likely it is that they will accept themselves. On the other hand, a negative self-image is likely to facilitate the strangers' indifference and withdrawal from the host environment, and thus delay their adaptation processes (Kim 1987).

There is empirical data available supporting of an association between positive self-confidence and communication-adaptation patterns of strangers. Among the
findings are studies of sojourner adaptation. It has been shown that the sojourners' confidence in their ability to speak English is an added influence toward their actual English fluency and on the development of social relations. Also, as pointed out by Lazarus and Folkman (1984), insecure individuals are likely to seek support from more familiar and less threatening ethnic individuals.

According to Lundgren (1978), interpersonal stress is related to discrepancies between individuals' evaluations of themselves (self-esteem, SE), their perceptions of others' evaluations of them (subjective public esteem, SPE), and others' actual evaluations of them (objective public esteem, OPE). Mead (1934, as cited in Lundgren, 1978) asserts that self-awareness develops as the person "takes the role of others" and begins to respond to his or her own activity in like manner to that of significant others or of the whole group. Another implication is that effective social interaction requires the ability to accurately assess and consider the reactions of significant others. Person may love or hate each other for a variety of reasons, but fundamental to the feeling we have for others are the feeling we have for ourselves. Gergen (1971) argued that depending on our self-esteem we may be predisposed not only to feel certain ways about others in general, but also to respond favorably or unfavorably to their action toward us.

It is assumed that discrepancies between SE, SPE, and OPE are likely to constitute a significant source of stressors for the individual: first, the degree to which individuals assess their own characteristics differently from the perceived and/or actual appraisals of others, opportunities for smooth interaction are likely to be affected. Second, there is the assumption that the presence of these discrepancies is stress-producing because the individual's self-conception may be weakened.

Several studies have demonstrated links between low OPE and measures of stress, anxiety, or psychosomatic symptoms (for example, French 1963; Rohrbaugh 1975, as cited in Lundgren, 1978).
Sullivan (1953) proposes that anxiety is precipitated by threats to the self system when significant others disapprove of an individual's actions or characteristics. He argues that stress is associated with actual and perceived negative appraisals from others.

2.4.4. Social stigma and self-esteem

The behaviour of others affects the level of an individual's self-esteem: for example, criticism should lower self-esteem. There are predictions that social stigma has a negative effect on self-esteem. According to the "looking-glass self" perspective, the self-concept develops through interactions with others and it is a reflection of the others' appraisals of one-self. Cooley (1956 as cited in Crocker and Major, 1989) argues that the self-concept is a product of one's awareness of how others evaluate the self as well as the adoption of the others' views. The "looking-glass self" perspective states that members of oppressed groups who know that they are regarded negatively by others, incorporate those negative attitudes into the self-concept and, consequently, are lower in self-esteem. Empirical evidence supports the general hypothesis of symbolic interactionists that self-perceptions and self-evaluations are related to the way that one believes others perceive or evaluate the self. According to the "looking-glass self" perspective this awareness of negative stereotypes and discrimination against one's group should result in negative self-evaluations among stigmatised individuals (Crocker and Mayor 1989).

Merton (1948, cited in Crocker and Mayor, 1989) proposes that self-fulfilling prophecies happen when a perceiver acts on his or her initially false beliefs about a target, in such a way that those beliefs come to be confirmed by the behaviour of the target. For example, a teacher who mistakenly believes that a student cannot do well in class may ignore that student's questions and requests for help, or he/she may move that student into a slow group and thereby prevent that student from performing well.
Research on self-fulfilling prophecies documents that situations in which targets often come to behave in ways consistent with the expectations of others and they may change their self-worth concepts as a result of this behaviour (Crocker and Mayor, 1989). According to this view, perceivers who have negative stereotypes about opposing groups may alter their behaviour to members of those groups so that the group members in turn, respond in a way consistent with the negative stereotypes. According to the "efficacy-based self-esteem" perspective, the self concept develops through effectual interaction with the environment. This perspective is a contrast to both the "looking-glass self" and the "self-fulfilling-prophecy" perspective's, which portray individuals as passive and essentially inactive victims of the attitudes of others. Self-esteem, according to this perspective, is not passively acquired, but is "earned through one's own competent actions" (Franks and Marolla, 1976). By learning that one can control and manipulate one's environment, the person acquires a competent view of the self as well as successful and able; consequently, he/she has high self-esteem. Conditions that block successful interaction opportunities with the environment may prevent the development of high-esteem (Crocker and Mayor, 1989). Therefore, social structural conditions such as segregation or discrimination against members of stigmatised or oppressed groups "can limit the possibilities for the formation of efficacy-based self-esteem; this is done by limiting access to resources that are necessary for producing the intended effects." (Gecas and Schwalbe, 1983, p.82).

In addition, other theories such as the equity theory, social comparison theory, and social identity theory are also compatible with the prediction that social stigma has negative effects on self-esteem (Crocker and Mayor 1989). This prediction has been widely accepted by social psychologists. For example, Cartwright (1950 as cited in Crocker and Mayor, 1989) argues that the group to which a person belongs serves as a primary determinant of his self-esteem. To a great extent, personal feelings of worth depend upon the social group evaluation with which a person identifies. Self-
hatred and feelings of worthlessness mostly occur from membership in underprivileged or outcast groups (p. 611).

Laboratory research by social psychologists provides evidence of the effects of social situations on self-esteem; it also shows that self-esteem is vulnerable to social circumstances and to environmental/situation forces (Gergen, 1971; Wood 1989).

2.4.5. Communication in assimilation deviance and alienation state

A lack of control is a function of observed behaviours from members of the host culture and from the immigrant, or to a greater or lesser extent, a perceived lack of control over the immigrant's new environment. The latter state defines one who has low self-esteem and does not define true alienation, although it may be classified as partial alienation (Twining, 1980). This state, where self-esteem is low is both a result and a determinant of an inability to learn, adapt or understand new norms.

In the deviance state, a person experiences tension with the new culture where the socialised norms from the native culture come into conflict with the norms of the new culture.

2.4.6. Communication from the host culture

The patterns of communication in the deviance state are defined as neglectful. These careless types of communication include patterns of partial denial and low levels of personal communication, as well as a level of unconcealed negativity. In the deviance state, a person experiences tension with the new culture in the circumstances when the social norms from the native culture come into conflict with the norms of the new culture (Twinning, 1980).

There is also an assumption that negative communication conforms to the same pattern as denial: it is a result of inconsistency. Lack of communication from members of a culture is associated with the incapability to learn or understand new
norms (Twinning 1980). This, in turn, leads to a decreased ability to interact successfully in the new culture (McQuire and McDermott 1987). Yum (1982) finds out that communication integration of Korean Immigrants in Hawaii is apparently related to norm acquisition as informational gain. Because both values and intimacy of interpersonal communication from the new culture are acculturation-related among Korean, Mexican, and Indo-Chinese Immigrants, reduced communication levels may also be considered neglectful (Kim 1980).

Parallel findings in the self-concept theory and in research support the neglectful communication concept. Although most self-concept theorists (for example, Coopersmith 1967) are concerned with child development, some of the best documented findings may apply to acculturation in ways similar to primary socialisation. The self-concept theorists relate inconsistent messages to lower self-concepts; and although completely ignoring children occurs rather infrequently, when it does happen, it lowers self concept (Ashmore and Del Bocca, 1976).

Low levels of personal communication could also be part of the neglectful stage. Kim (1984) argues that the concept of interpersonal communication is that which requires psychological levels of prediction—that most inter-cultural interactions occur on a cultural or socio cultural level. At these socio-cultural levels, personal uncertainty is considerably increased. Berger and Calabrese (1975) theorise that during interaction among strangers, a process of reduction leads to increased intimacy, information seeking, reciprocity, and affiliative expressiveness. Therefore a decrease of intimacy, information seeking, reciprocity, and affiliative expressiveness should be associated with neglectful communication and deviance. Even though few inter-cultural studies have explored these relationships, Gudykunst and Nishida (1984) found uncertainty to be related to nonverbal affiliative expressiveness among the Japanese, and to information seeking and self-disclosure when uncertainty was high and where cultural difference was present among the potential participants.
When newcomers conclude that they cannot communicate with members of the host culture, it is assumed that alienation will be the final result, as an outcome of not wanting to learn the host culture's norms. This circumstance is related to anxiety; so avoidance may lead to total withdrawal from inter-cultural communication. Social isolation is a feeling of being shut out from the group or of lacking access to group norms. Alienation may result if an individual feels unable or unwilling to cope with indistinct or contradictory norms. Contradictory norms may come from different cultures: host, native or ethnic.

2.4.7. Self-concept as an indicator of acculturation

The self-concept has a decisive role in social science as a conceptual link between the individual and the large social structure. Rosenberg (1981) state that the self-concept can be defined as a composition of multiple role-identities. There is the concept of role identity operating as a social force, affecting the structure of society in general self-perception and actions. Battle (1980) suggests that self-esteem predicts achievement, accomplishment, interaction with others, and psychological health. Individuals with higher levels of self-esteem would see themselves as comparatively more capable of dealing effectively with the environmental stressors related to positive acculturation movement.

High self-esteem among immigrants should help to reduce the impact of acculturative stress and its associated depression. Schwarzer et al., (1986) examine psychological indicators of acculturation; their study attempts to identify self-esteem, racial tension and inter-ethnic contact, as predictors of acculturative stress among 397 urban multi-cultural high school students in an urban area. Self-esteem, racial tension, and inter-ethnic contact are chosen as dependent variables. These psychological indicators are associated with ethnic group membership (Asian, Philippine, Hispanic), to language spoken at home (English or not English) and to the length of stay in the U.S.A. The highest acculturative stress is found in Asians,
with Hispanics having the lowest acculturative stress levels. Those students who speak English at home report more favourable results than those who are non-English speaking at home. Recently arrived immigrants are more prone to acculturative stress than those students who were raised in the U.S.A. Asians in general have been socialised with the belief that the primary social unit in society is the family, not the individual. The results show a consistent pattern of relationships in accordance with the hypothesis. Those who speak English at home report more self-esteem and inter-cultural contact and less racial tension. The same is true for those with a long length of stay compared to those with a short length of stay. Generalising over these three indicators, it can be concluded that acculturation has a positive impact on the psycho social situation of immigrant students, measured by self-esteem. Residing for many years in this country (United States) and speaking English at home increase the likelihood of inter-cultural contact and, thereby, help to reduce stereotyping, prejudice and social anxiety (Allport 1954 as quoted in Schwarzer et al., 1986).

Being socialised in a multi-cultural society leads to the acquisition of a variety of social skills and to adequate coping strategies which, when compared to non-English speaking newcomers who remain in their own ethnic neighbourhood isolation, decreases the likelihood of fear from other ethnic group members. Problems in adjusting to a new environment may cause psychological uneasiness as well as affect the self-concept. Living in a new environment, immigrants are faced with a sense of helplessness, reduced confidence, and a feeling of loss (Torbiorn 1982). Smith (1985) argues that those who view their environment as demanding, frustrating, and challenging to their self-esteem, encounter more frequent and more serious illness.
2.4.8. Self-esteem and the variables

In different comparative studies of gender, women usually report lower self-esteem and higher acculturative stress. Zuckerman (1989) questions and determines how male/female differences relate to his study about stress, self-esteem and mental health. Questionnaire responses of 804 women and 127 men are compared in order to assess sex differences among college students. Comparisons are made of their stress levels and reaction to stress, and of the extent to which self-esteem, interpersonal self-confidence, and self-concepts were associated with their stress experiences. The men and women report similar stress levels in most areas of life, but the women report greater stress in family relationships and in concern about mental health. In both sexes, levels of stress and reactions to stress are associated with self-esteem, interpersonal self-confidence, and self-concepts. Both men and women's lower self-confidence and lower estimations of self-worth, as well as their lessened coping ability was associated with depression, anxiety, withdrawal, and anger, while under stress. Billing and Moos (as cited in Zuckerman 1989) hypothesise that low self-esteem and low interpersonal self-confidence influence depression; this is because greater self-esteem and interpersonal skills reduce stress by providing access to social resources and effective coping.

Tadicola (1981) examines the relationship of minority Hispanic students’ self-esteem to their levels of rejection through minority ethnic identification and by their attitudes to their own ethnic group. He finds among the Hispanic male students that the higher the academic group, the higher the achievement level registers (Schmarzer et al., 1986).

With respect to social support and self-esteem, appropriate support might lead to a sense of well-being and mastery or esteem, and cause one to feel that problems are surmountable and that solutions are within one’s group. Emotional support during the act of coping, might encourage a positive emotional state to counteract the
negative effect brought on by stress and it also could lead to a more positive self-appraisal. In this way, support may greatly impact personal resources, affecting a lasting change to the self image.
2.5. Theoretical Framework

The theoretical framework which has been used in this study is based on Berry and Kim, Minde and Mok's "Acculturative Stress" model. This model has been used in a number of studies with native peoples in Australia and Canada, and subsequently with various groups in Canada (Berry, Kim, Power, Young & Buyaki, 1989).

Rogler and colleagues criticise acculturation research because the content and format of the scales are based on the assumption that increased involvement in the host culture necessarily entails disengagement with the traditional culture. Berry and Kim's model addresses this limitation by giving respondents the option to have high involvement with both the host culture and the culture of origin. Berry and Kim, (1988) define psychological acculturation "as the process by which individuals change their psychological characteristics, change the surrounding context, or change the amount of contact in order to achieve a better fit (outcome) with other features of the system in which they carry out their life" (p. 63).

The concept of acculturation is used to refer to those changes that groups and individuals undergo when they come in contact with another culture. Berry, Kim, Minde and Mok (1987) suggest that the changes which occur as a result of acculturation may be grouped in five categories. These relate to the other physical environment (such as the change from a rural to an urban environment), to biological factors (such as changes in the nutritional status and the consequences of this), to culture (where original cultural institutions such as religious, linguistic, and political become altered) to new social relationships (where new in-group allegiances may arise) and changes within the individual as she or he attempts to adapt to a new cultural sphere (such as changes in behaviour or in mental health). At the individual level, acculturation "entails changes in
behaviour, values and attitudes, and identity" (Williams & Berry, 1991, p. 633).

The changes that groups and individuals undergo when they come into contact with another culture is widely referred to as the concept of acculturation. Individual-level acculturation which is called "psychological acculturation" by Graves (1967), includes changes in behaviour, values and attitudes, and identity.

According to William and Berry, (1991), three points require emphasis in the examination of acculturation. One is that in order to study acculturation phenomena the researcher is required to adopt a cross-cultural perspective, including understanding and accepting the culture of the acculturating group. A second is the need to recognise that many of the acculturation phenomena happen as a result of the interaction between the two contacting groups. The third is that, as psychologists, we must deal with or react to the acculturative situation in the same way; in terms of variation in acculturative experience, we must also expect wide individual differences in psychological acculturative outcomes. A typical acculturation situation with which psychologists are confronted involves an individual of a certain and often non-dominant cultural background, being in contact with another cultural group (usually dominant), this leads to that individual having to adapt to his new situation using a variety of strategies (Berry and Kim, 1988). The variation of grouped individual strategies differ from readily and easily adopting the changes, to resisting them and collapsing under their burden.

2.5.1. Acculturative stress

Williams and Berry (1991), state that one of the most obvious and frequently reported consequences of acculturation is societal disintegration, which can go on to result in personal crisis. Individuals may be disturbed by the change, as the old social order and comfortable cultural norms often disappear. At the grass-roots
level, previous shapes of authority, civility, and welfare no longer operate, and at the individual level, hostility and uncertainty, identity confusion, and depression may set in. Taken all together, these changes make up the negative side of acculturation which is frequently, but not necessarily present. The opposite, which is successful adaptation, may also take place. Personal and situation factors interact to produce a particular level of adaptation which function to dictate any one of a variety of outcomes, from a complex set of cultural and psychological variables.

The stress that often accompanies acculturation has been examined during the pre-contact, contact, crisis, and adaptation phases of process (Berry, et al., 1987). New stressors begin to appear in the contact phases, and acculturative stress typically increases during the conflict phase. However, the level of cultural and behavioral change is often too much during the crisis phase, during this phase homicide, suicide, family violence, or substance abuse may accompany the attempted adaptation (Berry and Kim 1988).

The adaptation phase has several possible modes of resolution including assimilation to the dominant society, (Berry and Kim 1988). In the process, which the individuals adapt to their host environment three interrelated aspects - functional fitness, psychological health, and intercultural identity - are examined as the most direct and critical changes that are likely to be observed in strangers. A natural outcome of the stress - adaptation - growth process is an increased functional fitness, that is, a greater congruence and compatibility between the strangers, internal conditions and the conditions of the host environment. Successfully adapted strangers have the desire level of appropriate and effective ways of communicating with the host environment. As they achieve an increasing level of fitness in the host culture, they are better able to meet their basic survival needs and social necessities (for example, friendship, study, ). The increased functional fitness further enhances the potential effectiveness of the
strangers' performance and control in the host environment. An increase in functional fitness will, in turn, reduce the stranger's overall cross-cultural stress, as well as defense reaction to stress such as withdrawal, denial and hostility.

The development of an intercultural identity is another related aspect of the cross-cultural adaptation outcomes. Intercultural identity is likely to have the cognitive, affective, and behavioral flexibility to adapt to the situation and creatively manage or avoid conflicts that could result from inappropriate switching between cultures.

On the matter of acculturation and acculturative stress, many advisers will encourage international students with to seek a balance between participation in the new culture and the maintenance of their own cultural identities. Programs that provide international students with opportunities to serve as learning resources for domestic students have been successful in helping promote both the international students' integration into the academic community and their cultural self-esteem (Paige 1990).

Stressful experiences of cross cultural adaptation need not be regarded only as 'problems' to be avoided or minimized. That naturally is occurred in all situations of change to which individuals must adapt. Stress, as such, as an essential and integral part of the dynamics that helps 'mobilize' individuals for adaptive change and growth beyond the parameters of the original culture.

A conception that has been used to refer to the negative consequences which result from acculturation is acculturative stress (Berry et al., Kim, Minde & Mok, 1987). So, acculturative stress is limited to those reactions that can be theoretically or empirically connected to the acculturation process. Acculturative stress is reduction in the health status of individuals (including physical, psychological and social health) according to Berry et al., 1987. In true acculturative stress, the changes should be related in a systematic way in order to
know features of the acculturative process as experienced by the individual (Berry, 1990). It is important to note here that such stress is not necessarily negative; it may also be a positive and creative force, and it may stimulate, motivate, and otherwise enhance an individual's psychological functioning. However, several studies have suggested that psychological symptoms experienced by an immigrant group are related directly to acculturative stress (Berry and Blondel, Mok, Salgado De Synder, cited in Kyungrimshin, 1993). Berry, et al., (1987) indicated that the stress of acculturation can be expected to produce attendant strains, including a lowering of the threshold for physical disease and mental disorder. Thus, mental illness may be seen as one response to acculturation.

Summarising the literature, Berry and Kim attempted to identify the cultural and psychological factors that govern the relationship between acculturation and mental problems which often do arise during acculturation; these problems are not inevitable. Therefore, acculturation may enhance one's opportunities in life and one's mental health, or it may nearly destroy one's ability to carry on, depending on various group and individual characteristics entering into the acculturation process (Williams and Berry, 1991). This conception is illustrated in Figure 1 (page 203).

On the left of the figure, acculturation occurs in a particular situation, and individuals participate in and experience these changes to varying degrees. In the middle, stressors may result from this varying experience of acculturation; for some people acculturative changes may all be in the form of negative stressors, whereas for others, they may even serve as opportunities. On the right, varying levels of acculturative stress may be shown to be a result of acculturation experiences and stressors. Individual differences in each of these three phenomena are indicated by the vertical arrows within each of the components.
A first critical point to note, is that relationships among these three concepts (indicated by the solid horizontal arrows) are probabilistic, rather than deterministic; the relationships all depend upon a number of moderating factors (indicated in the lower box), including the mode and phase of acculturation, the nature of the larger society, the type of acculturating group, as well as a number of demographic, social, and psychological characteristics of the group and individual members. A point to note is that one's appraisal of the acculturation experience and one's coping abilities in dealing with the stressors can affect the level of acculturative stress experienced. So, the degree and direction of the relationship between the three variables at the top of Figure 1 can be influenced by each of these factors. This influence is indicated by the broken vertical arrows between this set of moderating factors and the horizontal arrows (Williams and Berry, 1991).

2.5.2. Factors influencing acculturative stress

There are many factors affecting acculturation and acculturative stress. According to Dona and Berry (1994), acculturative stress and its outcomes depend on a series of factors which influence the relationship between acculturation and mental health. These factors have been classified as: the nature of the society, the type of acculturating group, the modes of acculturation, demographic and social characteristics of the individual, and the psychological characteristics of the individual (Berry, Kim, Minde, and Mok, 1987).

2.5.2.1. Nature of the Society

Acculturative influences may be exerted by a society in a variety of ways. According to Berry (1990), mental problems may be less among immigrants in plural societies than in assimilationist ones. Within a pluralist society, large real cultural differences may exist with little acculturative stress being apparent, while
in an assimilationist society, even small real cultural differences may be connected with high levels of acculturative stress (Berry, 1975).

Berry and Kim (1988) indicate that in culturally plural societies, individuals and groups must face two important issues. One relates to the maintenance and development of one's ethnic distinctiveness in society and deciding whether one's own cultural identity and customs are of value and should be kept. The other area involves the desirability of inter-ethnic contact, deciding whether relationship with the larger society is of value and should be sought after.

Relative to the nature of society, Murphy (1965, 1973) points out that migrants experience less stress in multicultural societies than in uni cultural societies. It is possible for groups to maintain a supportive cultural tradition in multicultural societies, while in a uni-cultural society that is a single dominant culture, each immigrant must either adjust to or oppose it, leading to greater conflict and a higher rate of stress and emotional problems. In Murphy's findings (1965), in the plural societies the mental health of immigrants may be the same as and may even be better than the locally born. Murphy attributes this finding to two related factors in plural societies. One is the availability of a network of social and cultural groups which may provide support for those entering into the experience of acculturation. And another plural society factor is the greater explicit acceptance of a multicultural ideology, thereby placing less of a burden for change on the acculturating individual. These two factors are apparently associated with less acculturative stress and therefore little or no loss of mental health status.

Initial expectation of "status gain" in the new country often leads to an unrealistic view about one's new life, and disappointment may precipitate severe acculturative stress. In tolerant multicultural societies, there is the possibility that
this set of problems may be less although probably not entirely absent (Ekstrant, 1986).

There are potentially important differences among host countries which seem likely to contribute to differences in acculturative stress. The degree to which official government policy, and informal social pressures are pushed onto a multicultural and pluralistic inter-group philosophy or upon an assimilationist melting pot ideology, is one of the variables (Dyal and Dyal, 1981). Research by Murphy (1973) has shown that Canada differs substantially from the United States and Australia in the rate of immigrant mental health problems. Having appropriate controls for age, ethnicity, and other demographic differences, Canadian immigrants were less at risk than non-immigrant Canadians but American and Australian immigrants were at greater risk than the non-immigrants. He suggests that these differences may be related to the existence of different implicit inter-group philosophies which were operating in the three countries.

2.5.2.2. Mode of Acculturation

Acculturation can be seen as a process leading to a multiple set of outcomes, according to Berry and Kim (1988). They describe four different modes of acculturation according to how individuals and groups deal with issues that occur in all acculturation arenas. This model, is especially relevant in plural societies, and proposes that individuals and groups living together are confronted with two issues: the first, "Is my cultural identity of value and to be retained?" And the second, "Are positive relationships with the larger (dominant) society to be sought?" Even though these questions can be responded to on a continuous scale from negative to positive, in concept they can be treated as dichotomous yes/no options as shown in Figure II in page 204. (Berry and Kim, 1988).
When individuals answer negatively to the first question and positively to the second, they favour an assimilation mode. This means that they would relinquish their own cultural identity and accept the one held by the host country (Dona and Berry, 1994). When an individual does not wish to maintain his identity with his culture, and seeks daily interaction with the dominant culture, then the assimilation path and mode is defined (Berry et al, 1987).

In assimilation, the choice to relinquish cultural identity and move into the larger society is taken. This takes place by the absorption of a non-dominant group into an established "mainstream", or it is by the merging of many groups to form a new society ("the melting pot"). Taft (1974) has proposed that assimilation may be exhibited in several ways in cultural competence, social integration patterns, subjective identity, acceptance into the new group, and individual conformity to group norms. In a detailed analysis of this form of acculturation, Gordon (1964) describes a number of processes: most important among these are "cultural or behavioural assimilation" in which collective and individual behaviours become more similar, and "structural assimilation" in which the non-dominant groups penetrate the larger society's social and economic systems.

On the other hand, when the answer to both of the above questions is yes, an integration mode is present (Dona and Berry, 1994). When there is an interest in both maintaining one's original culture, and in daily interactions with others, integration is the option: here there is some degree of cultural integrity maintained, even though moving to participate as an integral part of the larger social network (Berry & Kim, 1987).

In contrast to assimilation, integration implies the keeping of cultural integrity as well as moving to become an integral part of the larger society. Therefore, in the case of integration, the option taken is to retain cultural identity and move to join with others in the larger society. So, there are a number of ethnic groups all
cooperating within a larger social system. Such an arrangement may occur where there is some degree of "structural assimilation," but little "cultural and behavioural assimilation," to use Gordon's terms. This implies an evolving ethnic culture in interaction with others that continues to evolve as well (Berry and Kim, 1988).

When the answer to the first question is "yes" and to the second, "no", separation mode is present (Dona and Berry, 1994). In the separation mode, individuals have no desire to relate to the host society, but want to maintain their traditions and culture. Separation refers to self-imposed withdrawal from the larger society. The maintenance of one's traditional way of life outside of full participation in the larger society may be because the group desires to lead an independent existence (as in the case of "separatist" movements), or it may be due to power exercised by the larger society to keep people in "their place" (as in slavery or an apartheid situation), as described by Berry and Kim (1988).

The remaining option is a negative answer to both of the above questions. This brings marginalisation, which is characterised by loss of contact with both the dominant group and the traditional one (Dona and Berry, 1994). A marginal group is usually defined as one that has partially given away it's former culture and has not yet achieved full acceptance in the new culture, where it is living (Smith, 1985). It is characterised by an individual losing essential features of his/her culture, but not replacing them by entrance into the larger society. This often brings feelings of alienation, marginalisation, and a loss of identity. In marginalisation, groups are out of cultural and psychological contact with both their traditional culture and the larger society. This doesn't mean that such groups have no culture, but simply says that this culture may be disorganised and may not be supportive of the individual with his or her needs during the process of acculturation.
It is noted that change in the mental health status of individuals may be expected to vary across these four modes, both as a function of the mode itself, and as a function of the congruence between an individual's preferred mode and that of the majority of his or her group.

According to Berry and Kim (1988), three modes represent various forms of adaptation; and adaptation refers to changes in a person's attitude and behaviour brought about by the attempt to cope with changes in the environment. Those who feel marginalised tend to be highly stressed, and those who seek to remain separate are also highly stressed; in contrast, those who pursue integration are minimally stressed, and assimilation tends to intermediate levels of stress (Berry, et al., 1987). Integration is preferred to assimilation since the latter term appears to imply moving to a complete loss of identity, whereas integration suggests participation by the new-comers in the life of the new group or society without necessarily becoming fully absorbed.

Several writers have described the potential dangers of over-identifying with the host culture, including the inhibition of objective discrimination of cultural cues, inhibition of relaxed social adjustment, due to overly ambitious attempts to be like the host, reduced professional effectiveness, increased adverse reactions to perceived rejection or discrimination, and increased alienation from the home culture as well as difficulty in readjusting on return (Livingston, 1960, Torre, 1963, as cited in Church, 1982). Such over identification with the host culture may be brought about by unresolved emotional conflict with one's own social group at home.

The sojourner's difficulty in defining the optional balance between identification with home and host culture values results from the sojourner's desire to behave in a way that is consistent with host culture acceptance, mores, and values,
combined with the desire to retain identification with his or her own culture and its mores and values.

Cultural separation is evidently related to a poor socio-cultural adaptation (Ward and Kennedy, 1993) which may occur because of being a minority. Bloom (cited in Smith, 1985) has examined the effects of minority status within a community as well as the risk of emotional disorder. He has theorised that minority status leads to alienation and social isolation, causing a great sense of stress in individuals and it can be a major factor in the increased risk of disease (Eaton, 1983). Within samples of native peoples, acculturation attitudes and stress were both measured, and there is a fairly consistent pattern: for all native peoples, those favouring integration experience less stress, while those preferring separation tend to experience greater stress; in all but two samples there is a negative correlation between a preference for assimilation and stress. Within the Korean sample, separation, marginalisation and stress load positively on the same factors (Berry and Kim 1987).

In the research which was done by Berry and Dona, 101 Central American refugees who were resettled in Canada completed a questionnaire dealing with their attitudes, behaviours, values, and levels of acculturative stress. The results indicated that different factors are involved in prediction of psychological and somatic aspects of acculturative stress. Contact with the culture of origin and movement of acculturation are the best predictors with respect to acculturation stress. Significant differences have been found across the three modes on psychological stress with individuals in the integration category exhibiting less stress than those in the assimilation and separation categories (Dona et al., 1994). In another study, Kim (1984) examines the acculturative stress of Korean immigrants living in metropolitan Toronto, related to acculturative attitude and language. At the individual level, females score higher on stress and their result is consistent with other studies. Also, results have shown that higher stress and a
feeling of marginalisation are associated with less language usage (or knowledge). The problem of communication together with the inability to use a language may be responsible for higher levels of stress and marginalisation in older Koreans who have problems with English. Individuals who have a high score on the separation and marginalisation modes of acculturation, report higher stress and feelings of marginalisation.

Education levels negatively in the factor analyses, suggesting that experiences and skills that are necessary to penetrate into Canadian society seem to be lacking in both modes. Further analyses show that those respondents who score high on the separation mode have low socio-economic status, less English usage, and they are less likely to have Canadian citizenship (Kim and Berry, 1986). Thus, the inability to penetrate into Canadian society due to lack of personal skill and resources seems to be producing high levels of stress and feelings of marginalisation.

Individuals who show a high degree of participation in Korean organisations, and who strongly favour maintaining Korean language are associated with reports of high marginalisation scores. It can be said that integration is a proper level of acculturation which can be applied for sojourners (for example, overseas students), since individuals who choose an integration mode exhibit lower levels of stress than those who favour a separation, an assimilation, or a marginalisation mode (Berry, et al., 1985).

2.5.2.3. Type of Acculturating Group

Berry and Kim (1988) point out that not all people experience acculturation for the same reasons. Some voluntarily seek out culture contact experiences, while others have it forced upon them. Some remain in their ancestral areas, while others experience their contact far from home. And some are in a temporary acculturation situation, while others are locked in for life. These distinctions are
likely to have an effect on the relationship between acculturation and mental health.

Referring to the type of acculturating groups, Berry and Kim have identified five different groups. They include: sojourners, native peoples, refugees, immigrants and ethnic groups (Dona and Berry, 1994, p.59). Berry and Kim (1988) point out that the five groups in the comparative studies of acculturative stress differ not by voluntariness, but rather by their movement to a new geographical and political context (p. 503) They show that an involuntary group such as native peoples and refugees have stress which is greater than that of a voluntary group, such as immigrants and ethnic groups. Sojourners fall between the involuntary and the voluntary groups.

One type of group is a fairly heterogeneous category called sojourners; these are persons in temporary culture contact situations (such as foreign students, diplomatic personnel, international executives). Sojourners may resemble each of the above four types of acculturating groups. An important difference is that because they are temporary and often voluntary, one might expect relatively few mental health problems in this group. There is, however, a "reverse acculturation" to be passed through upon returning home, perhaps creating a double dose of stressors. Moreover, being temporary may also mean being without much reason to establish social contacts in the new society, leading to a lower mental health status.

According to Furnham (1984), people usually have various motives and expectations when living in a foreign place. These motives and expectations help shape their reactions to their environment. Adaptive motivation is surely one of the keys differentiating attributes between sojourners and settlers. Sojourners (short-term residents), may think of their short-term visit abroad as transitory, and may generally negate any serious motivational commitment to adaptation.
With little motivation, learning the host communication and culture and participating in the host communication process are likely to be less important (Aitken, 1973).

2.5.2.4. Social and Demographic Characteristics of Individuals

There are many demographic and social qualities of the acculturating groups that may affect the degree of acculturative stress being experienced (Williams and Berry, 1991).

Socio-economic status is one of those factors. One's entry status into the larger society is often lower than one's departure status from the home society. This relative loss of status may result in stress; or in status mobility in the larger society, whether to regain one's original status or just to keep up with other groups, and may possibly be factors (Berry & Kim, 1988). Education as one of the specific features of status, provides on with resources to deal with the larger society, and this probably affects one's ability to function effectively in the new circumstances (Williams and Berry, 1991).

Along with educational background, gender has been observed to influence strangers' ability to adapt. A number of studies reported that male immigrants were significantly more skilled in the host language than female immigrants, with the same length of residence in the host society (Furnham, 1984 and Kim, 1982). In many cultures, women tend not to work outside of their home, placing them at a less advantageous position in a cross-cultural adaptation situation. When the relationship between age and academic level and various indices of sojourner adjustment is examined, the most consistent finding is that younger sojourners and undergraduate students have more social contact with host nationals, both as friends and in their living arrangements (Church, 1982). Surprisingly few studies have examined sex differences in adjustment. Some studies of foreign students that do show significant sex differences (eg, Fong & Peskin, 1969; Hill, 1966;
Porter, 1963, as cited in Church, 1982) suggest that female foreign students may report greater numbers of adjustment problems than do male foreign students.

The degree of their preparedness for change influences new-comers, acceptancy potential. Greater adaptive potential is experienced by those who are better educated and better informed about the host culture and have many contacts with the larger society. If one has contacts with the larger society, then whether that society is pleasant, whether it meets the current needs of the individual and whether the first encounters are viewed positively, ultimately affects mental health (Williams and Berry, 1991).

Kim (1988) suggests that preparedness for change is an important variable in sojourner adaptation. For example, prior inter-cultural experience or prior transitional experience may contribute to sojourner preparedness. Klineberg and Hull (1979), in their eleven-country study of 2500 university exchange students, conclude that prior foreign experiences and social contact with locals are the two most important factors contributing to student-adjustment. Gullahorn and Gullahorn (1963) report that in their study of overseas exchange students, younger sojourners who had never experienced a prior geographic relocation had more difficulty adjusting overseas. Knowledge about the communication system, particularly language, aids the new-comers' to prepare for change (Kim, 1988).

Social support is perhaps the most comprehensive variable in the literature; this refers to the presence of social and cultural institutions for the support of the acculturating individual. The included supports are such factors as ethnic associations, extended families, availability of one's original cultural group (visits to, availability of, alienation from the culture), and more formal institutions such as agencies and clinics devoted to providing support (Berry and Kim, 1988). One of the other variables refers to the acceptance or prestige of
one's group in the acculturation setting. To Williams and Berry (1991) some
groups are more acceptable on grounds of ethnicity, race, or religion than others;
these less acceptable run into barriers (prejudice, discrimination, exclusion) that
may lead to marginalisation of the group and that are likely to induce greater
stress. The point is that even in plural societies (those societies that may be
generally more tolerant of differences), there are still relative degrees of
acceptability of the various acculturating groups.

2.5.2.5. Psychological characteristics of acculturating individuals

The mental health of persons experiencing acculturation may be effected by
numerous psychological variables. According to Williams and Berry (1991) there
is a distinction between those characteristics that are present prior to contact and
those that develop during acculturation. Pre-contact variables include certain
experiences that may predispose one to function more or less effectively under
acculturative pressures. These include prior knowledge of the new language and
culture, prior inter-cultural encounters of any kind, motives for the contact
(voluntary vs. involuntary contact), and attitudes toward acculturation (positive
or negative). The other attributes are: one's level of education and employment,
values, and self-esteem.

Coping is a key psychological variable in dealing with acculturative stressors
(Taft, 1977). Not all individuals deal with these pressures in the same way, and
this leads to highly variable stress outcomes. When confronted by two cultures,
individuals develop attitudes and coping strategies that lead to personal
adaptations (Williams and Berry, 1991) The appraisal that one makes of the
acculturation experience is another variable. The sense of mind control that an
individual has over the acculturation process seems to play a role; those who see
the changes as opportunities that they can manage may have better mental health
than those who feel overwhelmed by them (Berry and Kim, 1988). Williams and
Berry (1991) suggest that it is not the acculturative changes themselves that are important, but rather, how they are seen and dealt with.

According to Berry and Kim (1988), the harmony between one's expectations and actualities will affect mental health. Individuals whose expectations exceed realities during acculturation, may have poorer mental health than those who achieve some reasonable match to their expectations.

So there are likely to be individual differences in how people actually engage in the acculturation process, how they perceive them, how they value them, and whether they satisfy him or her; these are all likely to be factors in the mental health status of the individual.
CHAPTER 3

METHODOLOGY

3.1. Introduction

This section operationalizes relevant variables and introduces the data collection technique, levels of measurement, hypotheses, and statistical techniques for analysing data. This section normally deals with questions about construction of hypotheses, questionnaire schedules, attitude scales, and sampling procedure.

It is necessary to describe some specific characteristics of the research and then select a research method which is appropriate.

Firstly, the research is *ex post facto* research. In other words, subjects can not be manipulated or assigned to treatments, because the independent variables (acculturation, self-esteem and socio demographic factors) have already refer to phenomena which have been shaped in past time..The reciever observes the dependent variable (acculturative stress scores) and retrospectively studies independent variables for their possible effects on the dependent variable.

Secondly, this research is explanatory research, looking for relationships. The goal is to discover relationships between or to develop an explanation of, the patterns in the data by elimination of as many alternative explanations of the patterns as possible. Prediction may follow explanation. Prediction is the process of estimating scores of dependent variable (acculturative stress) on independent variables (socio-demographic factors, acculturation and self-esteem)

Thirdly, the unit of analysis is the individuals, in this case the international students.
3.2. Survey Method

The survey method is used in this study to facilitate reaching conclusions about a population by selecting and studying samples chosen from that population to discover the relative incidence, distribution, and interrelations of socio-psychological variables. Surveys are chiefly used in studies that have individuals as the unit of analysis. In addition, they are excellent vehicles for measuring attitude, understanding associations formed among phenomena by looking at variations in variables across cases, and looking for other characteristics which are systematically linked with one another.

3.3. Sampling

In a survey, it is impractical to the all possible respondents. However, inferences based on a subset of the whole aggregate may be fairly accurate. A well-selected subset may reflect precisely the characteristics of the aggregate. The chief aim of sampling is to make an inference about a parameter that is unknown from a sample statistic that can be measured. Another aim of sampling is to test an hypothesized relation across variables observed in a population.

Stratified random sampling, which applied in this study, separates the population elements into non overlapping groups called strata, and then selects a simple random sample from within each stratum. All strata are represented in the sample, often through proportional allocation according to size.

The population for this study used all international students of the University of Wollongong. That is those students who are not Australian residents. [The University of Wollongong is a relatively large university in Australia. According to 1995 statistics from the Annual Report, the total student number is about 12000. Of
those there are about 10579 Australian and 1421 international students, 1088 full time and 333 part time from 68 nationalities]. Nationality and duration of residency in Australia were taken in to account as two main characteristics of sample. Students with more than six month residency in Australia and from nationalities with at least 25 students in the university included in the study. So in this study 989 overseas students from 11 nationalities were employed. The reasons for this selection are as follows:

1- The characteristics of acculturative stress and acculturation to the host society in social groups with relatively high density are likely to be different from those who are in groups of relatively low density. Student in large groups, due to social relationships, may have different socio-psychological attitudes towards the host community which influence the process of acculturation.

2- Small groups of student may not provide social support and organization which may influence the process of acculturative stress and acculturation.

3- The geographical distribution of international students in a variety of departments at the University, results in some extent student groups being widespread and consequently, difficult for the researcher to contact. Due to these three reasons it was decided that groups of 25 and more students would be the groups included in this research.

The sample of the survey was randomly drawn from 30% of the population based on the proportion of each nationality (stratified random sampling) according to following stages:
1. Determination of the student groups numbering more than 25 which included 11 nationalities (China, Hongkong, India, Indonesia, Iran, Japan, Korea, Malaysia, Taiwan, Thailand, and United States of America).

2. Preparing a list of students' names of each selected nationality.

3. Numbering each list separately, to assign code numbers to student names to ensure anonymity.

4. Drawing students from each list randomly based on its proportion in the population.

It is necessary to say that a pilot study showed about 10% data loss and the author decided to draw the sample from 30% of population which the details are shown in Table 3.1.

**Table 3.1. International students in the study.**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NATION</th>
<th>TOTAL STUDENT</th>
<th>SAMPLE SELECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>82</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Hongkong</td>
<td>140</td>
<td>43</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>106</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>Indonesia</td>
<td>124</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>Iran</td>
<td>84</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Japan</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Korea</td>
<td>56</td>
<td>17</td>
</tr>
<tr>
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<td>Malaysia</td>
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</tr>
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<td>Taiwan</td>
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</tr>
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<td>Thailand</td>
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<td>24</td>
</tr>
<tr>
<td>11</td>
<td>USA</td>
<td>107</td>
<td>33</td>
</tr>
</tbody>
</table>

989 | 300
3.4. Questionnaire

A number of data collection techniques are used in survey research but certainly the most common is the questionnaire. The questionnaire has many variations and has proven to be highly adaptable to the requirements of data collection for most survey. This research is characterized by structured and systematic sets of data, which I call a variable by case data matrix, and the questionnaire is the easiest way of ensuring this structured data matrix.

In the questionnaire, some indicators which permit measurement of attributes of all cases are developed. For many concepts or variables, developing an indicator is simple and the indicators are well established (e.g. marital status, sex, educational levels,...) but for others, particularly the more abstract concepts (e.g. attitudes) it is more difficult and needs a specific scale for measuring that concept in the questionnaire. A concept in the questionnaire is called a variable which is a symbol to which numerals or values are assigned. In cause and effect terms, a distinction can be made between dependent and independent variables. In this research acculturative stress is a dependent variable. Independent variables are either manipulated or classifying variables. In this research those socio-demographic factors (age, sex, marital status, level of study, financial situation, duration of stay in Australia, language background, religion, and nationality), acculturation and self-esteem are independent variables. Some qualitative variables which consist of unordered or ordered (ranked) discrete categories (e.g. acculturative stress, acculturation, and self-esteem items) and some quantitative variables which are assumed to have underlying continuity (e.g. age) have been employed. In addition, the questionnaire uses two kinds of questions. Firstly a closed or forced-choice question is one in which a number of alternative answers are provided from which respondents are to select one...
(e.g. acculturation items). Secondly, an open-ended question that is one to which respondents formulate their own answer (e.g. religion).

Operationalizing these variables is not difficult for variables such as socio-demographic factors because direct questions allow measurement. Operationalizing the variables like acculturative stress, acculturation and self esteem are not achieved by direct questions but by ones which permit transformation into quantitative variables by using attitude scales measurement. Acculturative stress, acculturation, and self esteem are measured by reference to the attitude of individuals. An attitude is a tendency to act or react in a certain manner when confronted with certain stimuli. The individual's attitudes are expressed, in speech or other behaviour, only when the object of the attitude is perceived. Attitude can be described by their content (what the attitude is about) by their direction (positive, neutral, or negative feeling about the object or issue in question) and by their intensity (an attitude may be held with greater or lesser vehemence).

3.5. Acculturation Measurement

Techniques which have been used in the measurement of attitude are useful for measuring acculturation. Attitudes occupy an interdisciplinary position and in assessing them scholars have long utilized scaling techniques-Thurstone, Likert, Guttman-designed primarily by psychologists. Scales are typically ordinal measures of a variable. They rank-order people (or other units of analysis) in terms of a specific variable such as religiosity, alienation, prejudice, stress or acculturation degrees. A person's score on a scale of acculturation, for example, gives an indication of his/her degree of acculturation vis-a-vis other people.

Acculturation is measured by means of a series of question, with the alternative answers being ranked in ascending or descending order. An ordinal scale or attitude
scale which is used in this research, serves three main functions: (1) to measure, (2) to aid in defining the concept by providing an operational definition; and (3) to prevent bias by covertly measuring a sensitive topic, so that the respondent does not even realize for example, that his/her level of acculturation is being measured and so cannot manipulate his/her answer.

In measuring acculturation, a specific scale (ordinal scale) with additive attribute has been employed, because a person's score on the scale must be computed by summing the number of responses the person gives. On the basis of this characteristic, the scale must also be uni-dimensional which means that all the items in the scale should fit together, or measure a single construct. Based on these attributes, the most appropriate scale for this research is the Likert, a widely used type of scale and very common in survey research developed by Rensis Likert (1932) to provide an ordinal-level measure of a person's attitude.

In short, the Likert scale used in this research has the advantage of not requiring a number of judges to decide what value should be assigned to each item. It is developed by using a discriminatory device (item total correlation identifying the most valid questions) and the respondents (from a pre-test) actually provide their own values for each item. It contains the following qualities: (1) The scale is uni-dimensional, that is assumed that only one dimension is measured by the scale. (2) The scale is an attitude measurement scale. (3) The items are additive that is, the score for each item is added together to form a single scale score wherein higher scale scores represent stronger attitude expression than felt by those who score lower. (4) No one item is more important than any other since all can contribute equally to the total scale score.
As argued earlier in this thesis acculturation is defined as in terms of physical, biological, cultural, social and psychological changes and for measuring them, 12 items were employed in the research.

In this survey acculturation changes are operationalized based on the Berry and Kim's definition (Kim et al., 1987: 492). They argue that physical changes such as a new place to live, a new type of housing, increased population density, more pollution, etc., Biological changes such as: new nutritional status, new diseases. Cultural changes, such as technical linguistic differences religious and social patterns are usually affected and some time replaced. Social change refers to new sets of social relationships, including ingroup-outgroup dynamics, and dominance patterns which may become established. Psychological change involves one's behavioral changes and an alteration in mental health status which almost always occurs as individuals attempt to adapt to their new milieu.

For each change, some items in the Likert scale have been used to measure it and ultimately for measuring acculturation scores, they are combined together. In other words, items.28. are considered to measure physical changes. Biological changes are measured by items.29. Items.24,25,26,31,32,and,33. are used to measure cultural and social changes. Psychological changes are determined by items.27 and34... An alternative strategy weights all items equally and uses their maximum variance, rather than a binary score. Items scored from 1 (lowest level) to 5 (highest level); scoring every choice depends upon the kind of question which is asked in that item. For example, in question 24 the choice A has score 1, while in question 34 the choice A has score 5.

To determine the reliability of the scale a pilot study was done (March 1995) on 57 international students from 11 different nationalities in the University of
Wollongong. The results indicated an excellent reliability (Alpha=0.81). Then, the scale (15 items) was analyzed for dimensionality by a principal components, orthogonal (quartmix rotation) factor analysis. Although the rotated factor analysis matrix indicated that the items were unidimensional and load significantly on a single dimension, three items had low correlation and were excluded from the final questionnaire. The unidimensionality allows each respondent's score to be summed into a Likert scale for subsequent correlation with independent variables (socio-demographic factors).

3.6. Acculturative Stress and Self-Esteem Measurement

The Sanchez and Fernandez scale (1993) was applied in this research to measure acculturative stress. This scale regards acculturative stress as a type of stress which is provoked by ethnic minorities' attempts to conciliate differences between their own and the mainstream culture. It measures acculturative stress in social, attitudinal, and environmental context. The scale with 23 items has been constructed based on Likert scale format with five options (Not Stressful, Slightly Stressful, Moderately Stressful, Stressful, Very Stressful). Sample items from this scale are "Loosening the ties with my culture is difficult," "People look down upon me if I practice customs of my culture," and "It bothers me when people pressure me to assimilate". Answers ranged from not stressful (1) to very stressful (5). I verified this scale in a pilot study (March 1995) on 57 international students in the University of Wollongong. Despite the high reliability of the scale (Alpha=0.88), the results showed that 13 items had low correlation with total scale score (items 3, 4, 5, 7, 8, 9, 10, 12, 14, 16, 17, 21, and 22). So, these items were excluded from the final questionnaire.
Self-esteem was measured by using the Coopersmith scale in the survey. In this scale self-esteem is regarded as a "set of attitudes and beliefs that a person brings with him or herself when facing the world." It includes beliefs as to whether he or she can expect success or failure, how much effort should be put forth, whether failure at a task will "hurt," and whether he or she will become more capable as a result of different experiences. In psychological “terms, self-esteem provides a mental set that prepares the person to respond according to expectations of success, acceptance, and personal strength” (Coopersmith, 1990:1). The scale was designed to measure evaluative attitudes toward the self in social, academic, family, and personal areas of experience. Whereas in this research self-esteem is regarded as a personal judgment of worthiness expressed in the attitudes a person holds toward the self, so the Coopersmith scale was applied in the survey as a useful instrument for measuring this concept. This scale has 25 items and is constructed based on two options (Like Me [Yes]-Unlike Me [No]). Responses scored 1 for those who have self-esteem and 0 for others who have not self-esteem in each item. This scale also applied in the pilot study and the results indicated high reliability of the scale (Alpha=0.67) for the subjects.
3.7. Validity and Reliability

In all empirical research the validity and reliability of measurements are paramount. In conventional usage, the term validity refers to the extent to which an empirical measure adequately reflects the true meaning of the concept under consideration. Various types of validity were measured in the study; the first is content validity which asks whether the measure of a concept is based on an adequate sample of the kinds of behaviour or attitudes concerned (Wright 1979). It is difficult to ensure the content validity of social measures. However, the content validity of the various instruments in this study was assessed in interviews with the students who piloted the questionnaire and from the literature. Content validity can then be assumed for all measures.

Establishing construct validity involves a number of interrelated steps. According to Carmines and Zeller,(1979:23)

"First, the theoretical relationships between the concepts themselves must be specified. Second, the empirical relationship between the measures of the concepts must be examined. Finally, the empirical evidence must be interpreted in terms of how it clarifies the construct validity of the particular measure"

Factor analysis was used in assessing construct validity in the creation of indices used in scoring the variables.

The most promising applications of factor analysis in recent years have been concerned with the testing of explicit hypotheses about structural relationships among sets of variables (Kim and Muller, 1978). It is an important technique for reducing and classifying sets of variables as a means of improving theoretical understanding. This statistical technique is useful for assessing the reliability and validity of
measures. On the employment of factor analysis, Kerlinger (1973:468) argued that "factor analysis is perhaps the most powerful method of construct validation" although there is disagreement among statisticians whether this is the case (Cronbach, 1971). Essentially, factor analysis consists of a variety of statistical methods for discovering statistical similarities or patterns existing in data sets. It is typically the case that more than one of these clusters, or factors, underlies a set of items. Each factor is defined by those items that are more highly correlated with each other than with the other items. The factors describe the basic dimensions of the total measurement or validate a theory or hypothesis. A statistical indication of the extent to which each item is correlated with each factor is given by the factor loading. In other words, the higher the factor loading, the more a particular item contributes to the given factor.

In the case of the acculturative stress, acculturation, and self-esteem scales, the researcher has hypothesized that the items of each scale measure a single phenomenon, that is, unidimensional. The results of factor analysis in the pilot study confirm the hypothesis.

Reliability is an indication of the extent to which a measure contains variable errors; that is, error that differ from individual (or some other objects) to individual during any one measuring instance, and that vary from time to time for a given individual measured twice by the same instrument. There are a number of well-established methods of testing the reliability of indicators. For testing the reliability of this research, Cronbach coefficient alpha has been used (Cronbach, 1951). Alpha ranges between 0 and 1; the higher the figure the more reliable the scale and, as a rule of thumb, alpha should be at least 0.7 before a scale is reliable. For computing "alpha", a specific command in the SPSS package has been used.
3.8. Pilot Study

A preliminary version of the questionnaire was tested during March 1995. First, contact was made with some of the International students who were attending university. Eighty students from the population of the study who were selected randomly took part in a pilot test. Included in the sample were 7 from China, 7 from Iran, 11 from Hongkong, 7 from India, 10 from Indonesia, 4 from Japan, 5 from Korea, 5 from Malaysia, 7 from Taiwan, 7 from Thailand, and 8 from United States. The draft questionnaire was mailed to the sample and 57 of them were returned at the time of data analysis. From the comments made by these pilot subjects, a number of alterations were made to the format and to individual questions before the questionnaire was used in the primary research. For instance, several items were modified to clarify content or improve readability. Some questions which were found to have doubtful relevance were omitted. Simple frequency, chi-square ($X^2$), and ANOVA analysis with some reliability estimates of the scale were carried out on the data. The results indicated excellent reliability of the scales, significant relationships between acculturation, self-esteem and acculturative stress and statistically significant relationships between some socio-demographic variables and acculturative stress.

3.9. Hypotheses

It should be obvious that defining the hypothesis as the building block or the essential unit in the scientific process is a more specific use of the term than defining it to include explanation, models and theory. For the purpose of this work, a hypothesis is defined as a proposition that is stated in testable form and that predicts a particular relationship between two (or more) variables. In other words, if we think
that a relationship exists, we first state it as an hypothesis and then test the hypothesis in the field.

Hypotheses can be derived deductively from theories, directly from observation, intuitively, or from a combination of these.

My hypotheses are as follows:

1. High level of acculturation is associated with low level of acculturative stress.
3. There is association between socio-demographic variables (age, nationality, sex, marital status, level of study, financial situation, duration of stay in Australia, language background, religion, visit home, faculty, place of residency) and level of acculturative stress.

3.10. Statistical Techniques

In this research both descriptive statistics (e.g. frequency distribution) and inferential statistics (e.g. chi-square, analysis of variance, and multiple regression) are used for analysing the data. Descriptive statistics are a collection of methods for classifying and summarizing numerical data. Inferential statistics are methods for making inferences about the characteristics of the population from knowledge of the corresponding characteristics of the sample. In using inferential statistics, I am looking for bivariate relationships. Properties of a bivariate relationship include whether the relationship is positive or negative, strength of the relationship, whether it is symmetrical or asymmetrical, which variable is the independent variable and which is the dependent (asymmetrical relationship only), and whether the relationship is linear or curvilinear.

The dimensionality of acculturation (12 items), is analyzed by a principal components, orthogonal (quartimax rotation) factor analysis and the internal
consistency of three scales (acculturative stress, acculturation, and self-esteem) determined on the basis of Cronbach's coefficient alpha. Analysis of variance (ANOVA) is used to test whether there are significant differences between the acculturative stress means of several different groups of observations.

Chi-square and Pearson correlation coefficient are used in this research for determining the relationship between two variables. When the variables under consideration are categorical in nature, as is often the case, the appropriate statistical procedure is the chi-square test. And, when variables are interval, Pearson correlation coefficient is applied. The chi-square test of independence is applied to data in the form of a contingency table. A contingency table is a two-dimensional table that is defined by the levels of two categorical variables. After determining the significance of chi-square, "Contingency", or "Kendall's Tau-b" coefficient for exploring the relationship between two variables are used. Which coefficient is used depends on the level of measurement of variables (nominal, ordinal, interval, or ratio). It should be added that in hypothesis testing, the risk of committing a Type I error is termed the level of significance. In other words, in reaching a decision about the null hypothesis (H0) two types of errors may arise. An alternative hypothesis (H1) may be accepted when the null hypothesis (H0) is true. This called Type I error. The null H0 may not be rejected when an alternative hypothesis (H1) is true, or a Type II error.

The third statistical technique used is regression (simple and multiple). Broadly speaking, regression analysis is a method of analyzing the variability of a dependent variable on one or more independent variables. The coefficient of multiple correlation (usually denoted by capital R) and the coefficient of multiple determination (usually denoted by R-square), which are two statistics that often accompany the report of the multiple regression, are used in this research for describing the relationships between
consciousness and socio-economic factors. The multiple correlation coefficient indicates how well the predicted degrees of consciousness correlate with the actual values of the socio-economic factors. The higher that correlation, the better the prediction. The coefficient of multiple determination is interpreted just like the coefficient of determination in simple linear regression.

In most sociological research and evaluation reports which used regression analysis, an equation that expresses the mathematical relationship between dependent and independent variables is formulated. In this research the regression equation is as follows:

\[ Y_i = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 \]

\[ Y_i = \text{Scores of individuals acculturative stress.} \]
\[ a = \text{Regression constant which is y intercept.} \]
\[ b_1 = \text{The slope of the regression line.} \]
\[ X_1 = \text{Acculturation Score.} \]
\[ X_2 = \text{Self-esteem Score.} \]
\[ X_3 = \text{Nationality.} \]
\[ X_4 = \text{Age.} \]
\[ X_5 = \text{Language.} \]
\[ X_6 = \text{Visiting Home Country Since Arrival.} \]
\[ X_7 = \text{Previous Place of Living.} \]
\[ X_8 = \text{Financial Situation.} \]

To interpret the results of the regression, a level of significance (at least at the level of 0.05) by using F-test is selected. The 0.05 level means that an obtained result it could occur by chance only 5 times in 100 trials. The 0.05 level corresponds fairly well to two standard deviations from the mean of a normal probability distribution.
For computing the results of those statistical techniques used in this research, the statistical package for social science (SPSS) is used. SPSS consists of many programs designed to manipulate statistical data and to display the result of this manipulation. Although there are many other statistical packages available, it has become increasingly popular for several reasons. First, it is user friendly, that is, it can be used very easily by researchers/statisticians who have minimal computer skills. Second, it can be used to complete the most complex analyses very quickly. And third, it can be used to analyze very large data sets. For using the SPSS, our data have been coded. The process of coding data involves assigning numerical values to nonnumerical categories of variables.
CHAPTER 4

DATA ANALYSIS

4.1. Introduction

In this chapter, descriptive and inferential statistics are employed. Descriptive statistics are used to describe the socio-demographic characteristics of the sample in terms of frequency and percentage mean and standard deviation. Inferential statistics are employed to determine the relationship between acculturation, socio-demographic factors, self esteem (independent variables) and acculturative stress (dependent variable).

Section one (4.2) is descriptive. It deals with the socio-demographic characteristics of the sample in which sex, age, marital status, faculty, level of study, visit home, payment fee, financial situation, place of residence, religion, language background, and nationality of the sample are described.

Section two (4.3) assesses the reliability of acculturative stress, acculturation, and self-esteem scales using factor analysis and Cronbach Alpha respectively. It presents descriptive statistics of those items from each scale (acculturative stress, acculturation and self-esteem) and the frequency distributions of the items tapping acculturative stress, acculturation and self-esteem.

The third section (4.4) compares the means of the acculturative stress scores in terms of socio-demographic variables, using analysis of variance (ANOVA). Section four (4.5) examines the relationship between scores for acculturative stress and acculturation, self-esteem, and socio-demographic factors by employing Pearson's Correlation and chi-square analyses. It also explores the variations in acculturative stress scores through multiple regression.
4.2. Socio-demographic characteristics of the sample

Socio-demographic characteristics of the sample data for the study were obtained from international students who responded to the questionnaire designed to discern intensity of acculturative stress. These students were from Wollongong University in Australia. Some demographic characteristics of the sample are as follows:

4.2.1. Sex

In this study, 48.6% of the sample were males and 51.4% were female (see Tables 4.1 and 4.2). The study results demonstrate that in comparison to the women, considerably more men were married (25.4%).

### Table 4.1

<table>
<thead>
<tr>
<th>SEX</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>84</td>
<td>48.6</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>51.4</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Table 4.2

<table>
<thead>
<tr>
<th>SEX</th>
<th>SINGLE</th>
<th>MARRIED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40 (23.19%)</td>
<td>44 (25.4%)</td>
<td>84 (48.6%)</td>
</tr>
<tr>
<td>Female</td>
<td>71 (41.01%)</td>
<td>18 (10.4%)</td>
<td>89 (51.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>111 (64.2%)</td>
<td>62 (35.8%)</td>
<td>173 (100%)</td>
</tr>
</tbody>
</table>
4.2.2. Age

The mean of the subjects' age is about 28 years. Table 4.3 shows the results.

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-25</td>
<td>32 (18.5%)</td>
<td>57 (32.9%)</td>
<td>89 (51.4%)</td>
</tr>
<tr>
<td>26-35</td>
<td>32 (18.5%)</td>
<td>23 (13.3%)</td>
<td>55 (31.8%)</td>
</tr>
<tr>
<td>36-45</td>
<td>16 (9.2%)</td>
<td>9 (5.2%)</td>
<td>25 (14.5%)</td>
</tr>
<tr>
<td>46-55</td>
<td>4 (2.3%)</td>
<td>——</td>
<td>4 (2.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (48.5%)</td>
<td>89 (51.4%)</td>
<td>173 (100%)</td>
</tr>
</tbody>
</table>

Mean = 27.91  Std. Error = 0.59  Median = 25.00

4.2.3. Faculty

Table 4.4 shows the frequency distribution of the respondents according to their faculty. The majority of the subjects (31.8 %) are in Commerce.

<table>
<thead>
<tr>
<th>FACULTY</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatics</td>
<td>23</td>
<td>13.3</td>
</tr>
<tr>
<td>Commerce</td>
<td>55</td>
<td>31.8</td>
</tr>
<tr>
<td>Art</td>
<td>20</td>
<td>11.6</td>
</tr>
<tr>
<td>Science</td>
<td>23</td>
<td>13.3</td>
</tr>
<tr>
<td>Engineering</td>
<td>20</td>
<td>11.5</td>
</tr>
<tr>
<td>Law</td>
<td>3</td>
<td>1.7</td>
</tr>
<tr>
<td>Behaviour-Science</td>
<td>28</td>
<td>16.2</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.2.4. Level of Study

Table 4.5 below indicates the level of study. It shows that the majority of the respondents in the sample (53.2%) fall into the postgraduate group.

Table 4.5

<table>
<thead>
<tr>
<th>LEVEL OF STUDY</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>81</td>
<td>46.8</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>92</td>
<td>53.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.5. Visit home

The respondents were asked how many times they have visited their country since they have arrived in Australia to study. The majority have not visited home yet. (see Table 4.6)

Table 4.6

<table>
<thead>
<tr>
<th>VISIT HOME</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>78</td>
<td>45.1</td>
</tr>
<tr>
<td>One time</td>
<td>50</td>
<td>28.9</td>
</tr>
<tr>
<td>Twice or more</td>
<td>45</td>
<td>26.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.6. Fee payment

The largest proportion of respondents (62.4%) are paying their own fees, and 9.8% of them have Australian government scholarships. Table 4.7 lists the results.
Table 4.7
Frequency distribution of fee payment arrangements

<table>
<thead>
<tr>
<th>PAYMENT FEE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self or family</td>
<td>108</td>
<td>62.4</td>
</tr>
<tr>
<td>Your government</td>
<td>43</td>
<td>24.9</td>
</tr>
<tr>
<td>Aust. government</td>
<td>17</td>
<td>9.8</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.7. Financial situation

The sample shows a normal distribution in terms of finance. Few are in the very good or very poor categories and the largest proportion (48%) are in satisfactory situation. Table 4.8 displays the results.

Table 4.8
Frequency distribution of the subjects' financial status

<table>
<thead>
<tr>
<th>FINANCIAL STATUS</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>8</td>
<td>4.6</td>
</tr>
<tr>
<td>Good</td>
<td>43</td>
<td>24.9</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>83</td>
<td>48.0</td>
</tr>
<tr>
<td>Poor</td>
<td>36</td>
<td>20.8</td>
</tr>
<tr>
<td>Very Poor</td>
<td>3</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.8. Place of residence

Respondents were asked to identify their place of living before coming to Australia. The largest proportion of them (77.4 %) were living in capital cities or large towns. This result is shown in Table 4.9.
Table 4.9

<table>
<thead>
<tr>
<th>PLACE OF LIVING</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital City</td>
<td>54</td>
<td>31.2</td>
</tr>
<tr>
<td>Large Town</td>
<td>80</td>
<td>46.2</td>
</tr>
<tr>
<td>Small Town</td>
<td>38</td>
<td>22.0</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2.9. Religion

Respondents assigned themselves into five categories in respect of religion. The largest proportion (35.31%) place themselves into no religious group and the minority are Hindu. These results appear in Table 4.10

Table 4.10

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Religion</td>
<td>61</td>
<td>35.3</td>
</tr>
<tr>
<td>Muslim</td>
<td>44</td>
<td>25.4</td>
</tr>
<tr>
<td>Buddhism</td>
<td>17</td>
<td>9.8</td>
</tr>
<tr>
<td>Christian</td>
<td>45</td>
<td>26.0</td>
</tr>
<tr>
<td>Hindu</td>
<td>6</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2.10. Language background

The sample was divided into two groups (English and Non-English Speaking Background). The largest proportion of International students are of non-English speaking background. Table 4.11 shows the result.
Table 4.11  
Frequency distribution of the subjects' language background  

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>28</td>
<td>16.2</td>
</tr>
<tr>
<td>Non-English</td>
<td>145</td>
<td>83.8</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2.11. Nationality

Table 4.12 indicates the nationality of respondents. It shows that the largest number (16.28 %) of the 173 respondents in the sample have come from Indonesia.

Table 4.12  
Frequency distribution of the respondents' nationality  

<table>
<thead>
<tr>
<th>NATIONALITY</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>18</td>
<td>10.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>28</td>
<td>16.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>10</td>
<td>5.8</td>
</tr>
<tr>
<td>HongKong</td>
<td>7</td>
<td>4.0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>8</td>
<td>4.6</td>
</tr>
<tr>
<td>Korea</td>
<td>5</td>
<td>2.9</td>
</tr>
<tr>
<td>America</td>
<td>26</td>
<td>15.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>20</td>
<td>11.6</td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td>6.9</td>
</tr>
<tr>
<td>Iran</td>
<td>26</td>
<td>15.0</td>
</tr>
<tr>
<td>India</td>
<td>12</td>
<td>6.9</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.3. Acculturative stress, acculturation and self-esteem measurements

This section examines the reliability of the three scales (acculturative stress, acculturation and self-esteem) employed in this study.
4.3.1. Reliability.

Before determining the scores of acculturative stress, acculturation, and self-esteem, it is necessary to identify the reliability of the scales. Cronbach's Alpha (Cronbach, 1951) was computed by the SPSS program (See Table 4.13). The reliability coefficient were as follows: acculturative stress (.89), acculturation (.84), and self-esteem (.72). In summary, according to accepted criteria, the internal reliability of the instruments in this study are considered to be well established.

Table 4.13

<table>
<thead>
<tr>
<th>SCALE</th>
<th>NO OF CASES</th>
<th>ALPHA</th>
<th>NO. OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>173</td>
<td>.89</td>
<td>10</td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>173</td>
<td>.84</td>
<td>12</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>173</td>
<td>.72</td>
<td>25</td>
</tr>
</tbody>
</table>

4.3.2. Factor analysis

For measuring acculturation, 12 items have been used in the survey as explained in the methodology section (Chapter 3). These 12 items were analysed for dimensionality by 9 principal components, orthogonal (quartimax relational) factor analysis. The rotated factor analysis matrix indicates that the 12 items are uni-dimensional and loaded significantly on a single dimension. The scale supports one factor by which 58.6% of the 12-item variance is explained with an eigen-value of 11.63. Table 4.14 presents the correlation of this factor with each item which is named according to it's factor matrix.
Table 4.14

Factor matrix

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>FACTOR 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty with written English (Item 1) Question 24</td>
<td>0.75</td>
</tr>
<tr>
<td>Difficulty in reading (Item 2) Question 25</td>
<td>0.77</td>
</tr>
<tr>
<td>Problem using Austr. Study method (Item 3) Quest. 26</td>
<td>0.66</td>
</tr>
<tr>
<td>Problem making Aust. Friends (Item 4) Question 27</td>
<td>0.76</td>
</tr>
<tr>
<td>Problem with Australian Climate (Item 5) Question 28</td>
<td>0.52</td>
</tr>
<tr>
<td>Problem with food/dietary choices (Item 6) Question 29</td>
<td>0.56</td>
</tr>
<tr>
<td>Feeling safe in Australia (Item 7) Question 30</td>
<td>0.66</td>
</tr>
<tr>
<td>Wearing Australian style of clothing (Item 8) Quest. 31</td>
<td>0.59</td>
</tr>
<tr>
<td>Speaking English at home (Item 9) Question 32</td>
<td>0.66</td>
</tr>
<tr>
<td>Listening to radio or watching TV (Item 10) Quest. 33</td>
<td>0.71</td>
</tr>
<tr>
<td>Contact with Australian people (Item 11) Question 34</td>
<td>0.70</td>
</tr>
<tr>
<td>Satisfaction in general (Item 12) Question 35</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Table 4.15 indicates the proportion of variance in the item explained by the factor. Eigen value and per cent of variance are demonstrated.

Table 4.15

The proportion of variance in the item explained by the factor

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COMMUNALITY</th>
<th>FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty with written English (Item 1) Quest 24</td>
<td>0.66</td>
<td>1</td>
</tr>
<tr>
<td>Difficulty in reading (Item 2) Question 25</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Problem using Austr, study method (Item 3) Quest. 26</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Problem making Australian friends (Item 4) Quest 27</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Problem with Australian Climate (Item 5) Question 29</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>Problem with dietary choices, food (Item 6) Quest 29</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>Feeling safe in Australia (Item 7) Question 30</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Wearing Australian style clothing (Item 8) Question 31</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>Speaking English at home (Item 9) Question 32</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Listening to radio, watching TV (Item 10) Quest. 33</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>Contact with Australian people (Item 11) Question 34</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Satisfaction in general (Item 12) Question 35</td>
<td>0.59</td>
<td></td>
</tr>
</tbody>
</table>

Eigen Value 11.63
Percent of Variance 58.6
4.3.3. **Acculturative stress scores**

The Sanchez and Fernandez (1993) scale was applied in this research to measure acculturative stress. The uni-dimensionality and high internal consistency of all 10 items allowed each respondent's score to be summed into a Likert Scale for subsequent correlation with acculturation, self-esteem, and socio-economic factors. A specific score can also be computed for each person based on 10 items in which his/her score in each item changes from 1 to 5. Five represents the highest level and 1 demonstrates the lowest level of acculturative stress in each item. In this part, different items of acculturative stress and total acculturative stress scores will be presented.

4.3.4. **Acculturative stress items**

When respondents were asked about their feelings when others make jokes about their ethnic background (Question 14), 53 (30.6%) of respondents replied that they became moderately stressed and 17 (9.8%) said that the experience was very stressful. Question 15 asked for the respondents' feelings when they compared themselves with other people in the successful overcoming of barriers. Based on the results, 50 (28.9%) were not stressed, 56 (32.4%) subjects of the sample were feeling slightly stressed; 47 (27.2%) were moderately stressed; 18 (10.4%) were stressed, and 2 (1.2%) were very stressed.

Question 16 evaluates the respondents' stress when others have stereotyped ideas about their culture. In this study, 35 (20.2%) individuals claimed that they were not stressed; 66 (38.2%) were slightly stressed, 47 (27.2%) were moderately stressed; 18 (10.4%) were stressed and 6 (3.5%) were very stressed.

When subjects were asked for their response when they experience inadequate communication, and others think that they are unsociable (Question 17), 57 (32.9%) of them replied that they were not stressed; 43 (24.9%) felt moderately stressed; 37 (21.4%) felt slightly stressed; 30 (17.3%) felt stressed and 6 (3.5%) felt very stressed.

Question 18 seeks to assess the stress of the subjects when others pressure them to assimilate. 57 (32.9%) of the respondents replied that it was not stressful for them; 44...
(25.4%) answered it was moderately stressing; 40 (23.1%) said it was slightly stressing; 23 (13.3%) replied stressful and 8 (4.6%) were very stressed.

Question 19 is about the feelings of subjects because they have an accent. The results show that 56 (32.4%) respondents were not stressed; 44 (25.4%) answered moderately stressed; 40 (23.2) said slightly stressed, 25 (14.5%) indicated stressed and 7 (4.0%) were very stressed. Question 20 identifies the stress of the subjects when they decide to separate themselves from their culture. Of the 173 individuals in the sample, 55 (31.8%) answered that they felt stressed; 41 (23.7%) felt slightly stressed; 38 (22%) felt moderately stressed; 25 (14.5%) felt stressful and 11 (6.4%) indicated feeling very stressed.

Question 21 tries to examine an association between thinking about cultural background and stress levels. The results show that 50 (28.9%) respondents replied not stressed; 47 (27.2%) said slightly stressed, 42 (24.3%) said moderately stressed; 21 (12.1%) were stressed, while 13 (7.5%) indicated very stressed.

Question 22 evaluates respondents' stress when they practice their customs while others are watching them. For 74 (42.8%) respondents, it did not stress them; 46 (26.6%) answered slightly stressed, 17 (9.8%) indicated stressed, 31 (17.9%) were moderately stressed; and 5 (2.9%) were very stressed.

Question 23 seeks to assess the subjects' stress when they are unable to understand others when they converse in English. The results show that 60 (34.7%) of the respondents believed it was not stressful for them; 52 (30.1%) replied slightly stressing, 28 (16.2%) were moderately stressed; 28 (16.2%) were stressful and 4 (2.3%) were very stressed. Table 4.16 below presents the results.
Table 4.16
Frequency distribution of the subjects replication on acculturative stress items

<table>
<thead>
<tr>
<th>ACCULTURATIVE STRESS ITEMS</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Feeling when others make jokes</td>
<td>27</td>
</tr>
<tr>
<td>Overcoming barriers</td>
<td>50</td>
</tr>
<tr>
<td>Meeting stereotypes about culture</td>
<td>35</td>
</tr>
<tr>
<td>Trouble in communication</td>
<td>57</td>
</tr>
<tr>
<td>Pressure to assimilate</td>
<td>57</td>
</tr>
<tr>
<td>Having an accent</td>
<td>56</td>
</tr>
<tr>
<td>Loose ties with culture</td>
<td>55</td>
</tr>
<tr>
<td>Think cultural background</td>
<td>50</td>
</tr>
<tr>
<td>Practice Customs</td>
<td>74</td>
</tr>
<tr>
<td>Trouble understanding English</td>
<td>60</td>
</tr>
</tbody>
</table>

4.3.5. Acculturative stress scores of the sample

The uni-dimensional scale with additive attribute allows the author to add the scores of 10 items and the construct acculturative stress score for each respondent and for the sample. This scale ranged from 10 to 47 with a mean of 23.62, median of 25.00, and standard deviation of 8.26. It means that the subjects report a relatively low level of acculturative stress. Table 4.17 shows the results.

Table 4.17
Frequency distribution of the respondents' acculturative stress scores

<table>
<thead>
<tr>
<th>ACCULTURATIVE STRESS SCORES</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>71</td>
<td>41.0</td>
</tr>
<tr>
<td>21-30</td>
<td>60</td>
<td>34.7</td>
</tr>
<tr>
<td>31-40</td>
<td>35</td>
<td>20.2</td>
</tr>
<tr>
<td>41-50</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>100</td>
</tr>
</tbody>
</table>

Mean = 23.61 Std Dev = 8.26 Median = 25.00

4.3.6. Acculturation and self-esteem scores

The uni-dimensionality and high internal consistency of acculturation and self-esteem items allow each respondent's scores to be summed for subsequent correlation with acculturative stress. For each student a specific score can also be computed, based on scores in each item for acculturation (Likert-type scale from 1-5) and 0 or 1 for self-esteem. A score of 5 indicates the highest level for acculturation and a score of 1 for indicates higher self-esteem. In similar fashion 1 demonstrates the lowest level for
acculturation and 0 the lower self-esteem. In this section, discreet item scores and total scores of each scale will be presented.

4.3.6.1. Acculturation scores

The subjects answered 12 items in the acculturation scale. The results show that the respondents level of acculturation is relatively high. In other words, most of them score between 3 and 4 on each item which indicates that their scores are above the mean. The mean and median of each item also confirm that most respondents are well acculturated. This scale ranges from 28 to 60, with a mean of 42.56, a median of 41.00 and a standard deviation of 7.96. Tables 4.18 and 4.19 show the results.

<table>
<thead>
<tr>
<th>ACCULTURATION ITEMS</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Lowest level)</td>
<td>(Highest Level)</td>
</tr>
<tr>
<td>Difficulty with written English</td>
<td>47</td>
</tr>
<tr>
<td>Difficulty in reading journal</td>
<td>37</td>
</tr>
<tr>
<td>Problem adjusting to study method</td>
<td>34</td>
</tr>
<tr>
<td>Problem with making friends</td>
<td>58</td>
</tr>
<tr>
<td>Problem with Australian climate</td>
<td>61</td>
</tr>
<tr>
<td>Problem with dietary choices</td>
<td>47</td>
</tr>
<tr>
<td>Feeling safe in Australia</td>
<td>37</td>
</tr>
<tr>
<td>Wearing Australian clothes</td>
<td>21</td>
</tr>
<tr>
<td>Speaking English at home</td>
<td>55</td>
</tr>
<tr>
<td>Listening to radio/watching TV</td>
<td>28</td>
</tr>
<tr>
<td>Contact with Australian people</td>
<td>28</td>
</tr>
<tr>
<td>General satisfaction</td>
<td>20</td>
</tr>
</tbody>
</table>
Table 4.19  
Frequency distribution of the subjects acculturation scores

<table>
<thead>
<tr>
<th>ACCULTURATION SCORES</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-35</td>
<td>38</td>
<td>22.0</td>
</tr>
<tr>
<td>36-45</td>
<td>69</td>
<td>39.9</td>
</tr>
<tr>
<td>46-55</td>
<td>53</td>
<td>30.6</td>
</tr>
<tr>
<td>56-65</td>
<td>11</td>
<td>6.4</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Mean = 42.56  
Std Dev = 7.96  
Median = 41.00

4.3.6.2. Self-esteem scores

Self-esteem was measured in the study by using the Coopersmith Scale. The scale has 25 items for measuring evaluative attitudes toward the self in social, academic, family and personal areas of experience. Each item can be scored 1 (yes) for those who have self-esteem and 0 (no) for others who do not have self-esteem in that item. The results indicated relatively high levels of self-esteem in the international students. In other words, a majority of students scored 1 in each item and across the students each item had a mean above 0.5 and a median of 1.00. The range was from 6 to 25, with a mean of 17.65, a median of 18 and a standard deviation of 4.03. Table 4.20 and 4.21, below, present the results.
### Table 4.20

**Frequency distribution of the self-esteem items**

<table>
<thead>
<tr>
<th>SELF ESTEEM ITEMS</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things don’t usually bother me.</td>
<td>53</td>
</tr>
<tr>
<td>I find it very hard to talk in front of a group.</td>
<td>56</td>
</tr>
<tr>
<td>There are many things about myself I’d change if I could do</td>
<td>75</td>
</tr>
<tr>
<td>I can make up my mind without too much trouble.</td>
<td>54</td>
</tr>
<tr>
<td>I’m a lot of fun to be with.</td>
<td>52</td>
</tr>
<tr>
<td>I get upset easily at home.</td>
<td>48</td>
</tr>
<tr>
<td>It takes me a long time to get used to anything new.</td>
<td>51</td>
</tr>
<tr>
<td>I’m popular with persons my own age.</td>
<td>62</td>
</tr>
<tr>
<td>My family usually considers my feelings.</td>
<td>45</td>
</tr>
<tr>
<td>I give in very easily.</td>
<td>67</td>
</tr>
<tr>
<td>My family expects too much of me.</td>
<td>45</td>
</tr>
<tr>
<td>It’s pretty tough to be me.</td>
<td>54</td>
</tr>
<tr>
<td>Things are all mixed up in my life.</td>
<td>51</td>
</tr>
<tr>
<td>I have a low opinion of myself.</td>
<td>57</td>
</tr>
<tr>
<td>There are many times when I could like to leave home.</td>
<td>53</td>
</tr>
<tr>
<td>I often feel upset with my work.</td>
<td>43</td>
</tr>
<tr>
<td>I’m not as nice looking as most people.</td>
<td>50</td>
</tr>
<tr>
<td>If I have something to say, I usually say it.</td>
<td>52</td>
</tr>
<tr>
<td>My family understands me.</td>
<td>37</td>
</tr>
<tr>
<td>Most people are better liked than I am.</td>
<td>50</td>
</tr>
<tr>
<td>I usually feel as if my family is pushing me.</td>
<td>40</td>
</tr>
<tr>
<td>I often get discouraged with what I am doing.</td>
<td>31</td>
</tr>
<tr>
<td>I often wish I were someone else.</td>
<td>29</td>
</tr>
<tr>
<td>I can’t be depended on.</td>
<td>40</td>
</tr>
</tbody>
</table>

### Table 4.21

**Frequency distribution of self esteem scores**

<table>
<thead>
<tr>
<th>SELF-ESTEEM SCORES</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10</td>
<td>10</td>
<td>5.8</td>
</tr>
<tr>
<td>11-15</td>
<td>37</td>
<td>21.4</td>
</tr>
<tr>
<td>16-20</td>
<td>81</td>
<td>46.8</td>
</tr>
<tr>
<td>21-25</td>
<td>45</td>
<td>26.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

- **Mean** = 17.65
- **Std Dev** = 4.03
- **Median** = 18.00

#### 4.4. comparison between different acculturative stress scores

Mean acculturative scores for each variable, in relation to some socio-demographic variables, were compared. For this purpose, the data was submitted to an analysis of variance (ANOVA). The socio-demographic variables used in the equations are as follows: sex, marital status, faculty, level of study, visit home, payment, financial situation, place of living, religion, language, and nationality.
This part of the study presents firstly those differences between acculturative stress scores in relation to socio-demographic variables which are not statistically significant. In the second part, other statistically significant differences are presented.

4.4.1. Acculturative stress by sex, marital status, faculty, payment and religion.

Based on current surveys and preliminary interviews, the author hypothesised that there would be statistically significant differences between the acculturative stress scores of males and females, single and married subjects, students studying in different faculties, students differing in sources of payment fees, and also students of different religions. Comparison between the means of these categories in each variable failed to confirm these hypotheses. In other words, the difference between the means in each variable is not statistically significant. Tables 4.22, 4.23, 4.24, 4.25 and 4.26 present the results.

Table 4.22
ANOVA Table for the comparison between male and female acculturative stress scores

<table>
<thead>
<tr>
<th>SEX</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD. DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1937.00</td>
<td>23.62</td>
<td>8.36</td>
<td>5673.28</td>
</tr>
<tr>
<td>Female</td>
<td>2054.00</td>
<td>23.61</td>
<td>8.21</td>
<td>5798.71</td>
</tr>
<tr>
<td>Within groups total</td>
<td>3991.00</td>
<td>23.62</td>
<td>8.29</td>
<td>11471.99</td>
</tr>
</tbody>
</table>

Table 4.23
ANOVA Table for the comparison between single and married persons' acculturative stress scores

<table>
<thead>
<tr>
<th>MARITAL STATUS</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD. DEV</th>
<th>SUM of SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>2491.00</td>
<td>22.85</td>
<td>8.21</td>
<td>7277.65</td>
</tr>
<tr>
<td>Married</td>
<td>1500.00</td>
<td>25.00</td>
<td>8.25</td>
<td>4016.00</td>
</tr>
<tr>
<td>Within Group Total</td>
<td>3991.00</td>
<td>23.61</td>
<td>8.22</td>
<td>11293.65</td>
</tr>
</tbody>
</table>

---

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### Table 4.24

**ANOVA Table for the comparison between acculturative stress scores in different faculties**

<table>
<thead>
<tr>
<th>FACULTIES</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD. DEV</th>
<th>SUM of SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatics</td>
<td>512.00</td>
<td>22.26</td>
<td>7.07</td>
<td>1098.43</td>
</tr>
<tr>
<td>Commerce</td>
<td>1402.00</td>
<td>25.49</td>
<td>7.02</td>
<td>2659.75</td>
</tr>
<tr>
<td>Art</td>
<td>408.00</td>
<td>22.67</td>
<td>8.70</td>
<td>1288.00</td>
</tr>
<tr>
<td>Science</td>
<td>487.00</td>
<td>21.17</td>
<td>8.99</td>
<td>1781.30</td>
</tr>
<tr>
<td>Engineering</td>
<td>428.00</td>
<td>21.40</td>
<td>8.84</td>
<td>1484.80</td>
</tr>
<tr>
<td>Law</td>
<td>66.00</td>
<td>22.00</td>
<td>7.21</td>
<td>104.00</td>
</tr>
<tr>
<td>Behavioural</td>
<td>654.00</td>
<td>25.15</td>
<td>9.78</td>
<td>2391.38</td>
</tr>
<tr>
<td>Total</td>
<td>512.00</td>
<td>22.26</td>
<td>7.07</td>
<td>1098.43</td>
</tr>
</tbody>
</table>

**Between Groups**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Sq</th>
<th>d.f.</th>
<th>Mean sq</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>555.85</td>
<td>6</td>
<td>92.64</td>
<td>1.83</td>
<td>.22</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10807.67</td>
<td>161</td>
<td>67.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.25

**ANOVA Table for the comparison between acculturative stress scores with different source of fees payment**

<table>
<thead>
<tr>
<th>PAYMENT</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD. DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yourself or family</td>
<td>2483.00</td>
<td>23.21</td>
<td>8.49</td>
<td>7639.48</td>
</tr>
<tr>
<td>Your government</td>
<td>1006.00</td>
<td>24.54</td>
<td>7.58</td>
<td>2296.19</td>
</tr>
<tr>
<td>Austral. government</td>
<td>383.00</td>
<td>23.94</td>
<td>7.96</td>
<td>950.94</td>
</tr>
<tr>
<td>Others</td>
<td>119.00</td>
<td>23.80</td>
<td>11.52</td>
<td>53.80</td>
</tr>
<tr>
<td>Total</td>
<td>3991.00</td>
<td>23.62</td>
<td>8.32</td>
<td>11417.41</td>
</tr>
</tbody>
</table>

**Between groups**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Sq</th>
<th>d.f.</th>
<th>Mean sq</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>54.59</td>
<td>3</td>
<td>18.20</td>
<td>.26</td>
<td>.85</td>
</tr>
<tr>
<td>Within groups</td>
<td>11417.41</td>
<td>165</td>
<td>69.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.26

**ANOVA Table for the comparison between acculturative stress scores with different religions**

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD. DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Religion</td>
<td>1455.00</td>
<td>23.85</td>
<td>8.84</td>
<td>4697.67</td>
</tr>
<tr>
<td>Muslim</td>
<td>1071.00</td>
<td>25.50</td>
<td>6.76</td>
<td>1872.50</td>
</tr>
<tr>
<td>Buddhism</td>
<td>421.00</td>
<td>24.76</td>
<td>9.54</td>
<td>1457.06</td>
</tr>
<tr>
<td>Christian</td>
<td>438.00</td>
<td>21.81</td>
<td>8.13</td>
<td>2780.512</td>
</tr>
<tr>
<td>Hinduism</td>
<td>106.00</td>
<td>17.67</td>
<td>5.24</td>
<td>137.33</td>
</tr>
<tr>
<td>Total</td>
<td>3991.00</td>
<td>23.62</td>
<td>8.17</td>
<td>10945.08</td>
</tr>
</tbody>
</table>

**Between groups**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Sq</th>
<th>d.f.</th>
<th>Mean sq</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>526.92</td>
<td>4</td>
<td>131.73</td>
<td>1.47</td>
<td>.10</td>
</tr>
<tr>
<td>Within groups</td>
<td>10945.08</td>
<td>164</td>
<td>66.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4.2. Acculturative Stress by level of study, number of visits home, financial situation, place of residence, language background and nationality.

This part presents differences between acculturative stress scores in relation to the level of study, visit home, financial situation, place of living, language background and nationality which are statistically significant.

Table 4.27
ANOVA Table for the comparison between undergraduate and postgraduate acculturative stress scores

<table>
<thead>
<tr>
<th>STUDY LEVEL</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>1796.00</td>
<td>22.17</td>
<td>8.02</td>
<td>5151.58</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2195.00</td>
<td>24.94</td>
<td>8.30</td>
<td>5996.71</td>
</tr>
<tr>
<td>Within Group Total</td>
<td>3991.00</td>
<td>23.61</td>
<td>8.17</td>
<td>11148.29</td>
</tr>
<tr>
<td>Source</td>
<td>Sum of Sq</td>
<td>d.f.</td>
<td>Mean of Sq</td>
<td>F</td>
</tr>
<tr>
<td>Between Groups</td>
<td>323.70</td>
<td>1</td>
<td>323.70</td>
<td>4.84</td>
</tr>
<tr>
<td>Within Group</td>
<td>11148.29</td>
<td>167</td>
<td>66.75</td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 4.27, postgraduate students' acculturative stress (M = 24.94) indicate higher levels of such stress than undergraduate students (M = 22.17) and the difference is statistically significant.

Table 4.28
ANOVA Table for the comparison between the subjects' acculturative stress and their visit home scores

<table>
<thead>
<tr>
<th>VISIT HOME</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1644.00</td>
<td>21.92</td>
<td>8.53</td>
<td>5391.52</td>
</tr>
<tr>
<td>One time</td>
<td>1284.00</td>
<td>25.68</td>
<td>6.62</td>
<td>2148.88</td>
</tr>
<tr>
<td>Two times or more</td>
<td>1063.00</td>
<td>24.16</td>
<td>9.01</td>
<td>3489.89</td>
</tr>
<tr>
<td>Within Group Total</td>
<td>3991.00</td>
<td>23.61</td>
<td>8.15</td>
<td>11030.29</td>
</tr>
<tr>
<td>Source</td>
<td>Sum of Sq</td>
<td>d.f.</td>
<td>Mean of Sq</td>
<td>F</td>
</tr>
<tr>
<td>Between Groups</td>
<td>441.71</td>
<td>1</td>
<td>220.85</td>
<td>3.32</td>
</tr>
<tr>
<td>Within Groups</td>
<td>11030.29</td>
<td>167</td>
<td>66.45</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.28 shows that those subjects who have not visited their home countries during their course of study have low levels of acculturative stress (Mean = 21.92), compared to those students who have visited home once (Mean = 25.68) or more times (Mean = 24.16).
Table 4.29
ANOVA Table for the comparison between acculturative stress scores with finance

<table>
<thead>
<tr>
<th>FINANCE</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD_DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>118.00</td>
<td>14.75</td>
<td>3.73</td>
<td>47.5</td>
</tr>
<tr>
<td>Good</td>
<td>773.00</td>
<td>18.40</td>
<td>8.04</td>
<td>2650.12</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>1988.00</td>
<td>24.85</td>
<td>7.42</td>
<td>4344.20</td>
</tr>
<tr>
<td>Poor</td>
<td>1066.00</td>
<td>29.61</td>
<td>5.17</td>
<td>936.56</td>
</tr>
<tr>
<td>Very poor</td>
<td>46.00</td>
<td>15.33</td>
<td>5.13</td>
<td>52.67</td>
</tr>
<tr>
<td>Within Groups total</td>
<td>3991.00</td>
<td>23.62</td>
<td>7.02</td>
<td>8081.04</td>
</tr>
<tr>
<td>Source</td>
<td>Sum of Sq</td>
<td>d.f.</td>
<td>Mean of Sq</td>
<td>F</td>
</tr>
<tr>
<td>Between groups</td>
<td>3390.96</td>
<td>4</td>
<td>847.74</td>
<td>17.20</td>
</tr>
<tr>
<td>Within groups</td>
<td>8081.04</td>
<td>164</td>
<td>49.27</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.29 shows the low level of acculturative stress for students with sufficient finance.

Table 4.30
ANOVA Table for the comparison between the respondents' acculturative stress scores and their place of residence

<table>
<thead>
<tr>
<th>RESIDENCE</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital city</td>
<td>1260.00</td>
<td>24.23</td>
<td>8.62</td>
<td>3787.23</td>
</tr>
<tr>
<td>Large town</td>
<td>1620.00</td>
<td>20.76</td>
<td>8.03</td>
<td>4969.85</td>
</tr>
<tr>
<td>Small town</td>
<td>1096.00</td>
<td>28.84</td>
<td>5.07</td>
<td>951.05</td>
</tr>
<tr>
<td>Within Groups total</td>
<td>3976.00</td>
<td>23.67</td>
<td>7.67</td>
<td>9708.13</td>
</tr>
<tr>
<td>Source</td>
<td>Sum of Sq</td>
<td>d.f.</td>
<td>Mean of Sq</td>
<td>F</td>
</tr>
<tr>
<td>Between Groups</td>
<td>1689.20</td>
<td>2</td>
<td>844.60</td>
<td>14.35</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9708.13</td>
<td>165</td>
<td>58.83</td>
<td></td>
</tr>
</tbody>
</table>

The data of Table 4.30 shows that students who were living in capital or large cities before coming to Australia, display a lower level of stress compared to those who were living in small towns.

Table 4.31
ANOVA Table for the comparison between acculturative stress scores of English and non-English language background

<table>
<thead>
<tr>
<th>ORIGINAL LANGUAGE</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>404.00</td>
<td>15.53</td>
<td>4.56</td>
<td>520.46</td>
</tr>
<tr>
<td>Non-English</td>
<td>3587.00</td>
<td>25.08</td>
<td>7.93</td>
<td>8946.99</td>
</tr>
<tr>
<td>Within Groups total</td>
<td>3991.00</td>
<td>23.61</td>
<td>7.53</td>
<td>9467.45</td>
</tr>
<tr>
<td>Source</td>
<td>Sum of Sq</td>
<td>d.f.</td>
<td>Mean of Sq</td>
<td>F</td>
</tr>
<tr>
<td>Between Groups</td>
<td>2004.55</td>
<td>1</td>
<td>2004.55</td>
<td>35.36</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9467.45</td>
<td>167</td>
<td>56.69</td>
<td></td>
</tr>
</tbody>
</table>

125
The mean of the acculturative stress scores for those subjects whose language background was English (M = 15.53) is statistically and significantly lower than those of a non-English background (Table 4.31).

### Table 4.32

ANOVA Table for the comparison between subjects' acculturative stress scores according to nationality

<table>
<thead>
<tr>
<th>NATIONALITY</th>
<th>SUM</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>SUM OF SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>200.00</td>
<td>18.18</td>
<td>6.14</td>
<td>377.63</td>
</tr>
<tr>
<td>China</td>
<td>499.00</td>
<td>27.72</td>
<td>7.56</td>
<td>971.61</td>
</tr>
<tr>
<td>Indonesia</td>
<td>730.00</td>
<td>26.07</td>
<td>7.29</td>
<td>1435.86</td>
</tr>
<tr>
<td>Thailand</td>
<td>194.00</td>
<td>19.40</td>
<td>5.56</td>
<td>278.40</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>189.00</td>
<td>27.00</td>
<td>8.90</td>
<td>476.00</td>
</tr>
<tr>
<td>Taiwan</td>
<td>233.00</td>
<td>29.12</td>
<td>8.89</td>
<td>552.87</td>
</tr>
<tr>
<td>Korea</td>
<td>145.00</td>
<td>29.00</td>
<td>6.96</td>
<td>194.00</td>
</tr>
<tr>
<td>America</td>
<td>398.00</td>
<td>15.92</td>
<td>6.07</td>
<td>883.84</td>
</tr>
<tr>
<td>Malaysia</td>
<td>574.00</td>
<td>28.70</td>
<td>6.41</td>
<td>782.20</td>
</tr>
<tr>
<td>Japan</td>
<td>206.00</td>
<td>17.17</td>
<td>5.90</td>
<td>383.67</td>
</tr>
<tr>
<td>Iran</td>
<td>604.00</td>
<td>25.17</td>
<td>6.97</td>
<td>1117.33</td>
</tr>
</tbody>
</table>

The result demonstrates that respondents with different nationalities have different acculturative stress scores, and that these differences are statistically significant.

### 4.5. The relationship between acculturative stress and acculturation, self-esteem and socio-demographic factors.

To determine the association between acculturative stress and acculturation, self-esteem and demographic variables, the data was submitted to Pearson's correlation, chi-square (x²), and multiple regression analyses. Relationships between acculturative stress, acculturation, self-esteem, age, and length of stay, as interval variables, can be measured by Pearson correlation. Chi-square was used to measure the association between acculturative stress and those nominal and ordinal variables (for example, sex, marital status, financial situation). Multiple regression accepts variables at any level of measurement and presents relationships and explains the variations of acculturative stress in terms of each independent variable. To use Chi-square in the survey, the
author had to categorise acculturative stress scores. Acculturative stress scores were classified in terms of quantities:

10-16 = 1, 17-24 = 2, 25-30 = 3, 31-47 = 4

Number one in the chi-square means the lowest level of acculturative stress and number 4 is the highest level of acculturative stress. In the first part of this section, the relationships between acculturative stress (dependent variable) and acculturation, self-esteem, age, and length of stay (independent variables) are presented by using the Pearson Correlation. The second part shows the association between acculturative stress (dependent variable) and those nominal and ordinal variables (independent variation), by using Chi-square. In the third part, multiple regression will be applied.

4.5.1 Acculturative stress by acculturation, self-esteem, age, and duration of stay.

Relating scores of acculturative stress, acculturation, self-esteem, age, and duration of stay in Australia, revealed real relationships between acculturative stress and acculturation, self-esteem, and age of the subjects. Results are presented below in Table 4.33.

<table>
<thead>
<tr>
<th>ACCULTURATIVE STRESS</th>
<th>r</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>-0.68</td>
<td>.01</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-0.63</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>0.26</td>
<td>.05</td>
</tr>
<tr>
<td>Duration of stay</td>
<td>0.09</td>
<td>.35</td>
</tr>
</tbody>
</table>

The results indicated negative and significant relationships between acculturative stress and acculturation (r = -0.68, Sig = .01), self-esteem (r = -0.63, Sig = .01) and there were positive and significant associations between acculturative stress and age (r = 0.26, Sig = .05). This means that those students with a high level of acculturation and self-esteem have a low level of acculturative stress and that older students have a higher level of acculturative stress than younger students. The results did not reveal any significant relationship between acculturative stress and duration of stay in Australia.
4.5.2 Acculturative stress by independent variables (nominal and ordinal variables).

To examine associations between acculturative stress and the independent variables (marital status, faculty, level of study, visit home, payment fees, financial situation, place of residence, religion, language background, and nationality), which are measured nominal and ordinal levels, Chi-square analyses are applied: the results indicate that there are not any statistically significant relationships between acculturative stress and sex, marital status, faculty, level of study, and payment fees (see Appendix 1, 2, 3, 4 and 5 for statistical details), but it has significant association with the remaining variables.

Associations between acculturative stress and remaining variables (visiting home, financial situation, place of residence, language background, religion, nationality) were significant. The results are shown in Tables 4.34, 4.35, 4.36, 4.37, 4.38 and 4.39.
Table 4.34

<table>
<thead>
<tr>
<th>Acculturative Stress</th>
<th>Visit</th>
<th>Not at all</th>
<th>One time</th>
<th>Twice or more</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>28</td>
<td>6</td>
<td>10</td>
<td>44 (26.0%)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>16</td>
<td>13</td>
<td>10</td>
<td>39 (23.1%)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>16</td>
<td>20</td>
<td>12</td>
<td>48 (28.4%)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>15</td>
<td>11</td>
<td>12</td>
<td>38 (22.5%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>75 (44.4%)</td>
<td>50 (29.6%)</td>
<td>44 (26.0%)</td>
<td>169 (100.0%)</td>
</tr>
</tbody>
</table>

Chi-square Value: 12.65, d.f.: 6, Sig: .04
Likelihood Ratio Value: 12.65, d.f.: 6, Sig: .04
Statistics Contingency Coefficient: .26, Approximate Sig: .04

Relating levels of acculturative stress to a different number of times visiting the home country, indicated real differences between the acculturative stress of those students who had not visited their home country and those who visited one or more times. The results suggest positive and significant relationship between acculturative stress and visits to the home country (contingency coefficient = .26, Sig = .04) in Table 4.36.

Table 4.35

<table>
<thead>
<tr>
<th>Acculturative Stress</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>6</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>8 (4.7%)</td>
</tr>
<tr>
<td>Good</td>
<td>24</td>
<td>7</td>
<td>8</td>
<td>3</td>
<td>42 (24.9%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>11</td>
<td>26</td>
<td>25</td>
<td>18</td>
<td>80 (47.3%)</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>17</td>
<td>36 (21.3%)</td>
</tr>
<tr>
<td>Very poor</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3 (1.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>44 (26.0%)</td>
<td>39 (23.1%)</td>
<td>48 (28.4%)</td>
<td>38 (22.5%)</td>
<td>169 (100.0%)</td>
</tr>
</tbody>
</table>

Chi Square Value: 72.11, d.f.: 12, Sig: .00
Likelihood Ratio Value: 72.11, d.f.: 12, Approximate Sig: .00
Statistics Contingency Coefficient: .73, Approximate Sig: .00
Kendall's Tau-b: .65

The results show that the students' financial situations correlate closely with their acculturative stress levels. An analysis of levels of acculturative stress which distinguished the respondents according to different financial situations indicated that those of better financial situations were significantly less stressed than those of poor
financial situations. The association between acculturative stress and financial situations is positive, and significant (Kendall's Tau-b = 0.65).

Table 4.36

Acculturative stress by place of residence

<table>
<thead>
<tr>
<th>Residence</th>
<th>Capital city</th>
<th>Large town</th>
<th>Small town</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative Stress</td>
<td>10</td>
<td>32</td>
<td>1</td>
<td>43 (25.6%)</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>19</td>
<td>5</td>
<td>39 (23.2%)</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>48 (28.6%)</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>11</td>
<td>16</td>
<td>38 (22.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>52 (31.0%)</td>
<td>78 (46.4%)</td>
<td>38 (22.6%)</td>
<td>168 (100.0%)</td>
</tr>
<tr>
<td>Chi Square Value</td>
<td>34.78</td>
<td>d.f.</td>
<td>6</td>
<td>Sig</td>
</tr>
<tr>
<td>Likelihood ratio</td>
<td>.00</td>
<td>Statistics Value</td>
<td>Approx. Sig</td>
<td></td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.40</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Marked differences were found between the level of acculturative stress of those who were living in capital or large cities and those who were living in small towns before coming to Australia. The association between the place of residence and acculturative stress (contingency coefficient = .40, Sig = .00) suggests that the acculturative stress of the subjects who lived in small towns was significantly higher than those who lived in large towns.

Table 4.37

Acculturative stress by language background

<table>
<thead>
<tr>
<th>Language Background</th>
<th>English Background</th>
<th>Non-English background</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative Stress level</td>
<td>17</td>
<td>27</td>
<td>44 (26.0%)</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>32</td>
<td>39 (23.1%)</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>46</td>
<td>48 (28.4%)</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>38</td>
<td>38 (22.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>26 (15.4%)</td>
<td>143 (84.6%)</td>
<td>169 (100.0%)</td>
</tr>
<tr>
<td>Chi Square Value</td>
<td>33.07</td>
<td>d.f.</td>
<td>3</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.00</td>
<td>Statistics Value</td>
<td>Approx. Sig</td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.39</td>
<td>.00</td>
<td></td>
</tr>
</tbody>
</table>

The data indicates a positive and significant relationship between acculturative stress and language background (contingency coefficient = .39 Sig = .00). This means that subjects with non-English language backgrounds have higher acculturative stress than English language background subjects.
Table 4.38

Acculturative stress by religion

<table>
<thead>
<tr>
<th>Acculturative Stress level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No religion</td>
<td>20</td>
<td>8</td>
<td>15</td>
<td>18</td>
<td>61 (36.1%)</td>
</tr>
<tr>
<td>Muslim</td>
<td>4</td>
<td>13</td>
<td>15</td>
<td>10</td>
<td>42 (24.9%)</td>
</tr>
<tr>
<td>Buddhism</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>17 (10.1%)</td>
</tr>
<tr>
<td>Christian</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>7</td>
<td>43 (25.4%)</td>
</tr>
<tr>
<td>Hindu</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>6 (3.6%)</td>
</tr>
</tbody>
</table>

Total 44(26.0%) 39(23.1%) 48(28.4%) 38(22.5%) 169 (100.0%)

Chi-Square Value 21.90 d.f. 12 Sig .03
Likelihood Ratio Value Approx sig
Contingency Coefficient .30 .05

Table 4.38 displays differences between the acculturative stress scores of subjects who have come from different religious backgrounds. Statistically significant differences in acculturative stress scales for different religious backgrounds were found.

Table 4.39

Acculturative stress by nationality

<table>
<thead>
<tr>
<th>Acculturative Stress level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>18 (10.7%)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>7</td>
<td>28 (16.7%)</td>
</tr>
<tr>
<td>Thailand</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>10 (6.0%)</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>7 (4.2%)</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>8 (4.8%)</td>
</tr>
<tr>
<td>Korea</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5 (3.0%)</td>
</tr>
<tr>
<td>America</td>
<td>17</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>25 (14.9%)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>9</td>
<td>20 (11.9%)</td>
</tr>
<tr>
<td>Japan</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>12 (7.1%)</td>
</tr>
<tr>
<td>Iran</td>
<td>2</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>24 (14.3%)</td>
</tr>
<tr>
<td>India</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>11 (6.5%)</td>
</tr>
</tbody>
</table>

Total 44(26.2%) 39(22.6%) 49(28.6%) 39(22.6%) 168 (100.0%)

Statistics Value 59.81 d.f. 30 Sig .000
Chi-square Value Approx sig
Contingency Coefficient .48 .007

Table 4.39 assesses differences between acculturative stress scores of students from various countries. Statistically significant differences in acculturative stress scores were found between different nationalities.
4.5.3. Multiple Regression

The advantage of the use of the multiple regression analysis technique is its display of the combined effects of a set of independent variables as well as the separate effects of each independent variable controlling on the others. Multiple regression enables us to express the variations of acculturative stress scores which are explained by every independent variable considered in the study. Independent variables used in the multiple regression equation are as follows: acculturation, self-esteem, age, level of study, visit home, financial situation, place of living, language background, and nationality. Some of the variables are interval (e.g., acculturation scores) and are placed in the regression equation directly, while others are nominal (e.g., language background) and are transformed into dummy variables. The means, standard deviations, cases and correlation matrixes of the variables are demonstrated in tables 40 and 41 (part A and part B). To explain the variation of acculturative stress scores (dependent variables) based on acculturation, self-esteem, and the socio-demographic factors (independent variables), the data was submitted to stepwise multiple regression. This technique enables us to explain: the correlation between the dependent variable and the entire set of independent variables multiple R; and the proportion of variance in the dependent variable associated with variance in any of the independent variables beta 1, the significance level of F for multiple R, and T statistics, that is, a measure of the distance of beta from zero in a probability distribution. The significance of T is the probability that such a deviation from zero would be due to sampling error.
Table 4.40
Mean, standard deviation and number of subjects of the variables

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MEAN</th>
<th>STD.DEV</th>
<th>CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative stress</td>
<td>23.62</td>
<td>8.26</td>
<td>169</td>
</tr>
<tr>
<td>Acculturation</td>
<td>42.56</td>
<td>7.96</td>
<td>171</td>
</tr>
<tr>
<td>Self esteem</td>
<td>17.65</td>
<td>4.03</td>
<td>173</td>
</tr>
<tr>
<td>Age</td>
<td>27.91</td>
<td>7.87</td>
<td>173</td>
</tr>
<tr>
<td>Financial situation</td>
<td>3.10</td>
<td>0.84</td>
<td>173</td>
</tr>
<tr>
<td>Nations:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>China=D1</td>
<td>0.1</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>Indonesia=D2</td>
<td>0.16</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Thailand=D3</td>
<td>0.06</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Hong Kong=D4</td>
<td>0.04</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Taiwan=D5</td>
<td>0.05</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Korea=D6</td>
<td>0.03</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Malaysia=D7</td>
<td>0.12</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Japan=D8</td>
<td>0.07</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Iran=D9</td>
<td>0.15</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>India=D10</td>
<td>0.07</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Language:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>Non-English=D11</td>
<td>0.84</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Residence:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>Large City=D12</td>
<td>0.46</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Small Town=D13</td>
<td>0.22</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Visits:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>One time = D 14</td>
<td>0.29</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>Twice or more=D15</td>
<td>0.26</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Payment:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>Your Government=D16</td>
<td>0.25</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Austral. Gov.=D17</td>
<td>0.10</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Others=D18</td>
<td>0.03</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Religion:</td>
<td></td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>Muslim=D19</td>
<td>0.25</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Buddhist=D20</td>
<td>0.10</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Christian=D21</td>
<td>1.26</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Hindu=D22</td>
<td>0.03</td>
<td>0.18</td>
<td>173</td>
</tr>
</tbody>
</table>
### Correlation matrix and 2-tailed significance of the variables

#### Table 4.4.1 (Part A)

<table>
<thead>
<tr>
<th></th>
<th>D2</th>
<th>D22</th>
<th>D23</th>
<th>D24</th>
<th>D25</th>
<th>D26</th>
<th>D27</th>
<th>D28</th>
<th>D29</th>
<th>D30</th>
<th>D31</th>
<th>D32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selt bsteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- E = Age
- D = Selt bsteem
- C = Financial situation
- B = Acculturative stress
- A = Acculturative

**Significant Level:**
- 0.05
- 0.10
- 0.20
- 0.30
- 0.40
- 0.50
- 0.60
- 0.70
- 0.80
- 0.90
- 1.00
- **+** = 0.01
- **+** = 0.005
- **+** = 0.001
Correlation matrix and 2-tailed significance of the variables

Table 4.41 (Part B)
4.5.3.1 The effect of acculturation on acculturative stress: forward regression.

Acculturative scores of the sample were entered into the regression equation in the first step. The results indicated a high and significant correlation (R = 0.679  Sig F = .0000) between acculturative stress and acculturation of the respondents. Furthermore, about 46% (R² = 0.461) of the variation in the acculturative stress scores are explained by acculturation scores. The beta coefficient showed a negative and significant relationship between acculturation and acculturative stress (beta = -.68  Sig T = .0000). This means that persons with high level of acculturation show low level of acculturative stress. The results are presented below in Table 4.42.

Table 4.42

<table>
<thead>
<tr>
<th>Regression of acculturative stress on acculturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R = 0.679</td>
</tr>
<tr>
<td>R Square = 0.461</td>
</tr>
<tr>
<td>Adjusted R = 0.457</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Acculturation</td>
</tr>
</tbody>
</table>

4.5.3.2 The effect of self esteem on acculturative stress

In the second step, self-esteem was added to acculturation and entered in the regression equation. The results showed high and statistically significant correlation between acculturative stress and these two independent variables (R = 0.727  Sig F = .0000). Acculturation and self-esteem together explain about 53% (R² = 0.529) of the variation of acculturative stress scores, of which 7% belongs to self-esteem. The beta coefficient indicated that the relationship between acculturative stress and self-esteem is negative and significant (beta = -.33  Sig T = .0000). The results are presented below in Table 4.43.
Table 4.43

Regression of acculturative stress on self esteem and acculturation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>T</th>
<th>Sig T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>-.47</td>
<td>-6.95</td>
<td>.0000</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>-.33</td>
<td>-4.88</td>
<td>.0000</td>
</tr>
</tbody>
</table>

5.4.3.3 The effect of nationality on acculturative stress

In the last step, nationality is added to acculturation and self-esteem and entered in the equation. The results indicate that the correlation between acculturative stress and the set of 3 independent variables is high (R = 0.770) and statistically significant (Sig F = .0000). These independent variables explain about 59% (R2 = 0.593) of other acculturative stress scores of which about 6% belongs to nationality. Beta coefficients (which are statistically significant) of the following nationalities show a higher level of acculturative stress than that experienced by American students: Taiwanese (15% higher), Korean (12% higher), Malaysian (20% higher), Chinese (12% higher), and Indonesian (13% higher). The results are presented below in Table 4.44.

Table 4.44

Regression of acculturative stress on nationality, self-Esteem, and acculturation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>T</th>
<th>Sig T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>-.39</td>
<td>-4.82</td>
<td>.0000</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>-.31</td>
<td>-4.54</td>
<td>.0000</td>
</tr>
<tr>
<td>D1</td>
<td>.12</td>
<td>2.71</td>
<td>.0103</td>
</tr>
<tr>
<td>D2</td>
<td>.13</td>
<td>2.66</td>
<td>.0144</td>
</tr>
<tr>
<td>D3</td>
<td>-.05</td>
<td>-.085</td>
<td>.3901</td>
</tr>
<tr>
<td>D4</td>
<td>.01</td>
<td>.03</td>
<td>.8111</td>
</tr>
<tr>
<td>D5</td>
<td>.15</td>
<td>2.44</td>
<td>.0108</td>
</tr>
<tr>
<td>D6</td>
<td>.12</td>
<td>2.77</td>
<td>.0100</td>
</tr>
<tr>
<td>D7</td>
<td>.20</td>
<td>2.72</td>
<td>.0104</td>
</tr>
<tr>
<td>D8</td>
<td>-.03</td>
<td>-.46</td>
<td>.6457</td>
</tr>
<tr>
<td>D9</td>
<td>.05</td>
<td>.68</td>
<td>.4936</td>
</tr>
<tr>
<td>D10</td>
<td>-.01</td>
<td>-.24</td>
<td>.8064</td>
</tr>
</tbody>
</table>
CHAPTER 5

DISCUSSION

5.1. Introduction

The findings of this study reveal new information describing the influence of acculturation, self-esteem and socio-demographic variables upon the acculturative stress of international students at the University of Wollongong. Significant differences noted between students indicate that acculturation, self-esteem and socio-demographic factors influence the acculturative stress of students in various ways.

The study's results reflect the important roles of acculturation, self-esteem and nationality in acculturative stress. Discussion of the results follow, divided into three parts. The first part discusses the role of acculturation in acculturative stress. The second part discusses self-esteem as a predictor of acculturative stress, and the last part discusses some socio-demographic variables influencing acculturative stress.

5.2. The Role of Acculturation in Acculturative Stress

This research aims to describe acculturation particularly in terms of its interactions with acculturative stress. The analysis survey results indicated a negative and significant relationship between acculturative stress and acculturation ($r = -0.68$, Sig = .01, Table 4.33). This indicates that students with a high score on acculturation have a low score on acculturative stress. Furthermore, about 46% ($R^2 = 0.461$) of the variation in the acculturative stress scores is explained by acculturation Table 4.42. These findings agree with a study by Padilla et al. (1985) who found that acculturation of students was a good predictor of stress. Several explanations can be suggested to account for the relationships between acculturation and stress.

Acculturation is firstly a function of foreign students' communication with members of the host culture, and lack of integration with the host community is likely to be
associated with high levels of stress. This view is supported by Ruben (1983) and Kealey (1989) who empirically confirm the relevance of communicative competencies acculturation of international students. They suggested that contact with the Australian culture will lead to greater effectiveness in transferring skills and knowledge, and to less associated stress. It seems clear that high contact can lead to an increased satisfaction, because contact assists people to be successful in meeting their own expectations and desires; also the contact presumably enriches the personal lives of both parties involved.

Satisfaction with relevant areas is positively correlated with acculturation; this point is supported by Searle and Ward (1990), who find that satisfaction with host/national relations predict psychological adjustment in students of Malaysia and Singapore living in New Zealand. In Australia, also, Scott and Stumpf (1984) and Taft (1986) suggest that life satisfaction is an important indicator of successful adaptation. Those who reported higher satisfaction had fewer mental health problems, greater contact with and participation in the society at large, greater knowledge of English, positive motivation, felt at home in the host country, and had fewer problems with homesickness, language, prejudice and loneliness.

Relationships with host nationals are effective in predicting some forms of the students adjustment. This point seems to be supported by Searle and Ward's (1990) social learning models which emphasises culturally appropriate skills and behaviours acquired through host-contact and cross-cultural experience. As well as acknowledging the importance of interpersonal relationships, this model specifies that host friendships are crucial for learning the skills of a new culture. From this perspective, it is postulated that cross-cultural problems may arise because the students have difficulty negotiating daily conversational and social encounters. Increased contact with the host culture could enable students to have greater social participation including the development of conversational skills.
Increased social interaction between members of different cultural groups should result in more favourable attitudes amongst individual members. Brislin (1981) and Church (1982) report that those with unfavourable opinions of their host cultures are more likely to experience depression. One interpretation states that attitude will affect contact with host individuals, which in turn will facilitate more acculturation. It seems that social interaction is associated with higher levels of satisfaction and lower levels of stress. This agrees with research suggesting that host friendships are one of the greatest sources of satisfaction for the international students, and that support from other host people helps to increase satisfaction and lower stress, for those in the overseas situation.

Another reason for the relationship between acculturation and stress is the social participation which familiarises strangers to the new society, and which is influenced by the acculturation process. Taft (1985) argues that social interaction becomes a part of the acculturation process to the degree that sojourners are involved interacting with members of the majority community. It may be possible that students in the situation of separation are in the least satisfactory alternative. In the integration mode "involvement in two cultural systems may provide the most supportive socio-cultural base for the individual" (Kim 1988, p. 213). Fortunately, Australia has attempted to promote an integration mode of acculturation, and to avoid assimilation, separation or marginalisation (Ekstrand, 1986). Integration which is combined with acculturation may result in better psychological adjustment. This point seems to be supported by Phinney, et al., (1992), who indicate by their study that attitudes toward integration were positively correlated with self-esteem, more social participation and well-being. The author believes that if the student doesn't integrate her/himself into the new environment, his or her expectations will not be realistic; and this is very important in the cross-cultural adjustment process. In relation to expectations, Chochrane (1983) emphasises the necessity for realistic expectations which are required for psychological well-being. Unrealistic expectations can affect an individual's ability to become unable
to cope with social demands; conflicts may arise including stressful social demands from new environmental surroundings.

Students in separation mode will find themselves in unfamiliar situations where they have inadequate cues for behaviour; they may be unable to participate socially and as a consequence suffer stress. Also, the successful cross-cultural adaptation of strangers is realised only when their communication with nationals is sufficient; but in separation situations there is insufficient communication between the stranger and host. One of the important factors in social interaction is the coping strategy in the new environment, and this is also influenced by racial identity and appraisals. The students may develop poor social interaction with the host due to lack of acculturation or because of inter-group attitudes such as prejudice. The host society may formulate plans to help minimise prejudices and ethnocentrism, and to maximise the awareness, attitudes and skills for effective intercultural communication.

Effective coping strategies will lead to adaptation and reduction of stress. It seems that strong ethnic identity without acceptance by the majority culture may set off added psychological conflicts. The influence of ethnic identification upon adjustment may be moderated by the presence of adaptation to the dominant culture.

In both of Ward and Kennedy's (1993) multinational samples of foreign students in New Zealand, a strong cultural identity is associated with increased social difficulties relating to the host culture. Stress may be created by mismatches between individual and social identities; this theme is evident in the sociological concepts of alienation. Some investigations have shown that alienation is associated with an external locus of control with feelings of powerlessness and uncertainty in foreign groups, leading to social difficulty and stress (Reimanis and Posen 1980).

Acculturation can affect socio-cultural adjustment activities through knowledge about the host culture and the host communication systems. It can be postulated that the students who demonstrate the greatest understanding of the host counterparts are
relaxed and satisfied with their life abroad. In contrast, less acculturated international students will be faced with higher degrees of uncertainty and will be unfamiliar with various aspects of the new cultural environment. Their initial perception of the unfamiliar host environment maybe dictated simply by learned stereotypes defining the environment, instead of by accurate insights. As Gudykunst and Hammer (1988) clearly expressed (based on the uncertainty reduction theory), strangers' adaptation is essentially a process of reducing the unpredictable elements of the host society by increasing their knowledge about the environment. When acculturation and contact occur under favourable conditions, understanding will develop.

When students do not have cognitive awareness of behaviour codes, they experience feelings of uncertainty and insecurity which can cause stress. This view is supported by Brislin (1981), who found that cross-cultural interaction created stress when the participants did not possess sufficient knowledge about cultural norms and values. It is suggested that knowledge of the host culture is associated positively with favourable contact and with strangers developing intimate relationships through interacting with host nationals.

Cultural learning enabled students to differentiate their own cognitive patterns from those of the host culture, and also to gradually increase their capacity for co-orientation with members of the host country. International students with a complex cognitive structure tended to show better differentiation of the number of dimensions in their personal construct, in order to better integrate them into a meaningful whole. A number of studies have shown the increasing differentiated perceptual organisation of strangers, over time. For example, Coelho (1958) found that Indian students in the United States showed increasingly differentiated perspectives on the American Culture, by being able to articulate the host culture with increasing detail, variety and scope over a period of 36 months.
By acculturation, international students become capable of recognising and identifying the contextual and individual differences of the cultural patterns; this provides them with a greater ability to maximise their adaptation or functional fitness in the host society. This belief is supported by Kim (1988) who argues that strangers with high cognitive complexity can view events in the host society with a more advanced, refined, differentiated, elaborated and integrated manner. Change in cognitive complexity enables the person to increase compatibility with host nationals, thus gaining more adjustment with less stress. Acculturation can affect adjustment activity by participation in various inter-personal and mass communication events, such as communications taking place in restaurants, supermarkets, highways, mass media, and library activities. Strangers receive input from the new environment which potentially provides them with the basis for an adaptive transformation.

The relational network of students has the potential to serve many important functions in facilitating their adaptation to the host culture. Perhaps the most widely recognised adaptive function is the provision of emotional support to the students who rely on it for a sense of security and well-being. The relational network helps to ease the loneliness, stress and difficulty that the strangers may encounter, particularly during the initial phase of the adaptation process. The relational network provides students with information and 'feedback' that could ease and promote their adaptive changes. Through various interpersonal contacts in the network, students are exposed to the non-verbal behaviour, the aesthetic values and emotional sensitivities of the host culture. They learn not only what to do, but also how they are doing in comparison to the nationals. During the initial phase of socio-cultural adaptation, cultural sub-committees can assist the new students to become familiarised with the new cultural setting while allowing them to maintain their traditional values and belief systems. The sub-committees may become a student protection service by supporting their psychological security, self-esteem and a sense of belonging; thus, their anxiety, feelings of powerlessness and social stresses are reduced.
Mass communication experiences are assumed to be positively associated with several other aspects of cross-cultural adaptation. Hong (1980) demonstrated by empirical data support, the adaptive function of host mass media use. The immigrants' exposure to American mass media (the amount and frequency of exposure to radio, television, magazines, newspapers and movies), together with their American relationships were found to be significantly related to cultural learning as exhibited in the immigrant's refined understanding of American friendship patterns (Kim, 1980).

The author believes that the adaptive function of host mass communication is more important during the initial phase of the adaptation process, during which time the students have not yet developed sufficient host communication competence to become involved with satisfactory interpersonal relationships in the host community. Because it seems that direct contact with native people is often frustrating and stressful for strangers. Kim (1988) explains that direct negative feedback from the natives can be overwhelming for the strangers. They like to avoid direct inter-personal relationships when they can, and so they resort to less personal, and more indirect mass communication as alternative and virtually pressure-free sources of learning about the host environment.

Second language competency is related to acculturation. The ability of students to use the host language is also a function of their desire for integration into the host culture and of their motivation to study the language and it includes the individual's ability to cope with uncertainty and continued adjustment with a new environment. This view is supported by Kim (1988), who indicated that knowledge of the host language is the most important aspect of host communication competence.

When students cannot acquire sufficient host language knowledge they will often have a history of extensive and continuous frustration. Integration and favourable contact with members of the host culture along with second language competence are found to be reciprocally related by adjustment researchers (Gullahorn and Gullahorn, 1963).
Competence in a second language is also influenced by shared communication networks and participation in a language community positively affects fluency in the language. This view is supported by research on learning a second language in informal environments. Students must learn the host language if they wish to function and participate in the host environment.

Students who separate themselves from the host community (less acculturation) cannot communicate with the nationals effectively and are unable to participate in direct encounters with them, as well as in host mass communication processes. In addition, host language competence enables the cultural stranger to think as native speakers think, because language patterns and thought patterns are closely inter-related. Moreover, the host language can be a source of power for strangers. As Bourdieu (1979) pointed out, "a person speaks not only to be understood, but also to be believed, obeyed, respected, distinguished" (p.19). All studies on cross-cultural adaptation have included language competence as an important indicator of acceptation (Kim 1988). For example, Nishida (1985) found that English competence of Japanese students in the United States stood out most clearly as significantly related with interactional effectiveness. Also, Defleur and Cho (1957) included 'language behaviour' as one of the crucial areas in their 'Index of Acculturation'.

Low acculturation leads to lesser contact with the host society and to lack of knowledge of host non-verbal behaviour. Student strangers need to learn the non-verbal behaviour patterns of the host culture, just as they need to learn the host language, because their aim is to become communicatively competent. The inadequacy of the students' less conscious elements of non-verbal behaviour brings tension and discomfort to themselves and to the nationals. When less acculturated students are exposed to conflicting values, beliefs, attitudes, and practices of the new culture, they are confronted with the necessity to communicate successfully with the host environment; they must communicate in order to achieve their own successful adaptation. Through communication competency the students will be able to manage the activities of daily
living appropriately and effectively, thereby becoming functionally fit in the new
cultural milieu. Because acculturation and inter-cultural adaptation are functions of
uncertainty, reduced stress and the reduction of uncertainty and stress are functions of
stereotypes, favourable contacts, shared networks, intergroup attitudes, cultural
identity, second language competence and knowledge of the host culture.

It can be said that the students need to develop their ability to communicate effectively
and efficiently, using the systems of language, non-verbal behaviour and
communication rules prevalent in Australia, even though it is difficult for them to
change their traditional attitudes quickly. They also are required to equip themselves
for an effective orientation, especially with a strong willingness to participate in the
host environment while accepting an affirmative attitude towards both themselves and
the environment. Additionally, they need special skills in preparation to successfully
perform in various social encounters with host nationals.

The international students' lecturers and supervisors can assist the process of change
by recognising the cultural roots, explaining the Australian style of learning, modelling
appropriate behaviour (including patterns of thinking), and encouraging and approving
effective study habits. Also, there is a need to provide support, sympathy and
encouragement to the University Students.

The host society needs to do what it can to facilitate the acculturation of students,
particularly to promote the overall public receptiveness toward the students, making
them feel welcomed and encouraged to become more integration and better sociacul-
cultural adjustment.

5.3. The role of self-esteem in Acculturative Stress

A secondary aim of this study is the description of self-esteem as a predictor of
acculturative stress. The results indicate negative and significant relationships between
acculturative stress and self-esteem ($r = -0.63$, Sig = .01, Table 4.33). As predicted,
the international students who were higher in self-esteem tended to have less acculturative stress. Multiple regression analysis shows that self-esteem accounts for 7% of acculturative stress variation ($R^2 = 0.068$). The association between self-esteem and stress has been consistently demonstrated in relevant research; for example, Schwarzer, et al., (1986) found self-esteem to be an important predictor of acculturative stress among 397 urban multi-ethnic high school students. Coopersmith (1967) also indicates that stress was negatively correlated with self-esteem. Walsh and Walsh (1988) find that self-esteem was related to the experience of stress amongst immigrants. They argue that low self-esteem may cause psychological problems as well as added environmental-adjustment conflicts.

Research on immigrant personality also indicates that constructs such as self-esteem have been associated with adaptation. Self-esteem is found to be a significant correlate of stress in three generations of Japanese-Americans, as documented in studies by Padilla, et al., (1985). Students who face a new culture in a host country experience some stressful events. Self-esteem may facilitate a person's adaptation to a foreign society; Searle and Ward (1990) describe self-esteem as an important personality variable working within a stress and coping framework. Bandura (1982) also indicates that a personal belief in one's own ability to cope with a particular demand is related to a reduce stress response and a more positive outcome.

Self-esteem may reduce stress by the increased usage of social resources, supportive services and effective coping. Carpenter (1992) argues that self-esteem influences the student's choice of coping activities and good coping strategies in a new environment; it leads to reducing or avoiding stress by lessening demands, changing the stressor, increasing resources, creating more favourable beliefs and appraisals, or by diminishing the emotional reaction to stress.

Effective coping gives direction toward certain outcomes including the psychological and physiological concomitants of the stress response, as well as broad outcomes like
health and well-being. It is suggested that the combination of self-esteem, social resource-choices and coping skills determine coping effectiveness. Gudykunst and Hammer (1985) argue that strangers' use of appropriate coping strategies as well as their shared network, intimacy, attraction to host nationals, and favourable contacts are associated positively with their second language competence and their knowledge of the host culture, both of which have an important role in cross-cultural adjustment and well-being.

Carpenter (1992) explained that individuals unable to use the supportive services and social resources also cope ineffectively because of feelings of helplessness and of low self-esteem. The author believes that foreign students with low self-esteem are less able to use suitable and available coping strategies. For example, they are less able to use interpersonal coping activities such as effective communication in sharing, negotiation, and intimacy in response to stressful appraisal or criticism. While Carpenter (1992) argues that problem-focused coping is designed to reduce the imbalance between demands and resources, it seems that various factors motivating self-esteem can decrease the number of relationships and interactions of students with the host community.

One of the possible reasons for this decrease is that the positive or negative attitude of international students as strangers toward the host environment is associated with their positive or negative attitude toward themselves. Kim (1988) argues that "the more accepting they are of their life in the host society, the more accepting of the host society they are likely to be" (page 101). On the other hand, low self-esteem is likely to lead international students into self-alienation and withdrawal from the host community. They may have feelings of greater interpersonal distance, move away from people, and perceive others as less trustworthy, and thus restraining their adaptation processes.

Another reason may be that in contrast to people with high self-esteem, low self-esteem individuals do not respect and accept themselves in a realistic way, and they will
apparently encounter a lower estimation of their self-worth. They also do not accept and respect the host nationals which prevents the development of positive host relationships. Since they are accustomed to experiencing failure, they are willing to accept negative feedback and to reject favourable feedback (McFarlin and Blascovich, 1981).

Relevant research demonstrates the association between self-confidence and the communication-adaptation patterns of strangers. The students' confidence in their ability to speak English would be important influence on the development of social relationships. Also, students who are insecure are likely to seek social support from less threatening ethnic individuals. Studies of Indo-Chinese refugees in the United States have emphasised the importance of positive self-confidence in their adaptation English-as-a-second-language classes (Office of Refugee Resettlement, 1984). Discussions with teachers and students in implied that lack of self-confidence, depression and trauma hindered the refugees' learning progress (Kim 1988). In addition to these research examples, much of the 'loneliness' literature confirms the assertion that involvement in meaningful and fulfilling relationships is related to self-esteem (Office of Refugee Resettlement, 1984).

Self-esteem may be related to satisfaction with friends, recreation, other students, and national government; it may also be associated with the availability of friends and the frequency of social interaction. It seems that students' lack of self-esteem may lead to social patterns of marginality and alienation, social isolation and discontent with their abilities and interpersonal comfort which are factors that differentiated minorities who were hospitalised from those who were not.

Self-esteem may reduce the effect of stressors by increasing stress resistance, and as a coping resource aide in stress resistance at an event occurrence. Those with high self-esteem have control over a stressor which may reduce or modify the stressor itself, while the low self-esteem students have low resistance to and low control over
stressors. This view is supported in studies by Leiberman (1987) and Hobfoll and London (1986) who found that women with positive self-evaluations had more resistance to stress in a crisis situation.

Self-esteem controls or moderates help-seeking and the reactions to receiving help. Research in the context of help-seeking and receiving indicates that the recipients' self-esteem plays a major role in the determination of sensitivity to self-threat in receiving aid. Low self-esteem students are less sensitive than high self-esteem persons to the self-threatening elements of relative inferiority and inadequacy which are associated with seeking and receiving help. The students with low self-esteem will have diminished commitment to the norm of reciprocity in interpersonal helping and be more likely to seek help which cannot be reciprocated. As Baumeister (1982) states, individuals with negative self-confidence do not aspire to excel and to seek opportunities for doing so; they aspire to be adequate or satisfactory and they seek to remedy their deficiencies. Coopersmith (1967) described the cues of inferiority and dependency inherent in seeking and receiving as being inconsistent with positive self-confidence. For low-esteem individuals, the self-threatening cues inherent in receiving help were assumed to be relatively consistent with unfavourable self-confidence.

Self-esteem predicts achievement, accomplishment and psychological well-being. A student with low self-esteem may lack confidence to believe that he or she can accomplish his/her task. Thus, they neglect the use of their potential abilities and available resources related to their improvement and success. It seems that students with low self-esteem do not increase their efforts and persistence in response to failure. Therefore they do not successfully cope when dealing with life crises. The students low in self-esteem are primarily interested in tasks needing improvement to reach minimum standards or levels of competence. Even success does not motivate them to pursue the task or to produce continued good performance. This may be because the students with low self-esteem see themselves as failures; they will anticipate failure and they will not likely engage in activities leading to success. Their expectations to
succeed are less than the students with high self-esteem and their foundation or base is a sense that one's efforts often come short of achieving success.

Self-esteem reduces stress by positive appraisal of stressors. It is an important personal resource in the appraisal which people make of their acculturation experience. Through their belief about self and about others, a cognitive evaluation of their potential stressors occurs. Even as the attitudinal and cognitive perspective suggests, it is not the acculturative changes themselves that are important, but rather, how one sees them and what one makes of them (William and Berry, 1991). Positive or negative consequences of change are dependent upon how the change is appraised and which coping strategy is employed. The ways in which the students actually cope also depend heavily on the resources that are available to them as well as the constraints that inhibit use of the resources in the situation of the specific encounter.

Students who see their environment as demanding and challenging to their self-esteem, encounter a high level of stress. Those who lack a sense of self-worth see changes as more threatening because they believe that they are not capable of handling the demands of the situation. They would see themselves as relatively incapable of dealing positively with the external stressors associated with transferral to a new place. They feel helpless, hopeless and without any recourse when faced with the new demands of various stressors. Students with low self-esteem emphasise their weakness, not their abilities, strengths and positive qualities. Therefore they experience failure and frustration which leads to stress. Since they cannot associate themselves with their real potential, they dislike and devalue themselves, and in general perceive themselves as incompetent to deal effectively with their environment. Consequently those students lacking self-esteem will be under pressure and unable to progress toward a successful adjustment in the host community.

It can be said that in order to cope with acculturative factors, the students need the ability to gain and maintain an awareness of themselves and develop positive attitudes
toward stressors as well as choosing coping strategies that lead toward the different socio-cultural adaptations.

5.4. The Role of Socio-Demographic Variables in Acculturative Stress

The third purpose of this study is to describe many of the socio-demographic variables affecting the acculturative stress of the international students. The following variables are included: nationality, financial situation, language background, level of study, prior place of residence, visit home, religion, gender, marital status, field of study and length of resident time. Some of these variables are sources of, or are interactive contributors to the stress of overseas students.

Nationality is one of the important factors contributing to acculturative stress. The data results indicate significant relationships between acculturative stress and nationality ($X^2 = 59.81, \text{ sig } = .00, \text{ Table 4.39}$. By using analysis of variance the author found that there are significant differences between the mean scores of the acculturative stress of students from different nationality groups, and this variable explains about 6% of the acculturative stress score ($R^2 = 0.064$). The beta coefficients which are statistically significant show a higher level of acculturative stress than that experienced by American students, in the following nationalities: Taiwanese (15% higher), Korean (12% higher), Malaysian (20% higher), Chinese (12% higher) and Indonesian students (about 13% higher, Table 4.44). The findings of this study confirm the findings of Morro (1960), Lysgaard (1955), Scott (1956), and Sewell and Davidson (1961) as cited in Church (1982) who found that nationality is one of the important factors in the adjustment of international students in cross-cultural exchange. This result also agrees with the findings of DeAmicis (1976), who suggests that the American students probably suffer fewer problems than any other nationality group in Australia. In a similar study, Minde (1985) examined the differences in stress levels according to the country of origin; his findings show that students from the United States have a lower stress level than Asian students. It seems probable that several factors conspire to
create different levels of stress among students from different nationalities; these include cultural and racial background and a preparedness for change.

The degree of similarity between the student's culture and the host culture in political, linguistic, economic, religious, technological and other experiential background is one of the important factors associated with adaptive potential and lower student stress levels. When one's cultural background is similar to the host culture, one can begin the adaptation process with greater ease. An effective indicator of the intensity of students' stress reactions is the degree of difference experienced between the students' home culture and the host culture. Cultural distance may be related to mental health indicators such as stress, anxiety and medical consultations. This view is supported by many studies conducted in the United States examining interpersonal relationship patterns of foreign students. These researchers report that European students interacted with Americans more extensively than Asian students (Selltiz, et al., 1963). This study also suggested that there are cultural patterns in the typical defence mechanisms used by students from different cultures to handle stress related to the necessary adaptive changes in the new host community.

The greater the degree of cultural distance, the more likely the student is to experience socio-cultural adjustment problems. Cultural differences in the various countries were quantified using the four dimensions of cultural variation proposed by Hofstede (1980). These four dimensions consist of Power distance, Individualism, Uncertainty Avoidance and Masculinity. The difference between Asian and American students is in their perception of social situations and points especially to the cultural contrasts. Asian culture has often been noted to differ significantly from Western culture, in terms of language, social orientation and role expectation (Padilla et al, 1985). Students from cultures with high levels of power distance accept the power of superiors as a basic feature of their relationship, which accepts obedience and values conformity (Hofstede, 1980). Differences emerge relating to problems in establishing friendships. Members of collectivist societies generally make life-long friendships with a small group of
same-sex individuals while Asian students reported difficulties linked with forming and maintaining friendships and in getting to know people in depth (Barker, et al., 1991). There are some types of relationships in Australia, including the informality and intimacy of heterosexual relationships which may be difficult for Asian students to accept. For example, the informality of opposite-sex relations in Australia is incorrectly perceived by some of the Asian students as highly promiscuous behaviour.

Some students may encounter difficulties in making friends and in using specific interpersonal skills. Probably because of their lack of experience in specific cultural knowledge and social skills, they have more hesitancy and problems in taking the initiative in conversations, coping with some challenging people, and interacting with the opposite sex.

Participation in group activities may be a considerable difficulty for some students. This is consistent with Samuelwicz's (1987) finding that participation in tutorials or seminars is one of the most difficult adjustments for overseas students at Australian Universities; while students knew that they were expected to express their own opinions, this form of behaviour was not expected in their home culture. They also felt that they did not have sufficient English competence, confidence or knowledge about how to participate actively in tutorials. With respect to inadequate English competence, some of the literature asserts that Asian students falsely claim that a broad range of difficulties at University is due to language deficiencies. They suggest that the students' academic problems may also arise from their learning styles and from poor analytical skills.

Social skills as a socio-cultural adjustment factor differ in the various nationalities. The greater the cultural disparity, the more disadvantaged a sojourner is in acquiring necessary social skills. Furnham and Bochner (1982) examined the relationship between cultural distance and social skills in foreign students by arranging countries of origin into three groups, according to similarities in religion, language, and climate.
Their results point out that cultural distance and social difficulty are strongly related. Therefore, speaking in social learning model terminology, individuals who are more culturally distant are likely to have fewer culturally appropriate skills for negotiating everyday situations. But it should be well noted that cultural distance is also related to stress and coping models because the transition between more distant cultures may comprise greater life changes and cause more distress (Searle and Ward, 1990). They have shown that those students who perceived more dissimilarity between their original and host cultures experience reduced social skills and increased difficulty during cross-cultural transitions.

Student attitudes toward the host community may differ in the various nationalities, and this may promote psychological distress in the students. There has been a related body of work assessing the relationship between values and attitudes to the host culture and social interaction with the host nationals. Although Europeans in the United States apparently experience fewer adjustment problems and have greater interaction with host nationals than Asians, they may also express relatively less favourable attitudes toward the United States. Europeans and other groups differ in their choices of American life aspects that meet with their approval or disapproval.

The European is also confused about many other factors related to general adjustment and to increased social interaction with host nationals. European students are likely to be younger, single, interested in associating with Americans and living abroad, well travelled, and more likely to say that their primary sojourn motive is getting to know another country (Hull, 1978).

Another factor which has impact upon the students' personal and social communication skills is the level of those abilities that they each brought with them to the host society. On the other hand, host groups differ in their degrees of receptivity to international students and of allowing them opportunities to become an integral part of their social processes. It may possible that the prestige or status of some nationalities as formed by
their cultural background influences the relationships between racial groups and native people. Many societies hold a certain esteem for various groups of the world. When negative out-group perception is toward a particular cultural or racial group, these perceptions discourage the participation of strangers from that group in the host communication processes. So the communication-adaptation process is dependent upon the way that it is perceived by the host nationals (Kim, 1988). The attitude of the host society toward a specific out-group may be due to a power relationship or to an existing domestic, economic or political situation (development of special events in international affairs may negatively affect a friendly attitude between groups, with an example being groups from Iran and the United States). Meaningful interpersonal contacts are often influenced by the general social climate. These attitudes and practices in the host society either facilitate or hinder a student's cross-cultural adaptation.

It seems that ethnic differences need not be the source of difficulties for the host society or the acculturating groups. The Australian Policy, which does not threaten or force cultural loss will be conducive to conflict reduction, and such ethnic contact will be likely to encourage mutual ethnic group acceptance in sharing their cultural expressions and values with other Australians. It is clear that this policy intends to avoid assimilation by encouraging ethnic groups to maintain and develop themselves as distinctive groups within Australian society and to increase inter-group harmony and mutual acceptance of all groups which develop themselves.

The author believes that when racial groups are openly accepted and supported by the host community they become motivated to acquire competency in host communication and are encouraged to take part in the development of positive interpersonal relationships with the native community. So these groups with decreased communication barriers will have less stress than those groups who are not offered this opportunity for adjustment to a new community. Kim (1988) indicates the "without genuine acceptance or the regard for strangers, the natives are likely to send out subtle, non-verbal messages of apathy and denial, if not of outright aloofness, hostility or
apathy." These negative messages can be a serious source of discouragement to strangers already experiencing considerable stress while trying to overcome their communication barriers. At times such negative cues may trigger extremely defensive and hostile feelings in sojourners which increase their inclinations to be defensive about their backgrounds and also hostile to the host society.

Acculturation and adaptation to the new culture is aided by prior familiarity or exposure to it. It seems that the students who have a direct or an indirect experience with the culture are likely to have an easier time encountering different circumstances than those who are newly exposed to the new host community. The level of familiarity may be indicated from ethnicity, or it may be judged from previous residency, personal contacts or related cultural experiences of the particular individual.

The adaptive potential of overseas students is affected by their degree of preparedness for change. Those who are better educated and better informed about the host culture (through training and other forms of learning) can begin their adjustments with greater potential for acculturation and adaptation. Kim argues that information about the host communication systems (especially language) and about relevant norms, rules, customs, and history as well as economic, social and political institutions may prepare the students for change. Students from countries with similar systems to their host community will be more prepared to adopt themselves to the new community.

Many of the students (particularly those from the third world) may have fatalistic beliefs before travelling, and that the initial confronting experience of being a sojourner also leads one to adopt fatalistic beliefs as well as passive and impaired coping strategies and psychological distress. The students tend to experience loss of control and therefore, inability to manipulate the outcomes of their behaviour. Students from a country with a fatalistic religious outlook, or whose experiences make them more helpless would have added difficulty adjusting than migrants from a country where personal responsibility is valued.
Furnham (1984) and Yum (1982) assert that schooling, even without regard to particular cultural content, is viewed as increasing the learners' cognitive capacity for new learning and mental resourcefulness. For example, when the students' formal schooling in their home countries has provided them with some exposure to the language, culture, geography and history of the host society, these students would have a better host communication, competence and participation in the social processes of the host society. Some researchers found that the more similar an education program was to the international student's home educational experience, the easier the academic adjustment became to those who studied in the United States.

The author argues that the students from other cultures often bring different educational motivations into their thinking, and these different purposes for learning will produce different outcomes. For example, some of the students have very deliberately organised their thinking and writing according to the standard and patterns already internalised in their home countries. In many Asian counties there is no expectation that students will write in any extended form, either in English or in their own language. So these countries seldom provide their students with a useful model for essay-writing in Australia. Limited experience in the use of writing as a means of thinking and as a way of exploring ideas and developing arguments, would be typical of many foreign students in Australia. He argues that adapting to new study patterns can be one of the important problems for some groups of students coming from Asian countries, compared with American students who come from a similar educational lifestyle, all of which affect the students' acculturation and adjustment processes.

It has been suggested that the financial situation plays an important role in the acculturative stress of international students. This claim is supported in the present study which reveals a significant difference between the acculturative stress of students and their financial situations ($X^2 = 72.11$, $\text{Sig} = .00$). The result shows that the students in a better financial situation were significantly less stressed than those in poor financial situations (Kendall's Tau-$b = .65$, Table 4.35). This study has confirmed the findings
by Nicassio and Pate (1984), who report that the financial situation among Vietnamese immigrants was negatively correlated with their degree of alienation from the American society. KyungRinShin (1993) also found that the individuals with greater financial resources were better able to cope with stresses associated with immigration. The possible causal links between the economic status of the students and the level of their acculturative stress may include the following factors. Students with good economic status are likely to achieve higher levels of interpersonal attachment and social assimilation that the less well-to-do. It seems that emotional health and satisfaction with various facilities are likely to be notably related to the future level of economic well-being achieved. Bardo and Bardo (1980) found that higher-status American immigrants to Australia were more satisfied with their friends than lower-status immigrants. The author believes that a good financial situation is an important resource able to empower the student to resist stress, and to cope with stresses associated with transition, as well as to become more involved and increase self-esteem for positive interaction within the new society. The student is then more able to use the various opportunities available to assist in social adjustment to the host community. Sufficient finance aids in stress resistance because it may provide the student with a feeling of being more acceptable and valued, as well as actually being a kind of support available to the student.

The study results indicate positive and significant association between acculturative stress and age \((r = 0.26, \text{ sig } = .05, \text{ Table 4.33})\). This means that older students have a higher level of acculturative stress than younger students, and confirms other previous study results such as Change (1980) and Richardson (1974). They report a higher level of acculturation among the young (Chinese women in the U.S.A. and English adults in Australia). Also, Kessel and Dary, et al., (as cited in Anumonye, 1975) found more anxiety in the older overseas students than in the younger ones. However, some studies find no significant age difference between psychiatric clinic students and healthy control subjects.
The author suggests that the following factors may be important in explaining why age is influential in acculturative stress. The younger students are more flexible than the more mature aged and better able to accept change; therefore they're more able to successfully adjust their living habits and patterns to blend into those of the new community. So, the socio-cultural adjustment process is especially difficult to adults who are accustomed to functioning effectively in their own cultures. Nicassio and Pate (1984) found that the age of Vietnamese immigrants to the United States positively correlated with alienation from the new society.

Younger student may tend to identify more with the new society than older student do. The reason for this is because young people assimilate more than the older people in regard to language, food, social contacts and leisure activities. Also, as Scott and Scott argue, older persons are less likely to be satisfied with their recreational activities and less likely to relate with the nationals. They also say that old people are more likely to miss their friends in the home country and to maintain closer contacts with the native-born, than young immigrants would.

The older students are most likely to be the least acculturated in terms of language, social customs, and behaviour. This fact is also noted by Morgan (1980) who suggests that older students cling to the cultural heritage in which they have been acculturated. They may experience greater difficulty initiating and maintaining interpersonal relationships in the host community. One apparent explanation for this is that values held by older individuals differ significantly from those of the younger people. Yamamoto (1968) also agrees that values held by older individuals relating to their roles and their ability to tolerate passivity are markedly different from those of the dominant society. Another reason for their willingness to frequently adopt a passive role could be the strong emotional identification with friends and family in their home country; these ties are more binding for them than for younger migrants.
Role expectations may differ between younger and older individuals. More mature migrants may often experience greater stress than younger ones because of tremendous adjustments made in their family and employment roles. Role conflicts relate with considerable impact to the acculturation process. For the older students who marry and have children, the host community's role expectations for parents may conflict with their previously held ideas, and cause adjustment struggles toward a new communication pattern.

Younger students have more potential and ability to learn and to deal with social skill problems which represent a way to achieve changes in the host country. Young migrants would also have greater language and communication competence; thus, their socio-cultural adjustment could be easier than for older students. Krechen and Shulman (1990) agree with the author and indicate that "the overall scores for coping decrease with age" (p, 362). Kim (1988) states that age is closely associated with openness for change. Many studies have reported that age at the time of migration significantly influences the level of adaptation, with particular reference to acquiring a second language. It follows that younger adults tend to acquire English more quickly and also attain a higher proficiency than the older adults. Gal (1978) found a correlation between an immigrant's age and preference of speaking in the original language. This inverse relationship between age and adaptation was observed among American tourists in Africa during their sojourning: the older tourists experienced greater culture shock and were observed to show less tolerance to host environmental stressors.

Most of the older students are married and they may encounter more conflicts relative to their family needs, and in all probability may have conflict with their own children's acculturation process. On the other hand, they are more preoccupied with their family, which can have an affect on their acculturation and adjustment to the new society.

Language study is one of the socio-demographic variables which has been statistically significant with acculturative stress in the present study ($X^2 = 33.07$  $\text{sig} = .00$). The
data indicates that the students with non-English language backgrounds have higher acculturative stress than English language background students (contingency coefficient = 0.39, Table 4.37). The author's finding agrees with other researchers such as Schwarzer, et al., (1986) who find that those students who speak English at home reported less acculturative stress. It is widely accepted that there is a positive relationship between language proficiency and the amount of social interaction with host nationals as well as satisfaction and adjustment (Church, 1982). Also, it has been suggested that a low level of English proficiency was associated with alienation amongst Indo-Chinese immigrants in the United States (Nicassio, 1983). A similar argument has been advanced by Tauka et al., (at press) in their study of international students in Japan; they found that increased language fluency was associated with an increment in associated adjustment. Language skills are the most difficult of the international student's adjustment problems. The original language of the overseas student plays an important role in this/her acculturation and socio-cultural adjustment.

There are some important considerations relating to advantages of international students having prior English knowledge. Even experience with English cultures has facilitating effects on socio-cultural adjustments, because by this familiarity, the students can more easily gain satisfaction with possessions and friends and by integration into the new society. It should also be noted that an English-speaking cultural background uses more of community facilities for education, recreation, health, welfare and requires more acculturation. The author argues that the degree of English knowledge may explain the differences in stress levels, rather than other cultural variations because English is of central importance to successful communication with the larger society.

Students with an English-speaking background encounter less interpersonal problems than students with non-English speaking backgrounds. They display high self-confidence, satisfaction with change, friends, social interaction, and their rating and University results. On the other hand, students with non-English-speaking backgrounds are unable to express their thoughts, feelings and knowledge. They are
prevented from becoming oriented to the host culture and they fail to participate in the various social activities; in particular, they seem unable to use the support services which are established in order to help them to acculturate and adjust themselves in the new host community. Consequently, they will encounter more difficulties and stress than international English-speaking students. Lack of written and spoken English competence, among non-English speaking international students are one of their predictable problems. Therefore, it can be asserted that lack of language competence causes poor communication with the nationals and poor adjustment with increased stress to the non-English background students.

It can be said that English language competence is a primary instrument for students to use in promoting their power to cope with individual deprivations and to increase their socio-cultural adjustments. Most of the non-English speaking background students who finished the three month course in the University English learning centre expressed dissatisfaction with the short three-month English course. Apparently they needed more time to learn English and to become more familiar with the Australian methods of study.

The present study shows that the differences between acculturative stress and levels of study is statistically significant (sig = .02). Furthermore, ANOVA shows that the postgraduate students' average score for acculturative stress indicates higher levels of acculturative stress than the undergraduate students (Table 4.27). This finding of the present research conflicts with Sadrossadat’s (1995) research, who claims that postgraduate students have less difficulties than undergraduate students with their adjustments to the Australian society. However, the finding of this present study is supported by Ballard and Chancy (1991) who indicate that postgraduates are more firmly bound within their own culture than their undergraduate counterparts; thus, they are less flexible in adjusting themselves to cultural change.
Postgraduate students generally have additional coping factors in their lives as international students which place them under considerable more stress than the undergraduate students. They're likely to be older, married with children, and more severely dislocated by moving for some years to a foreign country. Many are already employed in quite senior government or academic positions and accordingly have great pressure on them to be successful, both from their employers and their families. Since most of these students are officially nominated for postgraduate degrees, they're particularly valuable for the development of their own national institutions. They are likely to have had a gap between their previous studies and their current degree and so they would be less accustomed to the student life and to being in a subordinate role.

There is some indication that postgraduate students are likely to experience both additional and somewhat diverse problems of academic adjustment, as contrasted to those experienced by undergraduates. It seems that social skills such as language and communication with others are often more difficult for postgraduate students than for undergraduate students. For example, most of the postgraduate students in the P.H.D. level would have contact mainly with some departmental staff members or with other research students; this is particularly true for international postgraduates in engineering, while undergraduates have courses, interaction and communication with other classmates. Because postgraduates have less chance for interaction with the host society than undergraduate students, they are likely to experience decreased general satisfaction and acculturation, leading to more stress.

The findings of the present research indicate that there is a significant difference between the place in which the students lived and the level of their acculturative stress ($X^2 = 34.78$  sig = .00). The results confirm this expectation: among the students who come from small cities or rural areas, stress was increased higher than those with an urban background (contingency coefficient = .40, Table 4.36). This finding is in agreement with Ruesch, et al., (1948) and Sadrossadat (1995) who consider the rural-urban variable as a factor which effects the process of adjustment. The reason for this
may be that students of urban background are more likely to draw out confidential friends in the new community, have a higher social assimilation and be viewed as having greater self-confidence and interpersonal competence, than the rural students. They may also be more satisfied and comfortable with using the new community's facilities for education and recreation.

Some researchers confirm the affect of cultural distance on cross-cultural adjustment. They believe that greater cultural distance between the newcomer and the host society decreases the international student's adaptive potential. Furnham and Bockner (1982) indicate that cultural distance and social difficulty are related. International students undergoing cross-cultural transition will experience many changes. The degree of these changes can be related to the unfamiliarity of the social and physical environment. In this new cultural situation, it is probable that the students experience increased social/cultural conflict and added stress.

The number of visits to the home country by international students during the period of their university courses is associated with their acculturative stress. The results indicated a significant relationship between acculturative stress and visits to the home country ($X^2 = 12.65$  sig = .04). Students who did not visit their home country had less acculturative stress than those who visited one or more times (contingency coefficient = .26, Table 4.34). It can be stated that the students who remain in the host community during their time of study may have sufficient time to complete their process of acculturation and to obtain a more satisfactory adjustment.

Those international students who visit their family and friends in their home country will feel some immediate benefit and happiness/satisfaction in re-establishing relationships, however, they may also become involved with some socio-cultural conflicts. When students who have studied abroad a considerable length of time, visit their country of origin, they may discover that they have changed while the people at home have remained the same; their family and friends may not have been expecting or
desiring to see a changed student. Some of the students become accustomed to a new lifestyle and sometimes they may even lose their identity. Moreover, when they return to the host society, they will need to readjust themselves again to their student roles in the host society. This brings a considerable cost of time and energy to the overseas students, which then becomes an experience of stress because of the added readjustment to the host community. This readjustment stress is greater for students belonging to a society with a greater socio-cultural gap to the host community, than for the students belonging to a society similar to the host culture. In other words, the greater the similarity between the student's society and the host community, the easier the re-acculturation or readjustment process is for the student. Therefore the student would be well-advised to talk with the international student advisor before visiting his/her home country.

The result of the present study indicates that differences between students' acculturative stress scores of those from various religious backgrounds was statistically significant \( (X^2 = 21.90 \ \text{sig} = .03, \text{Table 4.38}) \). However, Analysis of Variance shows that the mean in different religions is not statistically significant (Table 4.26).

Studies on the relationship between religion and mental health have not attained a universally accepted view. The theoretical relevance of religious affiliation to migrant adaptation is derived from the potential that it offers, including peace of mind and spiritual gratification during a time of uncertainty and stress Scott and Scott (1989) also support this statement). Unfortunately, there is little evidence available to substantiate such a view; this may be because religious affiliation and commitment are confounded with other variables, such as age and ethnicity which may have quite opposite effects on adaptation.

In an Australian longitudinal study, Roman Catholic affiliation and frequency of attendance at religious services were unrelated to levels of symptoms; religious differences in subjective adaptation or role performance were few, and disappeared
when other demographic variables were controlled. Although religious respondents tended to score lower than others on cultural skills, this difference was apparently due to their ethnicity and low socio-economic status, because the correlation between religious commitment and cultural skills became non-significant when the other two demographic variables were controlled (Scott and Scott, 1989). Some researcher such as Matson (1989), found religious commitment to be positively related to cross-cultural adjustment. These findings may be supported by their idea that religious affiliation could offer a sense of personal security and comfort for the strangers during a period of uncertainty in the new society.

Religion can be involved during any phase of the stress-coping process. As a personal resource, it has effect on the primary appraisal of threat, challenge or loss. A belief system could also affect secondary appraisal relating to coping possibilities in a given situation. Moreover, it may bring a psycho-social resource and constraint to the coping process. The author believes that a student's relationship with God may influence the student's well-being through directly enhancing self-esteem and reducing the negative affect of change, or by enhancing positive and adaptive appraisals of the meaning of change and of stressful situations; such cognitive and emotional benefits may lead to an increased capability to employ adaptive stress-related coping strategies, and to receiving added functional social support from others.

Some studies have found the commitment to religion is negatively related to adjustment (Graff and Ladol, 1977). One possible explanation for these findings is that the students with strong religious beliefs could be resistant to new ideas, new values and new practices. As a result, the student's acculturation would be less satisfying with various aspects of the host society. Rothbauw, et al., argue that religion may be the mean of accepting an event, rather than focusing on ways to change it.

It is possible that students holding a religious preference different to the major host society religion, face increased acculturation problems. A number of explanations can
be found for this occurrence including the possibility that the students may find little in the host community's cultural values to validate their own religious view. They may also need to modify their religious practices, and as a result they could experience diminished comfort and personal security in the face of changes in the host society. Apparently religious practices such as prayer and devotional meditation reduce anger and anxiety. In addition, the preferred religious support services, such as church and religious groups may not be available to assist the international student. However, for those students with similar host community beliefs, common religious communication with the host members causes more cultural familiarity and added satisfaction with life in the new society, illustrating the concept that religion is a potentially strong bond between individual and community. Burke (1986) studied international students at the University of New South Wales and found that religious groups were a source of support for the students. Religious groups could help their members adjust to a relocation by performing various networking functions; this could include providing an orientation program facilitating acculturation and adjustment to relocation, thus reducing student uncertainty and stress levels. If religious groups are unavailable, various University student associations might provide sub-committees to assist new students to gain information and listings of various religious groups and organizations who may function to assist or welcome the newcomers to the Wollongong area.

The structure of a religion may also create conflict or deter the students' acculturation in a new community. The Muslim students encounter some problems with regard to the availability of Halal meat. This kind of meat is provided for purchasing in Australia, but because it is not necessarily readily available, the Muslim students encounter practical difficulties obtaining it. The communication pattern of this student group, with particular reference to relating to the opposite sex creates inconveniences for the Muslim women in the University setting; their pattern of communication leads to lack of communication and less acculturation. Moreover, the customary dress for Muslim women may elicit a negative attitude from host individuals, towards the women.
wearing a cover-all style of clothing, and could hinder the development of a good interpersonal relationship. Thus, the Muslim women students could be constantly faced with the possible development of low confidence and feelings of frustration. Religious rules might impose limitations and prevent some students from participating in student recreational and group activities; an example is that most Iranian students choose to participate in their own Ter group programs (celebrations or ceremonies) rather than join in with the University's International Students Program. This choice negatively affects the process of their acculturation and adjustment to the new society.

We can say that religion has both a negative and a positive relationship to acculturation; however, the more similarity and harmony exists between the religion of the overseas student and the host community, the more readily he/she should adjust to the host society.

While many related studies report that gender is associated with cross-cultural adjustment, the statistical procedures employed showed no association between gender and acculturative stress.

In a comparative acculturative stress study by Berry, et al., (1987), a negative correlation indicated greater female stress, and an all-Muslim Malay sample exhibited greater sex difference in acculturative stress. Morgan (1980), Krenchen and Shulman (1990) also suggest that females are more likely to experience socio-cultural problems, than the males.

Gender has been observed to influence strangers' adaptive potential. A number of immigrant studies report that male immigrants were significantly more skilled in the host language than female immigrants (Furnham, 1984; Kim, 1976); however, Padilla (1980) and Anumonye (1975) observed no sex difference in socio-cultural adjustment.

Researcher have sought to explain the sex differences by noting the greater sensitivity and exposure of women to stressful life events. Kim (1988) argues that sex difference
may be a result of reporting variations, for example, women may be more anxiety-conscious and communicate this more openly to others. Perhaps clues to differences in sex bases for self-esteem can be found in differing correlates for male and female well-being. However, in the Canberra area, sense of their own worth (Scott and Stumpf, 1984), did not reveal any statistically significant differences. So it seems that sex differences in the meaning of emotional well-being and self-esteem are not pronounced, even though the mean level may differ between men and women.

There is a suggestion that immigrant women tend to be less culturally assimilated than men, but Scott and Scott (1989) state that a statistically significant test has not been presented by research in this area. The author suggests the following factor which may be important in the explanation of why sex is not influential in student acculturative stress levels. It is obvious that student characteristics in this study differ from other groups of female immigrants; in the first place, they are prepared similarly to male students preparing for overseas study, needing equal English language skills for University entrance requirements. In many cultures, women tend to possess a lower level of educational background than men, and this places them in a position of less advantage when adapting into a cross-cultural situation. The women students in the present study could be as intelligent as their male counterparts. Kim (1988) adds support to this argument by suggesting that gender confounded by other characteristics such as a poor education background, may be predictors of acculturative stress.

Most of the study's female students are from Asia, where the females seem to be associated with low levels of independence, and high levels of role rigidity. Asian women also gain knowledge by socialisation and expression of feelings; therefore they would tend to strive in order to be in touch emotionally. But in new societies such as Australia, both genders tend to hold equal opportunities in all areas of life. This prepares an atmosphere in which the female students experience increased power, confidence and potential for improving themselves; so, they may reduce their level of stress with this kind of self-presentation in the new society. Therefore, their stress
response may be more successful, as they employ more problem-focused strategies, rather than emotion-focused strategies.

It can be said that gender does not qualify as a theoretically sound explanatory factor for the observed differences in acculturative stress, because it is confused by other background characteristics.

The present research findings indicate that there is not a significant difference between marriage and acculturative stress among international students. However, it should be noted that there are different opinions about the effect of marriage on social and cultural adjustments in a new society.

Bardo and Bardo (1980) found that married American immigrants in Australia were less alienated from their new culture than single immigrants. Berry and Blondel (1982) similarly found that married Vietnamese immigrants in Canada had a tendency to score relatively low in self-reported adjustment problems. Others stated that married students were more stressed in a new environment. For example, Anumonye (1975) believes that the married status among Nigeria students is associated with poor socio-cultural adjustment in Britain. Also, Lasry and Sigal (1975) found no significant difference in levels of psychiatric symptoms between single and married Jews who had moved from North Africa to Canada.

Verwey and Brackel (1957) found that the single migrant in Holland participates more frequently in general community activities and has fewer cultural ties. Some researches report that lack of family amongst Scandinavian migrants was an important factor in their rapid assimilation. This could have resulted because family was perhaps the most significant factor reinforcing the persistence of cultural traits from their own country.

There is evidence that the married status of strangers significantly increases their ethnic communication activities. It seems that those who are more reliant on other ethnic individuals for social support, would have less acculturation and more socio-cultural
adjustments than those who participate more in host community relationships, even though they may be supported by their ethnic groups in the new society. Scott and Scott (1989) argue that marital status may affect both emotional security and diffuse responsibility. In the new community it is important to reduce adjustment problems and to increase satisfaction related to friends, employment, community and overall life circumstances. Marital status also affects the intimacy of one's interpersonal relationships as well as the impression of self-confidence.

We can say that the effect of marriage on acculturative stress depends on marital satisfaction, which is used as a resource of coping to reduce adjustment stress in the new society. On the other hand, it could be a facilitating motivation for increased acculturation, or even act as a barrier to better integration and successful adjustment in the new community. Moreover, some married students live alone because of scholarship situations or financial problems. There is also no significant difference between marriage and acculturative stress, probably because marital status may be confounded by other background characteristics and personal variables.

The present research findings indicate that there are no significant differences between the field of study, length of resident time in the host country and student acculturative stress. It's possible that the sample size was insufficient to consistently demonstrate the association in logistic regression.
CHAPTER 6

6.1. Conclusion

The acculturative stress experience of international students at the University of Wollongong during their adjustment to various degrees of acculturation and self-esteem has been studied. This study is ex post facto and explanatory research, with it's main purpose being to discover the relationship between acculturative stress (a dependent variable) and acculturation, self-esteem and socio-demographic variables (independent variables). Acculturation is defined as items of physical, biological, cultural, social and psychological changes. Acculturative stress refers to a particular kind of stress in which the stressors are recognized as having their source in the process of acculturation. Self-esteem is measured by a person's degree of endorsement to various evaluation statements about her/him self.

The theoretical framework used in this study is based on Berry, Kim, Minde and Mok's 'Acculturative Stress' Model 1987.

Stratified random sampling was applied in this study, using the entire international student population of the University of Wollongong. The criterion for inclusion was that each national sample required a student complement numbering 25 or more with at least 6 months of residence in Australia. Accordingly, 989 international students from 11 nationalities were employed in the study, the sample of which was randomly drawn from 30% of the population, based on the proportion of each nationality.

The study instrument includes 60 items which refer to acculturative stress, acculturation, self-esteem and socio-demographic variables. Content validity of the various instruments in this study was assessed from the literature. Factor analysis was also used for assessing construct validity by the creation of indices used for scoring the variables. The factor analysis results in the pilot study confirmed that the items of each scale measure a single unidimensional phenomenon. Cronbach coefficient alpha has

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been used for testing the reliability of the research, and the reliability of the instruments is considered to be well established.

Eleven out of fifteen hypotheses have been supported by the employment of statistical techniques with the use of both descriptive and inferential statistics for analysing the data.

The results indicate negative and significant relationships between acculturative stress and acculturation ($r = -0.68 \text{ sig } .01$), and self-esteem ($r = -0.63 \text{ sig } .01$). Furthermore, multiple regression analysis shows that about 46% of the variation in the acculturative stress scores is explained by acculturation and that self-esteem accounts for 7% of the acculturative stress variation. Data analysis shows that there is a significant difference between the measured acculturative scores of the students in terms of nationality, language, level of study, prior place of living, visits to home country during study, age, financial situation and religion. The results do not indicate a significant difference between the measured acculturative stress scores of the students and field of study, gender, marital status, and duration of stay in Australia.

The study results present the highly acculturated student as having a low level of acculturative stress. A low level of acculturative stress could be attributed to a greater effectiveness in transferring host society skills and knowledge, which is associated with acculturation and host community contact. The students with high acculturation levels will have added satisfaction, and satisfaction predicts psychological well-being. Moreover, social participation and integration combined with acculturation may result in additional socio-cultural adjustment. Acculturation may also reduce stress and diminish uncertainty through favourable contacts, integration, shared networks, inter group attitudes, second language competence and communication competence.

The present research supports the premise that the international students with high self-esteem tend to experience less acculturative stress. Its possible that self-esteem reduces stress by increasing stress resistance: through positive appraisal of stressors, usage of
social resources, supportive services and effective coping strategies. Self-acceptance and self-respect is associated with an accepting host society and respect for the nationals; such a climate nurtures the development of positive host relationships. Self-esteem is related to satisfaction with friends, recreation, and other students; it is also associated with the availability of friends and the frequency of social interaction.

The data analysis indicated that nationality is one of the important factors contributing to acculturative stress. Much depends on the degree of similarity between the student’s culture and the host culture in terms of politics, linguistics, economics, religion and technology. Power distance, individualism, uncertainty, avoidance and masculinity are some dimensions of cultural variation which could cause different acculturative scores among the many nationalities. Most of the international students were from Asian countries and they differed significantly from the American students. The student's language, social orientation and role expectations could contribute to these acculturative differences.

The students in well-financed situations had significantly lower stress than those with poor financial support. Those students with relatively high economic status are likely to achieve additional levels of interpersonal attachment as well as satisfaction with various available facilities. Economic well-being also increases stress resistance by generating feelings of self-acceptance and validity.

Older international students had a higher level of acculturative stress than the younger students. The explanation could be that younger students are more readily able to accept change through flexibility, have greater potential to learn a new language and to cope with social skill challenges. The more mature students may experience an increased difficulty in initiating and maintaining interpersonal relationships in the host community, perhaps due to a preoccupation with their families and/or role conflicts which impact on the acculturation process.
English-speaking background students reported less acculturative stress because of their ability to cope rather independently with social, cultural and academic demands. They also use the community's educational, recreational, and health and welfare facilities frequently, which requires additional acculturation. These students display high self-confidence, satisfaction with other students, their rating and their University results. A low level of English-speaking proficiency is associated with alienation and with an increment in associated adjustment.

Differences between acculturative stress and levels of study were statistically significant. Postgraduate students are likely to be in a more mature age group, married with children and might experience both additional and somewhat diverse problems of academic adjustment. They have less opportunity for interaction with the host society than the undergraduate students.

The rural-urban factor studied in the acculturative stress of international students may be described as increased 'cultural distance' during the transition. The intensity or degree of the changes which the international students are faced with, relates to the degree of unfamiliarity to their new social and physical environment. In this new urban cultural situation, it is probable that the students will experience increased social-cultural conflict and more acculturative stress.

The number of visits by international students to their home country during their period of study was associated with their acculturative stress. The students who did not visit their home country had less acculturative stress than those who visited one or more times. The probable key reason for stress-related home visits is that the home-visit students must undergo an extra readjustment to and from a society with a major socio-economic gap to the host community.

The results of the present study indicate significant differences between students' acculturative stress scores from diverse religious backgrounds. Religion can be involved in the stress-coping process as a personal resource; it has an effect on the
primary and the secondary appraisal coping strategies. Some studies find religion to be negatively related to acculturation, perhaps because students with strongly fixed religious beliefs might be unable to accept new ideas, values and practices. Another reason is that religion may be the student's mode of accepting an event, rather than choosing to focus on strategies to change it (problem-solving).

Students may find little in the host community's cultural values to validate their own religious commitment or system. Lack of religious practice and the use of a religious support group may be causes for stress to some groups of religious students. For those students with similar host community beliefs, common religious interaction with the host members causes more cultural familiarity and more satisfaction in community life. The structure of a religion may also create conflicts or deter the student's acculturation. Because of rigid religious restrictions, some groups of students may constantly battle with the development of low self-confidence and feelings of frustration, through being denied interaction with other students, participation in student recreational and group activities and involvement in multi-ethnic group programs.

The present research findings indicate that there were no significant differences between the field of study, length of resident time in the host country, gender, marital status and acculturative stress. It's possible that the sample size was insufficient to consistently demonstrate the association in logistic regression, or that these variables may be confounded by other background characteristics.

International students can adopt the strategy of maintaining a certain distance from the host culture. Even though they should participate actively and adapt well to the host community, it seems that because of exposure to changes in beliefs, values, and behavioural norms, such participation may be difficult, particularly for Asian students.

Acculturative practitioners should realise that some international students will strongly resist pressures to conform to the host society, but they do require assistance in adjusting to the new society. The University of Wollongong has developed an effective
cross-cultural orientation program for international students (see International Students Orientation Handbook, 1995). When addressing the subject of acculturation and acculturative stress, the student advisers should encourage international students to seek a balance between participation in the new culture and maintaining their own cultural identity. The student orientation programs should contain opportunities for the international students to promote both their integration into the new community and their cultural self-esteem.

The host society should openly express their acceptance of and their support for international students, and thus motivate them to acquire host communication competence and encouragement to participate in supportive interpersonal relationships with the host nationals.

International students should be adequately exposed to the host country's culture through proper orientation classes in their home countries before travelling overseas (orientation classes would include discussions on topics such as student motivation, age, knowledge of host, and financial situations).

6.2. Limitations of the Study

Several limiting factors appeared when Acculturation and Acculturative Stress was proposed for research study. To adequately define the nature of acculturative stress as encountered by the international students at Wollongong University was at the least, a formidable task.

Acculturation has different phases, thereby limiting the researcher's maintenance of control over the research throughout the phase changes. Also, one group of students cannot be restudied in the initial assessment phase because the level of acculturative stress is likely to have progressed or changed to another acculturation phase. For future studies, the excluded causal variables should be controlled through sampling, and a multiphase-design testing should be employed.
In this study, questionnaires were employed for data collection purposes. This method of assessment has its own limitations; in future research study, other data collection methods could be applied, including interview techniques.

Limited student numbers (less than 25) in some nationalities of Wollongong University International Students prevented their inclusion in this research. The study results might have differed if all overseas student nationalities had participated. In addition, some groups were comparatively limited in numerical size. Further research using large samples drawn from a varied population is necessary to obtain a generalised finding.

A number of specific indicators were discussed in the Theoretical Framework, but only some of their roles were studied. The author could not control some of the predisposition variables which may have asserted a causative influence on the students' acculturation. The researcher should control host environment conditions and adaptive predispositions. Future research could be focused on the host community attitudes toward students with differing nationalities, the student attitudes toward the acculturation mode and student coping skills related to and influential for acculturation and socio-cultural adjustment.
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FIGURES
Figure 1. Relationships between acculturation and stress, as modeled by other factors.


Please see print copy for image.
APPENDIXES 1-5

Non-significant results
**APPENDIX 1-1**

**Acculturative stress by sex**

<table>
<thead>
<tr>
<th>Accultur. Stress Level</th>
<th>Male</th>
<th>Female</th>
<th>RowTotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>21</td>
<td>44 (26.0%)</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>21</td>
<td>39 (23.1%)</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>28</td>
<td>48 (28.4%)</td>
</tr>
<tr>
<td>4</td>
<td>21</td>
<td>17</td>
<td>38 (22.5%)</td>
</tr>
</tbody>
</table>

| Total                  | 82(48.5%) | 87(51.5%) | 38 (22.5%) |

| Chi Square Value       | 1.93      | d.f. 3   | Sig .58   |

**APPENDIX 1-2**

**Acculturative stress by marital status**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Single</th>
<th>Married</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative Stress Level</td>
<td>23</td>
<td>11</td>
<td>44 (26.0%)</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>15</td>
<td>39 (23.1%)</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>19</td>
<td>48 (28.4%)</td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td>15</td>
<td>38 (22.5%)</td>
</tr>
</tbody>
</table>

| Total          | 109 (64.5%) | 60(35.5%) | 169 (100.0%) |

| Chi-square Value | 2.98      | d.f. 3   | Sig .39   |

**APPENDIX 1-3**

**Acculturative stress by faculty**

<table>
<thead>
<tr>
<th>Acculturative Stress</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informatics</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td>23 (13.7%)</td>
</tr>
<tr>
<td>Commerce</td>
<td>9</td>
<td>12</td>
<td>20</td>
<td>14</td>
<td>55 (32.7%)</td>
</tr>
<tr>
<td>Art</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>18 (10.7%)</td>
</tr>
<tr>
<td>Science</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>23 (13.7%)</td>
</tr>
<tr>
<td>Engineering</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>20 (11.9%)</td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3 (1.8%)</td>
</tr>
<tr>
<td>Behaviour Science</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>26 (15.5%)</td>
</tr>
</tbody>
</table>

| Total                | 44 (26.2%) | 39 (23.2%) | 48 (28.6%) | 26 (15.5%) | 168 (100.0%) |

| Chi-square Value     | d.f.     | Sig      |         |
|----------------------|----------|----------|
| Likelihood Ratio     | 19.37    | 18       | 36       |
### APPENDIX 1-4

**Acculturative stress by level of study**

<table>
<thead>
<tr>
<th>Acculturative Stress Level</th>
<th>Undergraduate</th>
<th>Post Graduate</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>18</td>
<td>44 (26.0%)</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>21</td>
<td>39 (23.1%)</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>25</td>
<td>48 (28.4%)</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>24</td>
<td>38 (22.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>81 (47.9%)</td>
<td>88 (52.1%)</td>
<td>169 (100.0%)</td>
</tr>
</tbody>
</table>

**Chi square**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>d.f.</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.15</td>
<td>3</td>
<td>.24</td>
</tr>
</tbody>
</table>

### APPENDIX 1-5

**Acculturative stress by payment of fees**

<table>
<thead>
<tr>
<th>Payment</th>
<th>Self/family</th>
<th>Your govmt</th>
<th>Aus govmt</th>
<th>Others</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative Stress Level</td>
<td>18.3</td>
<td>3.6</td>
<td>3.0</td>
<td>1.2</td>
<td>26.0</td>
</tr>
<tr>
<td>1</td>
<td>14.8</td>
<td>7.7</td>
<td>-0</td>
<td>.6</td>
<td>23.1</td>
</tr>
<tr>
<td>2</td>
<td>15.4</td>
<td>7.1</td>
<td>5.3</td>
<td>.6</td>
<td>28.4</td>
</tr>
<tr>
<td>3</td>
<td>14.8</td>
<td>5.9</td>
<td>1.2</td>
<td>.6</td>
<td>22.5</td>
</tr>
<tr>
<td>total</td>
<td>107(63.3%)</td>
<td>41 (24.3%)</td>
<td>16 (9.5%)</td>
<td>5(3.0%)</td>
<td>169 (100.0%)</td>
</tr>
</tbody>
</table>

**Chi-Square**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>d.f.</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>13.94721</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>208</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2

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APPENDIX 3

Ethics committee approval
27 June 1995

Ms Ashraf Gholamrezaei
C/- Dept of Public Health & Nutrition
University of Wollongong

Dear Ashraf,
Thank you for your response to the Committee's requirements for your Human Research Ethics application HE95/107 "Acculturation and self-esteem as predictors of acculturative stress among International students at the University of Wollongong".

Your response meets with the requirements of the Committee and your application is now formally approved.

Chairperson
Human Research Ethics Committee

cc. Assoc. Prof. R. Harris
CONSENT FORM

I ....................................................agree to participate in the study titled ,"Acculturation and self-esteem as predictors of acculturative stress" among International students in the University of Wollongong. I understand that my name will appear nowhere on any documentation and the researcher has given assurance that my rights to privacy and confidentiality will be adhered to. Also my consent to participate is voluntary. If you have any enquiries regarding the conduct of the research please contact the secretary of University of Wollongong Human Research Ethics Committee on (042)214457.

signature.......................Date.................
APPENDIX 5

Letter accompanying the questionnaire
24th March, 1995

Dear Student,

An international student is undertaking a survey as part of her Doctoral studies. The purpose of her research is to help International students adjust to the new environment in Australia.

As the information in this survey is important for her research, please complete the Questionnaire and return it by hand as soon as possible to the following address:

**Department of Public Health and Nutrition**
Northfields Avenue
University of Wollongong NSW 2522

OR

Post in the pre-paid envelope provided.

Yours sincerely,

Ross D Harris
Head, Department of Public Health and Nutrition.
APPENDIX 6

Information sheet for participants
Dear Student

I am an international student, as you are, and I wish to find out what kind of help is needed to assist international students to increase their self-esteem, reduce their stress, and make successful adaptation to their studies in Australia. I have, therefore, designed a survey to gain the required information.

You do not have to answer the questions. You are free to refuse to cooperate. However, your answers to this questionnaire will help the future may being of International students and also help me to complete my doctoral studies.

I appreciate your cooperation and consideration of my request. Please return the completed questionnaire in the envelope provided at your earliest convenience.

Thank you.

Ashraf Gholamrezaei
APPENDIX 7

Questionnaire
PART A: Please provide the following information about yourself by writing or marking the appropriate number on the questionnaire.

1. Sex
   1. □ Male
   2. □ Female

2. Age...................(years)

3. Marital status
   1. □ Single
   2. □ Married
   3. □ Divorced
   4. □ Widowed

4. In which faculty do you study?

5. At which level are you studying?
   1. □ Undergraduate
   2. □ Postgraduate

6. How many times have you visited your country since you have come here to study?
   1. □ Not at all
   2. □ One time
   3. □ Two times or more

7. Who is responsible for payment of your university fee in Australia?

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1. □ Yourself or your family
2. □ Your government
3. □ Australian government
4. □ Others (please indicate)..........................

8. How is your financial situation here?

1. □ Very good
2. □ Good
3. □ Satisfactory
4. □ Poor
5. □ Very poor

9. Where did you live for most of your life?

1. □ The capital city of your country
2. □ In a large town or city
3. □ In a small town or rural area

10. With which religious faith are you affiliated?......................

11. How long have you been in Australia?.....................(months)

12. Is English language your native language?

1. □ Yes
2. □ No

13. Your nationality......................................................
PART B: Please indicate the extent to which the following events are stressful to you by marking the appropriate number on the questionnaire.

<table>
<thead>
<tr>
<th>NS</th>
<th>SS</th>
<th>MS</th>
<th>S</th>
<th>VS</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I feel uncomfortable when others make jokes about or put down people of my ethnic background.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I have more barriers to overcome than most people.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Many people have stereotypes about my culture or ethnic group and treat me as if they were true.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>17. People think I am unsociable when in fact I have trouble communicating English.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. It bothers me when people pressure me to assimilate.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. It bothers me that I have an accent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. Loosening the ties with my culture is difficult.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. I often think of my cultural background.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. People look down upon me if I practice customs of my culture.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. I have trouble understanding others when they speak English.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
PART C: Please compare your present situation with the situation when you arrived in Australia then indicate the answer that best describes you in the following statements by marking the appropriate number on the questionnaire.

24. To what extent do you have difficulty with written English?

1. Great difficulty
2. Much difficulty
3. Some difficulty
4. A little difficulty
5. No difficulty

25. To what extent do you have difficulty in reading journals, books, etc.?

1. Great difficulty
2. Much difficulty
3. Some difficulty
4. A little difficulty
5. No difficulty

26. To what extent do you have problems in adjusting to Australian methods of study?

1. Great difficulty
2. Much difficulty
3. Some difficulty
4. A little difficulty
5. No difficulty

27. To what extent do you have problems in making Australian friends?

1. Great difficulty
2. Much difficulty
3. Some difficulty
4. A little difficulty
5. No difficulty

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28 To what extent do you have problems with the Australian climate?

1. Great difficulty
2. Much difficulty
3. Some difficulty
4. A little difficulty
5. No difficulty

29. To what extent do you have problems with food and dietary choices?

1. Very big problems
2. Big problems
3. Moderate problems
4. Few problems
5. No problems at all

30. Do you feel that you are safe in Australia

1. Very safe
2. Moderately safe
3. Neither safe nor safe
4. Somewhat unsafe
5. Very unsafe

31. To what extent do you wear the Australian style of clothing?

1. Always
2. Often
3. Sometimes
4. Rarely
5. Never

32. To what extent do you speak English at home?
1. Always
2. Often
3. Sometimes
4. Rarely
5. Never

33. To what extent do you listen to radio or watch TV in English?
1. Always
2. Often
3. Sometimes
4. Rarely
5. Never

34. To what extent are you satisfied with contacts with Australian people?
1. All
2. Most
3. Some
4. Few
5. None

35. Taking everything into consideration, how would you describe your satisfaction with life in general at the present time?
1. Extremely satisfied
2. Very satisfied
3. Satisfied
4. Dissatisfied
5. Very dissatisfied
**PART D:** In this part, you find a list of statements about feelings. If a statement describes how you usually feel, put an X in the column YES. If the statement does not describe how you usually feel, put an X in the column NO. There are no right or wrong answers.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 36 | Things usually don't bother me. |   |   |
| 37 | I find it very hard to talk in front of a group. |   |   |
| 38 | There are lots of things about myself I'd change if I could |   |   |
| 39 | I can make up my mind without too much trouble. |   |   |
| 40 | I'm a lot of fun to be with |   |   |
| 41 | I get upset easily at home |   |   |
| 42 | It takes me a long time to get used to anything new |   |   |
| 43 | I'm popular with persons my own age |   |   |
| 44 | My family usually considers my feelings. |   |   |
| 45 | I give in very easily |   |   |
| 46 | My family expects too much of me. |   |   |
| 47 | It's pretty tough to be me |   |   |
| 48 | Things are all mixed up in my life. |   |   |
| 49 | People usually follow my ideas. |   |   |
| 50 | I have a low opinion of myself. |   |   |
| 51 | There are many times when I would like to leave home. |   |   |
| 52 | I often feel upset with my work. |   |   |
| 53 | I'm not as nice looking as most people |   |   |
| 54 | If I have something to say, I usually say it. |   |   |
| 55 | My family understands me. |   |   |
| 56 | Most people are better liked than I am. |   |   |
| 57 | I usually feel as if my family is pushing me. |   |   |

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58- I often get discouraged with what I am doing.

59 - I often wish I were someone else.

60- I can’t be depended on.