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Acculturative stress appraisal and acculturation attitudes

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Acculturation, Acculturative Stress Appraisal and Acculturation Attitudes - Literature Review

by

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Abstract

The term *acculturation* describes an array of cultural changes that occur when culturally different groups come into continuous, first hand contact (Redfield, Linton, & Herskovits, 1936). *Acculturative stress* describes a multitude of psychological or social problems that are often encountered by individuals experiencing acculturation (Berry, 1994). This article reviews the empirical literature on acculturation and factors influencing the outcomes of the acculturation experience from the perspective of the research framework proposed by Berry (1974, 1984, 1987, 1989, 1990). Methodological issues relevant to advancing this area of research are also addressed. In particular the influence of attitudes to acculturation on the level of acculturative stress has been investigated. Some research positions critical of Berry's framework and some alternatives to Berry's framework will also be briefly discussed. New multivariate models that examine the interplay of these variables are now required to further understanding in this area.

The phenomenon of migration has always been a part of the human condition. War, famine, disease and often a simple wish to better one's economic situation drove individuals and whole ethnic groups from their familiar surroundings into strange and often hostile lands. The immigrants were not always welcomed by the host population and the encounter was often a challenging experience for both groups. The trend to emigrate has steadily increased over the last twenty years as people try to escape the poverty of the Africa, South America and large parts of Asia and attempt to settle in one of the developed western countries (Escobar, 1998; Rissel, 1997; Cheng & Chang, 1999). War, depression and social unrest have also resulted in forced migration. It is estimated that 100 million people reside outside their countries of origin (Rissel, 1997). Additionally, the technological advances of the 20th century made the travel and resettlement open to people who, in the earlier times, would not have contemplated it and for some, immigration becomes an adventure and is not a necessity forced by urgent economic or political circumstances (Rissel, 1997).

Regardless of the reasons people left their native countries, all migrants go through the process of adaptation. The study of this process is one of the central topics of cross-cultural psychology. Berry (1997) suggested that the answer to the question of what happens when people who grew up in one culture attempt to live in another cultural context, has important practical consequences in the field of mental health. The negative outcomes of the migrant adaptation process can lead to psychological problems that, in time, will have an accumulative effect in the form of social problems (i.e., crime, drug abuse, alienation). The seriousness of this problem is brought home by the results of some community-based mental health studies that attempted to establish a prevalence rate of mental disorders in the ethnic communities

in Australia. Bui and Bertelli (1990) found that the rates of psychiatric morbidity in some European and Asian migrant communities in Australia compare very unfavourably with the same rates in an Anglo-Australian sample. They found the prevalence rates for mental disorders among European migrants ranging from 6.8% for Italians to 5.5% for migrants from Eastern Europe and 3.9% for the migrants from other parts of the world excluding UK and Ireland. In comparison the mental illness prevalence factor for Anglo-Australians was 3.5% while UK migrants rate of psychiatric morbidity was even lower at 3.2% .

Australia is a country largely built on immigration. Founded as a British colony in 1788 for the purpose of establishing a convict settlement, Australia, over the period of two centuries, became a nation in its own right (Jupp, 1991). The current Australian population is a mixture of immigrant groups of great diversity. There are more than one hundred different ethnic and cultural groups in Australia and 25% of Australia's population is comprised of migrants (Parry, 1998). Australia has become a diverse nation of immigrants and the present policy of multiculturalism encourages all ethnic groups to preserve and maintain their culture and heritage. However, despite the fact that Australia initiated a large-scale immigration program following the Second World War and introduced a large number of migrants from non-English speaking backgrounds, the recognition of the multicultural character of Australian society evolved rather slowly. The consecutive Australian Governments attempted to address the issue of the rising migrant population through different policies including:

1. Assimilation – this was the official policy towards migrant adaptation during the first six decades of 20th century and was often called a White Australia policy. Non-British migrants were expected to shed their

language and culture and assimilate into main English-speaking population as quickly as possible.

2. Integration – this policy was introduced by Liberal-Country Party Government in 1966 to replace the racist White Australia policy. The policy recognised the hardship of newly arrived migrants from non-English speaking countries and attempted to address these difficulties by increased expenditure on migrant welfare and assistance. The integrationist policies were stopped in 1972 by Whitlam's Labour Government and replaced by policy of multiculturalism (DIMA Fact Sheet, 2000)

In 1972 multiculturalism became Australia's official policy towards migrant population and is officially known as 'Australian Multiculturalism'. The term describes

> ... the public policies that manage the consequences of the cultural and linguistic diversity of Australian society in the interest of the individual and society as a whole. The Australian Government is committed to a multicultural policy that recognises the social, cultural and economic benefits of the nation's diversity and seeks to ensure that it is a positive force for Australia...(DIMA Fact Sheet, 2000)

In the context of multicultural policies in Australia the Bui and Bertelli's (1990) findings demonstrate that migrant adaptation and it's success or failure is a very important research as well as social issue.

This article is an overview of the literature on migrant adaptation, acculturation and acculturative stress. The framework in which the relationship between the process of acculturation and mental health is studied will be the one

proposed by Berry (1984), Berry and Kim (1987) and extended by Berry, Kim, Minde and Mok (1987) and Berry (1990). The article will begin with various definitions of terms and concepts of acculturation and acculturative stress and presentation of issues significant to their study. The outline of some empirical studies on the experience of acculturation, acculturative stress and the variables moderating the outcomes of the acculturation process will follow. Some research positions critical of Berry's framework and some alternatives to Berry's framework will also be briefly discussed.

Acculturation

Acculturation is a term describing the extremely complex process of cultural influences occurring between two culturally different groups in continues contact and was for the first time observed and described at the group level by Redfield, Linton and Herskovits (1936) defined *acculturation* as a:

> ...phenomena which results when groups of individuals having different cultures come into continuous firsthand contact, with subsequent changes in the original culture patterns of either or both groups... under this definition acculturation is to be distinguished from culture change, of which it is but one aspect, and assimilation, which is at times a phase of acculturation. It is also to be differentiated from diffusion, which ... also constitutes only one aspect of the process of acculturation. (pp.149-152).

Acculturation was initially believed to be a group phenomenon influencing only ethnic groups in contact with different ethnic groups (Berry, 1992). However, Graves (1967) proposed that acculturation can also be observed on the personal level where individuals struggle through the process of migrant adaptation, which he referred to as *psychological acculturation*. At this level the term acculturation refers to the whole array of social and psychological changes which are experienced by the

individual belonging to the ethnic group that collectively endures acculturation (Berry, Kim & Boski, 1988; Berry, 1992).

A theoretical framework was developed by Berry (1980, cited in Berry, 1990) systematising the relationships between variables influencing the acculturation process both at the individual and the group level. He differentiated between two distinctive levels *(population level* and *individual level)* on which cultural change and acculturation can be observed and studied. On the group level, acculturation involves ecological, cultural, social and institutional changes while psychological acculturation of the individual involves changes in attitudes, behaviour or the identity of the person who is part of the ethnic group undergoing the process of acculturation. This distinction between group and individual level of acculturation is very important because:

> ...if we want to eventually understand the relationship between culture contact and psychological outcomes for individuals, we will need to assess...changes at the population level and the individual's participation in this change, then relate both of those measures to the psychological consequences for the individual (Berry, 1990, p.204).

A separation between the causes (*Antecedents)* and the results (*Consequents*) of the cultural change has been also proposed by Berry (1990). On the group level the causes of the cultural change can be either of the internal or external nature. The alteration in the internal group dynamics is usually initiated by scientific and technological progress which usually is followed by social change. The external pressures for cultural change can involve colonisation, wars or invasions. The cultural change/ acculturation invariably results in a transformed cultural and social system of

the acculturating group with new political and linguistic institutions emerging and with new relationship patterns being established (Berry, 1988). Correspondingly, acculturation on the individual level is always related to the psychological characteristics of the individual members of the acculturating group who, frequently, are acquiring new psychological characteristics that can either aid or impede their adaptation to the new situation. The individual behavioural changes due to the acculturation process and their influence on the mental status of the individual are the particular focus of this analysis.

Acculturation and the changes in individual behaviour

When individuals move into the new society they usually change their values and attitudes. Such changes are often referred to as *behavioural shifts* (Berry, 1994). The behavioural shift involves all the changes of behaviour patterns that are common in a new society but quite divergent from the behaviours practised in the culture of origin. The character and extent of behavioural shifts depend both on group level and individual level variables (Berry, 1994). The initial contact phase is mainly determined by the characteristics of both the host society and the migrating group. The differences between the political context, economic development and demographic factors characterising both groups will determine the nature and the limits of the behavioural shift while some characteristics of the host society (ethnic/racial attitudes, immigration ideology, the extent of social support and social acceptance) will either aid or hinder the participation of the acculturating group in the host society.

As the migrant group attempts to find it's place in the new society, the individual members of the group adjust their values and behaviours. This process of

adjustment can be either adaptive or maladaptive and depends on a number of individual characteristics. Berry (1994) suggested a number of factors that may have existed prior to migration (i.e., motivation to migrate, social/economic expectations or experienced decrease in social status) and a number of determinants that may have emerged during the acculturation process (i.e., acculturation strategies, social support, social attitudes). During the behavioural shift, the acculturating group members are learning new behaviours from the dominant culture and at the same time are shedding behaviours that were prominent in the society of origin, which are not useful in the new situation. Berry (1994) related the extent of the processes of culture learning/shedding to the strategies adopted by the new migrant in a host society. The harmonious culture learning and culture shedding occurs in migrant groups and individuals who decided to assimilate in the new environment while those who cannot adapt to the new society and adopt a separation strategy will neither learn the new behaviours nor cast off the old ways of life. In host societies that enforce the integrationist policies, the culture learning of the emigrants will be substantially larger than the culture shedding while marginalized migrant groups and individuals will shed their own culture without learning the ways of their new host society (Berry, 1994). The outcome of the behaviour shifts is highly variable and therefore "... there is no expectation of one single acculturation pattern, but of highly variable strategies and outcomes that will lead to variably successful long term adaptation." (Berry, 1994, p.136). However, Berry remarked that no matter how successful the outcome of the behavioural shift is, the acculturative change experienced by individuals who move into the new society is almost always accompanied by *acculturative stress.*

Acculturation and Stress

The initial definition of acculturation assumed that the cultural influences were mutually experienced by both cultures coming into contact (Redfield, Linton & Herskovits, 1936). However, Berry and Kim (1987) remarked that the change is experienced more by the acculturating group than by the host nation and that the process is far from being wholly positive and painless. The acculturating group, according to Berry (1992), usually goes through various changes which can be classified either as physical (i.e., change of living environment), biological (i.e., introduction of new diet), political (i.e., beneficial or detrimental change of political system), economic (i.e., shift towards new forms of employment), cultural (i.e., linguistic or. religious adjustment), or social (i.e., changing family and intergroup relationship). The individual who belongs to the acculturating group can be in a state of turmoil and transformation and also experiences a number of psychological problems associated with the change of the ethnic identity. These psychological difficulties frequently encountered by individuals during acculturation are referred to as *acculturative stress* (Berry & Annis, 1974; Berry, Kim, Minde & Mok, 1987). Acculturative stress has been defined by Berry (1992) as the

> … kind of stress in which the stressors are identified as having their source in the process of acculturation, a phenomena that may underline poor adaptation, including a reduction of the health status of the individuals, identity confusion and problems in daily life with family , work and school… (p. 75).

The consequences, which must be related to the acculturation experiences of the individual, are largely negative and unwanted. They tend to appear unexpectedly and

often cause serious problems for the subject's adaptation and may , in particularly difficult situations, may lead to psychopathology such as lowered mental health status in form of anxiety and/or depression, feelings of marginality and alienation and increase in the level psychosomatic complaints (Berry, 1994).

Several studies have been conducted focusing on the relationship between various environmental factors that can influence the acculturation process and acculturative stress. Murphy (1965) presented some evidence that the mental health problems of migrants are intensified in assimilationists societies compared with countries where multiculturalism is a preferred government policy. Born (1970) attempted to explain the conflict created by the acculturative situation in terms of the withdrawal of status, respect and particularly the *relative deprivation*. The relative deprivation is defined by Born as a '...negative discrepancy between legitimate expectation and actuality, or between legitimate expectation and anticipated actuality, or both...' (p.535) and describes the tension that is often created by the cultural gap existing between the migrant's culture of origin and the host nation's culture. Born initially pointed to the cultural gap as an important source of acculturative stress.

The relationship between the acculturative stress and various environmental factors that can influence the acculturation process was investigated by Berry and Annis (1974). They found that the level and intensity of the acculturative stress depends on both the features of the acculturating group and the pressures brought into the process by the host society. Participants in the study were 357 Canadian Indians, who were either relatively traditional or relatively acculturated. They found that as the cultural gap between acculturating group and the host culture widens, the acculturative stress's intensity increases mainly for the acculturating group. On the individual level, Berry and Annis discovered that acculturative stress is negatively

related to the psychological differentiation of the acculturating individuals. Therefore, the more closely the individual depends on the community of origin for psychological wellbeing and the harder it is for the individual to become independent of the community of origin's values, the more acute the level of acculturating stress is for this individual.

A further study that attempted to determine what variables contribute to the level of acculturative stress was Chataway and Berry's (1989). They compared a group of Chinese students with two groups of French-Canadian and English-Canadian students. The participants were matched for various aspects of their lives and personalities, their coping strategies and the level of experienced anxiety. The results confirmed that the greater the difference between cultures, the higher the level of acculturative stress and the less positive the experiences of migrants in their new environment.

Similar connection between the cultural gap separating acculturating groups and the level of the acculturative stress was demonstrated by Hovey and King (1996). They attempted to determine the relationship between the level of acculturative stress, the prevalence of depressive episodes and suicidal ideation among Latino-American adolescents. Results showed the relationship between acculturative stress and the level of depression and suicidal ideations. People who were mostly at risk of being depressed and suicidal were usually those suffering from high levels of acculturative stress. They were described by Hovey and King as "…caught between cultures..." and unable to reconcile the influence of the traditional values of their cultural group and disparate norms and expectations of the mainstream American society. Furthermore, Hovey and King found that certain cultural traits characteristic for

various migrant groups may act as buffers against unacceptable high levels of acculturative stress. For example, family support is an important source of emotional support for Latino migrants and wherever the traditional, closely knit, family model was preserved in the Latino migrant community a low level of acculturative stress was also found (Hovey & King, 1996).

In a similar study Takeuchi, Chung, Lin, Sheng, Kurasaki, Cheng and Sue (1998) investigated the prevalence of the Major Depressive episodes among Chinese Americans in Los Angeles. This study involved a sample of 1747 adult Chinese Americans who were first generation of migrants. At least 12% of the subjects had experienced either major depression or a dysthymic episode during their lifetime with 5% suffering current episodes. Takeuchi et al. found that social pressure brought by living in an other than Chinese society, where traditional family support became fairly loose, was the most consistent correlate of depression and dysthymia.

Finally, a meta-analysis by Berry, Kim, Minde and Mok (1987) compared several Canadian studies which explored the experience of acculturative stress in different ethnic groups in Canada. Their analysis demonstrated a number of important variables (both individual and group) that influence the level of acculturative stress. For example, salient individual variables were sex, age, education level, acculturation attitudes and individual cognitive style, while status, social contact and social support were significant group variables. The results of these studies demonstrate that the outcome of the acculturation must be influenced by both the ethno-specific characteristic of the migrating group as well as by the individual traits of the people belonging to the migrating group.

Theoretical Framework of Acculturative Stress

A theoretical framework of the interrelations between various cultural, social and psychological attributes that influence the outcome of acculturation process was attempted by Berry and Kim (1987). They theorised that the intensity of the acculturative experience in conjunction with the number of stressors experienced by the acculturating individual will determine the actual level of acculturation stress suffered by migrants. Additionally, Berry and Kim postulated the existence of five groups of factors moderating the psychological outcome of the acculturation process:

- *Nature of the host society*: multicultural vs. assimilationist;
- *Type of acculturating group*: Immigrants, Refugees, Native People, Ethnic Groups, Sojourners;
- *Demographic and social characteristics of individual*: Age, Status, Social Support, etc.;
- *Psychological characteristics of individuals*: Coping Skills, Person Factors etc.;
- *Mode of Acculturation*: INTEGRATION, ASSIMILATION, SEPARATION, MARGINALISATION.

The first factor, the *nature of the host society* and whether the host society adopts assimilationist or multicultural policies towards migrants can substantially increase or reduce the level of acculturative stress experienced by migrants. This was confirmed by Murphy (1973), who demonstrated that in Canadian society, which adopted multicultural policies, migrants had lower mental hospitalisation rates. This was compared to the United States that, though pluralistic and open to migrants, adopted much more assimilationist policies with regard to migrants. Similarly, Berry and Kim (1987) demonstrated that a multicultural and pluralistic society would exert

lower pressure on migrants to adjust culturally. This would provide ample time and support throughout the cultural adaptation period, lowering the danger of the negative consequences of acculturative stress. Likewise, an Australian study by Taft (1985) explored social attitudes towards migrants and demonstrated that the multicultural policy adopted by the Australian Government increased the level of tolerance towards many non-English European migrants. However, there was still a high level of prejudice against migrants from Asia.

The research into the influence of the nature of the host society on the acculturative stress was summarised by Berry (1998). He suggested four basic requirements of the host society and the acculturating group in order to create and sustain a multicultural society in which all ethnic groups can live and coexist comfortably. In such a society:

(i) a positive "multicultural ideology" is maintained where the majority supports multiculturalism and accepts the consequences of multicultural policies;

(ii) there is generally a low level of intolerance or prejudice;

(iii) various multiethnic groups maintain positive mutual attitudes;

(iv) all ethnic groups share and display a high degree of attachment to the larger society (concept of nation, national symbols, integrity of national interest) and agree on the common national goals.

The second factor modifying the level of acculturating stress is the *type of acculturating group*. Kim and Berry (1987) suggested the existence of five different acculturating groups: immigrants (i.e., people who migrate as a result of their choice),

refugees (i.e., people who are forced out of their homes due to unforeseen and catastrophic events like wars, revolutions or natural disasters), native people (i.e., people who, in the past, have been invaded and overpowered by the colonisation from different countries), ethnic groups (i.e., minority groups who coexisted with the dominant ethnic group on the same territory), sojourners (i.e., revellers, tourists, international students. From amongst five acculturating groups defined in Kim and Berry's framework, much attention has focused on refugees, followed by migrants, ethnic groups/native people and sojourners. A number of studies explored the issue of acculturative stress in migrants and refugees (Berry, Kim, Power, Young & Bujaki., 1989; Dona & Berry 1994; Kim & Berry, 1985; Taft, 1985). Findings suggested that migrants who voluntarily arrived in the host country adapt much better than refugees who were forced to leave their homeland. Some studies also explored the acculturative experiences of foreign students in the United States, Canada or Australia (Green, 1994; Chataway & Berry, 1989) and found that Asian students find the acculturative experience difficult due mainly to a lack of social support.

A comparative study of the level of acculturative stress experienced by the five different acculturating groups was conducted by Berry, Kim, Minde and Mok (1997). They found that refugees and native people usually experienced the highest levels of acculturative stress followed by sojourners who experienced an intermediate level of stress and immigrants and ethnic groups who experienced the lowest level of acculturative stress. Berry et al. suggested that when acculturation was the result of an involuntary contact between two or more culturally different groups (as in the case of refugees or native people) the resulting acculturative stress will be higher as compared to where contact between groups was voluntary (for example, migrants or ethnic

groups). The higher stress level of sojourners who, although a voluntary group, may have their acculturative stress level heightened due to the impermanence of their contact and, in the case of overseas students, due to their relative youth and student status.

The third and the fourth factor influencing the acculturation process incorporates *psychological , social and demographic characteristics of the acculturating individual*. Berry and Kim's (1987) framework identified education, age, gender or prior intercultural experiences as the most likely to influence the intensity of the acculturative stress. Similarly, the cognitive style and the type of coping strategies implemented by the acculturating individual can either help them to successfully adapt to the new society or hinder such adaptation and lead to high levels of acculturating stress. Several studies examined the manner in which social, demographic and psychological characteristics of the individuals mediate the level of acculturative stress. Mok (1985), Kim (1984) (cited in Berry et al., 1987), and Berry et al. (1987) have found that a high level of education is consistently associated with low levels of acculturative stress. Two explanations for this phenomenon were proposed Berry et al. (1987). Firstly, the "cognitive" explanation which states that the higher the level of education of the person the more cognitive, economic and social resources an individual possesses to cope with the stresses of the migration. Secondly, the "social" explanation which demonstrates that the term "education" usually refers to European education which exposes students to a variety of sources of knowledge which provides some initial acculturative information prior to the experience of migration.

The influence of the climate of the host country on the process of migrant assimilation has been studied by Minde (1985) (cited in Berry et al., 1987). It was found that the climatic similarities between the country of origin and the country of migration influence the level of acculturative stress as much as the cultural differences. The greater the cultural gap between the home country and the host country, the greater the stress displayed by the acculturating individuals. Berry et al. (1987) demonstrated that the migrant's ability to speak host's country language influences the acculturative stress level more than other cultural differences. They also established that there were gender differences in the perception of the acculturative stress, with females suffering greater stress than males.

Finally, a study by Liebkind (1996) examined whether Berry's framework could be extended outside English speaking countries. Participants were Vietnamese refugees in Finland. The study explored the influence of sociodemographic characteristics and the social context on the level of acculturative stress. Results indicated that gender, Finnish language proficiency and age were the best predictors of the level and intensity of the acculturative stress. This appears to support Kim and Berry's theoretical assumption. The final factor moderating the level of acculturative stress is the *mode of acculturation.*

The Mode of Acculturation and Acculturation Attitudes

The way the individual reacts to the stressful situation of acculturation is going to determine the comparative success or failure of the process. Born (1970) created a framework of four basic adaptive mechanisms that are available to the acculturating individual for the resolution of the conflicts that accompany the process of migrant adaptation:

1. **Retreatism** - involves the upholding of the traditional patterns of behaviour and a subsequent refusal to go along with the accepted behaviours of the host country;

2. **Reconciliation** – involves an attempt to combine the traditional behaviours and the new patterns acceptable in the host society;

3. **Innovation** - involves the rejection of the traditional patterns of behaviour and a subsequent acceptance of the new patterns of behaviours characteristic of the host society;

4. **Withdrawal** – involves an overt rejection of both the traditional and the new.

Born's framework has been adapted by Berry (1984) who emphasised that the issue of "how to acculturate" is equally important to migrants and the members of the host society. The strategies that help to resolve this issue are worked out through the everyday contact of both acculturating groups and individuals, but their outcome is determined by the way groups and individuals answer two basic questions:

(i) how important, for the acculturating individuals and the group they belong to, are traditional values, customs and beliefs and to what extent must they be maintained (defined by Berry, 1997, as *cultural maintenance*);

(ii) how closely should acculturating individuals and the group they belong to interact with the host society and/or other cultural groups (defined by Berry, 1997, as *contact and participation*);

The above theoretical setting in conjunction with Born's (1970) conceptualisation has allowed Berry to create a framework of acculturation strategies called Modes of Acculturation. In this framework there are negative and positive responses ("yes" or "no") to two issues ("cultural maintenance" and "contact and participation") which creates a matrix of four possible modes of acculturation. In a multicultural society these four strategies can be defined from the point of view of the acculturating group as follows:

(i) **Assimilation** – acculturating individuals seek mostly contact with the host society and do not wish to maintain their cultural identity (this corresponds to Born's *Mode of Innovation*);

(ii) **Separation** – acculturating individuals seek mostly contact with the ethnic group of origin but avoids contact with the host society (this corresponds to Born's *Mode of Retreatism*);

(iii) **Integration** – acculturating individuals seek to maintain close contact with both the host society and their ethnic group of origin (this corresponds to Born's *Mode of Reconciliation*);

(iv) **Marginalisation** – acculturating individuals have little interest in initiating and maintaining contact with the host society, but also show little interest in cultural maintenance (this corresponds to Born's *Mode of Withdrawal*);

It is important to note that Berry (1997) specifically emphasised that this framework is valid only when acculturating individuals live in a multicultural society that allows the choice of acculturation. In more restrictive cultures, where the host society specifically constrains such choices, a different classification must be used. A forced Separation changes into *Segregation* and the forced Assimilation becomes a *Pressure Cooker* rather than a gentle Melting Pot of multicultural societies.

Few studies examining the relationship between acculturative stress and attitudes to acculturation have been conducted over the last two decades. Initially Berry and Annis (1974) examined the relationship between the three acculturative attitudes and the level of acculturative stress. This study examined the three attitudes Assimilation, Integration and Rejection (Rejection corresponds to the attitude of Separation (Berry, 1984)). Marginalisation had not been included in this early study. The results demonstrated that high levels of acculturative stress are associated with the lack of

desire to maintain contact with the larger society (attitude of Rejection) while Integration and, to a lesser degree, Assimilation were significantly associated with lower levels of acculturative stress.

The Korean community in Canada was explored in Kim and Berry's (1985) study who demonstrated that the Integration attitude followed by Assimilation are the most beneficial to the general well-being of the migrants. Separation followed by Marginalisation are often reported to be related to the experience of stress and marginality. Partridge (1988) found a similar relationship between acculturative stress and acculturative attitudes amongst Westerners living in culturally distant Japan. Similarly, a study of Latino refugees in North America by Donna and Berry (1994) found that following levels of cultural maintenance, attitudes to acculturation were the best predictors of acculturative stress. The migrants who were in Separation mode were significantly more anxious than those in Integration and Assimilation mode.

The results of the above research lend support to Williams and Berry's (1991) claim that "...those who feel marginalized 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 leads to intermediate levels of stress..." (p. 635). However, as Berry's framework of acculturation credits the acculturation attributes with a strong influence on the outcome of the acculturation process, the scarcity of well designed studies in this area needs to be addressed in future research.

Critiques of Berry's framework and some alternatives

It must reiterated again that the main goal of these article is to summarise the research related to the Berry's framework of acculturation and acculturative stress suffered by the migrants. However, given the scope and the complexity of the issues

surrounding the phenomenon of migrant adaptation, it is also imperative to present some views critical of Berry's acculturation framework and to discuss some alternatives proposed by other researchers.

The most common criticism found in the literature concerns the incompleteness of Berry's framework. Some confusing qualities of Berry's acculturation paradigm have been identified by Triandis (1997). On one hand, the model is very complex but on the other, it still lacks several variables that would be appropriate to create a more complete structure. Triandis singled out the important concept of *cultural distance* that is not paid enough attention. In particular, the model does not deal well with the problems that arise from the distinctions between cultures (i.e., egalitarian vs. hierarchical, individualistic vs. collectivist, loose vs. tight etc) and totally ignores the acculturation problems of re-adjustment to the old culture after some migrants go back to the countries of their origin. Triandis suggests the much broader acculturation model that includes most of the known dimensions of cultural variations. Such model, though not testable in its entirety due to its complexity, would anyway indicate the areas of future studies examining the relationship between the variables influencing the experience of acculturation and the variables pointing towards the differences between cultures.

Pick (1997) made a similar criticism calling attention to the vast complexity of Berry's model resulting in its ultimate inflexibility. The different modules of Berry's framework are locked with each other in functional relationship that creates a structure that resists the inclusion of new variables often appearing in the transitory world of migration and acculturation. Therefore, Pick proposed that the large macro-model must be necessarily complemented by the number of micro-theories that will be "capable of locating and explaining the patterns of specific groups while taking into

account the transitory nature of the phenomena" (p. 50). Otherwise, Berry's vast and sweeping macro-model is simply not testable, a characteristic also noted by Lazarus (1997), who have chosen to call it a "metatheory" rather than a working model.

Lazarus also indicated that Berry's conjecture relies too heavily on the concept of acculturation while not paying enough attention to the individual emotions of people who adjust to cultures different from their own. On one hand the model attempts to deal with the concepts of stress and coping but on the other it does not pay enough attention to the *fit* between psychological characteristic of the migrating individual and the environmental factors that are being faced by this individual. According to Lazarus, this process is very much *transactional* and therefore *dynamic* as the situations faced by the individual migrants and their responses to such situations and the emotions that are generated in the process are in the constant state of flux. A structural and static framework created by Berry is somewhat unable to deal properly with the dynamic process of emotional changes experienced by the individual struggling to adjust to the new culture. Hence, Lazarus proposed that future models of migrant adaptation should rely more on stress, emotion and coping paradigms rather than on acculturation hypothesis as the concepts of culture and its effect on individuals is complex and confounded by too many untested variables.

Apart from criticising the technical details of Berry's framework some researchers proposed different approaches to the study of the problems associated with the immigration and acculturation. Ward (1997) called attention to the culture learning/social skills angle to cross-cultural change and adjustment as fundamentally different from Berry's stress and coping inspired acculturation model. She proposed a framework focusing on social rather than psychological limitations leading to problems in migrant adaptations process. Such social limitations usually involve

problems negotiating everyday social situations that in turn may or may not lead to some future psychological problems. Therefore, if migrants experience some psychopathology during the period of cultural adjustment it is regarded as a result of social learning skills deficit rather than as a sole source of migrant adaptation problems. From the practical perspective the social skills/culture learning approach offers a possibility of easier intervention through better education of prospective migrants (i.e. better understanding of host societies and their values, learning of expected behaviours and culture-specific skills etc.) and seems to be certainly less costly than eventual psychological/psychiatric interventions aimed at alleviation of psychopathology brought about by the troublesome process of migrant adaptation. The stress/coping paradigm used by Berry to construct his acculturation framework has been also criticised by Schoenpflug (1997) who proposes to introduce a developmental perspective into acculturation research. The Schoenpflug analysis recognises that the event of migration introduces the elements of turmoil and confusion into dynamic process of individual development forcing the individual to reorganise her or his ethnic identity, social identity/behaviour, cognitions and even personality organisation. Therefore, adopting the developmental perspective for acculturative research would provide the investigator with much wider angle of enquiry than stress/coping paradigm used by Berry's model.

Berry's framework and Australian studies of migrant settlement

Australia is a country largely built on immigration. From the time it was founded as a British colony for the purpose of establishing of a convict settlement, Australia became a nation in it's own right (Jupp, 1991). Australia has became a diverse nation of immigrants and the present policy of multiculturalism encourages all ethnic groups to preserve and maintain their culture and heritage. Few Australian studies have

examined all the five factors influencing the outcome of the acculturation process. From an Australian perspective, research needs to concentrate on issues affecting Australia if we are better able to understand the processes and impact of acculturation in this context.

A research review by Jayasuriya, Sang and Fielding (1992) considered the interaction between the stress of immigration, mental health risk factors and the mental outcome of the acculturation process in the migrant population of Australia. They reviewed many epidemiological and cross-cultural studies attempting to create a "...new perspective of transcultural ....psychology...". This analysis reflects the medical perspective of mental disorders, but nevertheless provided beneficial overview of the overall mental health of Australian migrants, who are particularly affected by depression and schizophrenia.

Several studies by Burvill (1973) , Burvill, McCall, Stenhouse and Reid (1998) and Taft (1985) investigated some of the problems facing migrants adapting to Australian mainstream culture and specific Australian factors influencing the mental health of the migrant population. Burvill's studies are mainly preoccupied with the suicide rates among migrants while Taft's (1985) study :

> Employed two complementary and interrelated perspectives for conceiving the behaviour and reactions of the subjects both before and after their migration: the socialisation-resocialisation perspective of Taft (1957, 1966, 1972a, 1977a) and the dynamic sequential model of Richardson (1957, 1961, 1967, 1974). (p.364).

The theoretical perspectives and the methodologies employed by these studies are outside the scope of Berry's framework but their findings remain a valuable input to the discussion about problems facing migrants adapting to the life in Australia.

Furthermore, only a few studies have considered Berry's acculturation framework in the Australian context. Studies by Green (1994) and Gupta (described in Green, 1994) examined some of the factors influencing the acculturative process with an international student population in some major universities in Perth (Western Australia). These studies replicated Kim and Berry's (1985) study and used their Acculturation Attitudes Scale which was modified to suit a Chinese student sample. The results of both studies support Berry's et al's. (1989) conclusion that migrants who display Assimilation and Integration attitudes suffer less acculturative stress than those who display Separation or Marginalisation.

Conclusions

The area of migrant adjustment, acculturation experiences and psychological problems associated with such experiences have been the domain of productive scholarly activity for at least four decades. Berry created the most comprehensive framework for acculturative research, that includes both group and individual level variables influencing the experiences of the individual who is undergoing the acculturation (Berry, 1997). Ward (1992) has summarised Berry's research and concluded that he "... has largely demystified the acculturative process by showing that the process and product of changing cultures can be understood in familiar terms and interpreted in the light of existing theories in mainstream psychology..." (p. 58). An important contribution of Berry's framework is, that it describes the influence of coping strategies adopted by acculturating individuals (acculturative attitudes) on the overall outcome of the process of acculturation (Ward, 1992). There is a paucity of research investigating five main groups of factors influencing the outcome of the acculturation process. The finding of the research are also inconsistent.

Furthermore, the results of a number of studies did not support all the predictions of Kim and Berry's (1988) theoretical framework of acculturative stress. Nwadoria and McAdoo (1996) conducted a study of Amerasian migrants to assess the influence of gender, race, English proficiency level and the length of stay in the United States. Although they found that the ability to speak English competently decreases the level of acculturative stress in migrants, the integrationist attitude has a negligible effect. Similarly, Damji, Clement and Noels (1996) did not provide evidence to support the claim that a strong aspiration to identify with host nation would enhance the migrant adjustment and therefore lower the level of the acculturative stress. They also concluded that the interrelations between various cultural, social and psychological attributes of the acculturating individual and the outcome of acculturation process cannot be understood independently of their sociocultural and evolutionary context. Kim and Berry's (1987) "four attitudes" framework can only be part of a larger and more complex system that will be formulated in the future. Still, a study by Laroche, Kim and Hui (1997) demonstrated that ethnic individuals living in Canada can reside in two cultures independently. These studies raise questions of Berry's claim that assimilation and integration are the only two possible positive attitudes to the acculturation process.

There is a need to built a body of knowledge in the area of acculturative stress. Future researchers could be guided by current approaches, but could widen the research area by examining the differences in the general stress level between members of the host society and migrant groups and exploring the cultural differences existing between acculturating groups (cultural distance) and the influence of those differences on the outcome of the acculturative process.

The area could also benefit from a longitudinal study with migrants. This would provide the opportunity to examine the changes of the level of acculturative stress in time. Current approaches provide a "snapshot" picture of the acculturative stress and are unable to answer the question whether the level of acculturative stress rises or falls in time and what factors are affecting such changes. Future studies should attempt to address some of these issues.

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Acculturative Stress Appraisal and Acculturation Attitudes - A Comparative Study of Asian and European Migrants in Australia.

by

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Abstract

The relationship between the type of acculturating group and the levels of acculturative stress encountered during the acculturative experience has been documented in the study of Berry and Kim (1968) and replicated by others. However, there is not much evidence concerning the influence of the cultural compatibility between the acculturating group and the host nation on the level of acculturative stress. The aim of this study was to compare the level of acculturative stress between migrants of Asian (Singaporean Chinese) and European (Polish) origin using a group of white Anglo-Australians as a control. The main hypothesis was that people migrating to Australia from Europe will experience a lower level of acculturative stress than Asian migrants due to the greater similarity of the cultural background between Australia and Europe than between Australia and Asia.

The phenomenon of migration has always been a part of the human condition. War, famine, disease and often a wish to better one's economic situation drove individuals and groups from their familiar surroundings into foreign and often hostile lands. Immigrants were not always welcomed by the host population and the encounter was often a challenging experience for both groups. The trend to emigrate has steadily increased over the last twenty years as people try to escape the poverty of Africa, South America and large parts of Asia and attempt to settle in one of the developed western countries (Escobar, 1998; Rissel, 1997; Cheng & Chang, 1999). War, depression and social unrest have also resulted in forced migration. It is estimated that 100 million people reside outside their countries of origin (Rissel, 1997). Additionally, the technological advances of the 20th century made travel and resettlement open to people who, in the earlier times, would not have contemplated leaving their homeland. For some, immigration becomes an adventure and is not a necessity forced by urgent economic or political circumstances (Rissel, 1997).

Regardless of the reasons people left their native countries, all migrants go through the process of adaptation. The study of this process is one of the central topics of cross-cultural psychology. Berry (1997) suggested that the answer to the question of what happens when people who developed in one culture attempt to live in another cultural context, has important practical consequences in the field of mental health. The negative outcomes of the individual migrant adaptation process leads to psychological problems that, in time, will have an accumulative effect in the form of social problems (i.e., crime, drug abuse, alienation of some ethnic groups). The seriousness of the experience of dislocation is evident by the results of some community-based mental health studies that attempted to establish a prevalence rate of

mental disorders in the ethnic communities in Australia. Bui and Bertelli (1990) found that the rates of psychiatric morbidity in some European and Asian migrant communities in Australia compare very unfavourably with the same rates in an Anglo-Australian sample. In addition, the prevalence rates for mental disorders among European migrants ranged from 6.8% for Italians to 5.5% for migrants from Eastern Europe and 3.9% for the migrants from other parts of the world excluding UK and Ireland. In comparison the mental illness prevalence factor for Anglo-Australians was 3.5% while UK migrants rate of psychiatric morbidity was even lower at 3.2%. In Australia, where migrants comprise 25% of the population of 18 million (Parry,1998), the failure or success of migrant adaptation is an important research and social issue.

A framework for understanding acculturation and migrant adaptation was developed by Berry (1984, 1990, 1992, 1998). This study will adopt the framework proposed by Berry and Kim (1987) and extended by Berry, Kim, Minde and Mok (1987) in which the relationship between the process of acculturation and mental health is studied. The aim of this study is to investigate some factors involved in the acculturation experience of two groups of migrants in Australia: Chinese Singaporeans and Polish migrants. The focal point will be the influence of a number of situational and attitudinal variables on the outcome of the migrant adaptation process and the level of stress that may accompany acculturation.

Acculturation

Acculturation is a term describing the extremely complex process of cultural influences occurring between two culturally different groups in continuous contact. This phenomenon was observed and described at the group level firstly by Redfield, Linton and Herskovits (1936) who defined *acculturation* as a:

> ...phenomena which results when groups of individuals having different cultures come into continuous firsthand contact, with subsequent changes in the original culture patterns of either or both groups... under this definition acculturation is to be distinguished from culture change, of which it is but one aspect, and assimilation, which is at times a phase of acculturation. It is also to be differentiated from diffusion, which ... also constitutes only one aspect of the process of acculturation. (pp.149-152)

Acculturation was initially believed to be a phenomenon influencing only ethnic groups in contact with different ethnic groups (Berry, 1992). However, Graves (1967) proposed that acculturation can also be observed on the personal level where individuals struggle through the process of personal adaptation which he referred to as *psychological acculturation*. In this context, the term acculturation refers to the whole array of social and psychological changes which are experienced by the individual belonging to the ethnic group (Berry, Kim & Boski, 1988; Berry, 1992).

Berry (1980, cited in Berry, 1990) created a theoretical framework that seeks to systematise the relationships between variables influencing the acculturation process both at the individual and the group level as shown in Figure 1.

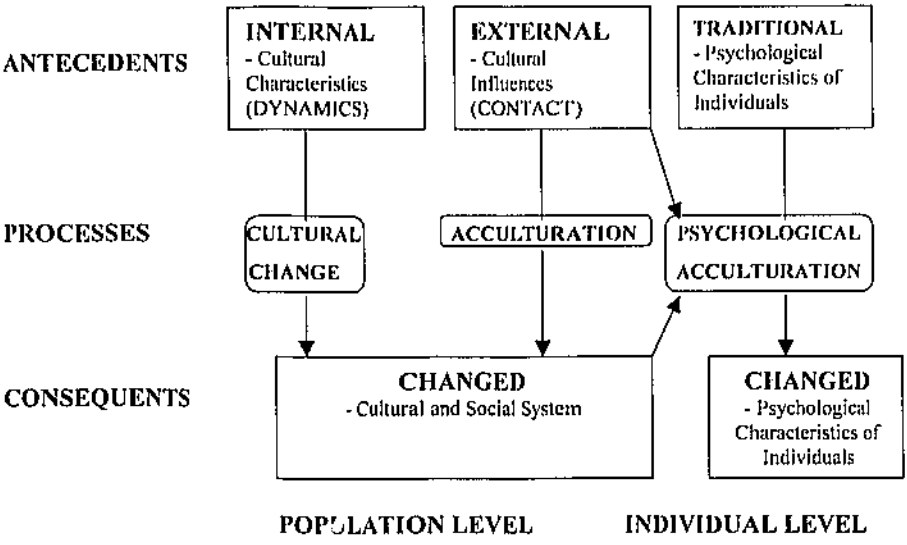

Figure 1. A framework of key variables and relationships in the study of acculturation (Adapted from Berry ,1990)

Berry (1990) has differentiated between two distinct levels *(population* and *individual)* on which cultural change and acculturation can be observed and studied. The acculturation on the group level involves ecological, cultural, social and institutional changes while psychological acculturation of the individual involves changes in attitudes, behaviour or the identity of the person who is in contact with the different culture. This distinction between the group and individual level of acculturation is significant because, as Berry (1990) stated: '...if we want to eventually understand the relationship between culture contact and psychological outcomes for individuals, we will need to assess...changes at the population level and the individual's participation in these changes, then relate both of those measures to the psychological consequences for the individual' (p.204).

Berry (1990) has also discriminated between the causes (*Antecedents)* and the results (*Consequents*) of the cultural change. At the group level, the cultural change can be initiated through an alteration in the internal group dynamics or externally through contact with an outside group. Some examples of the sources of internal change are inventions, discoveries or innovations (i.e., writing, discovery of new lands or the steam engine) while external pressures for cultural change can involve colonisation, wars or invasions. At the individual level, acculturation is always related to the psychological characteristics of the individual. The cultural change and acculturation invariably results in a transformed cultural and social system of the acculturating group. At the same time, the individual members of the acculturating group are frequently acquiring new psychological characteristics that can either aid or impede their adaptation to the new situation.

Acculturative Stress

The initial definition of acculturation assumed that the cultural influences were mutually experienced by both cultures coming into contact. However, Berry (1988) remarked that the real change is experienced by the acculturating group rather than by the host nation and that the process is far from being wholly positive and painless. The acculturating group usually goes through various changes which can be classified either as physical (i.e., change of living environment), biological (i.e., introduction of new diet), political (i.e., beneficial or detrimental change of political system), economic (i.e., shift towards new forms of employment), cultural (i.e., linguistic or religious adjustment), or social (i.e., changing family and intergroup relationship) (Berry, 1992). The individual who belongs to the acculturating group is in a state of turmoil and transformation and may also encounter a number of personal

psychological problems associated with a change of ethnic identity. These psychological difficulties frequently encountered by individuals during acculturation are referred to as *acculturative stress* (Berry & Annis, 1974; Berry, Kim, Minde & Mok, 1987).

Acculturative stress has been defined by Berry (1992) as:

> ... kind of stress in which the stressors are identified as having their source in the process of acculturation, a phenomenon that may underline poor adaptation, including a reduction of the health status of the individuals, identity confusion and problems in daily life with family , work and school... (p. 75).

The consequences are largely negative, unwanted and usually appear unexpectedly often causing serious problems for the migrant's adaptation and may lead to psychopathology. Several studies have been conducted focusing on the relationship between various environmental factors which can influence the acculturation process and acculturative stress (Berry & Annis, 1974; Chataway & Berry,1992; Dona & Berry,1994; Berry, Kim, Minde & Mok,1987; Hovey & King,1996; Liebkind,1996; Takeuchi, Chung, Lin, Sheng, Kurasaki, Cheng & Sue,1998). The results of these studies demonstrated that as different individuals react differently to acculturative stress, the outcome of the acculturative process must be influenced by both the ethno-specific characteristic of the migrating group as well as by the individual personalities of the people belonging to the migrating group.

Theoretical Framework of Acculturative Stress

A theoretical interpretation of the interrelations between various cultural, social and psychological attributes that influence the outcome of acculturation process was

attempted by Berry and Kim (1987). They theorised that the intensity of the acculturative experience in conjunction with the number of stressors experienced by the acculturating individual will determine the actual level of acculturation stress suffered by migrants. Additionally, Berry and Kim postulated the existence of five groups of factors moderating the psychological outcome of the acculturation process:

- *Nature of the host society*: multicultural vs. assimilationist;
- *Type of acculturating group*: Immigrants, Refugees, Native People, Ethnic Groups, Sojourners;
- *Demographic and social characteristics of individual*: Age, Status, Social Support, etc.;
- *Psychological characteristics of individuals*: Coping Skills, Person Factors etc.;
- *Mode of Acculturation*: Integration, Assimilation, Separation, Marginalisation.

The framework of variables predicting such an outcome is presented in Figure 2.

The first factor, the *nature of the host society* implies whether the host society adopts assimilationist or multicultural policies towards migrants as these can substantially increase or reduce the level of acculturative stress experienced by migrants. This was confirmed by Murphy (1973) who demonstrated that in Canadian society, which adopted multicultural policies, migrants had lower mental hospitalisation rates. This was compared to the United States that, though pluralistic and open to migrants, adopted more assimilationist policies with regard to migrants. Similarly, Berry and Kim (1987) demonstrated that a multicultural and pluralistic society would exert lower pressure on migrants to adjust culturally. This would provide ample time and support throughout the cultural adaptation period, lowering the danger of the negative consequences of acculturative stress. Likewise, an

Australian study by Taft (1985) explored social attitudes towards migrants which indicated that the multicultural policy adopted by the Australian Government increased the level of tolerance towards many non-English European migrants. However, there was still a high level of prejudice against migrants from Asia.

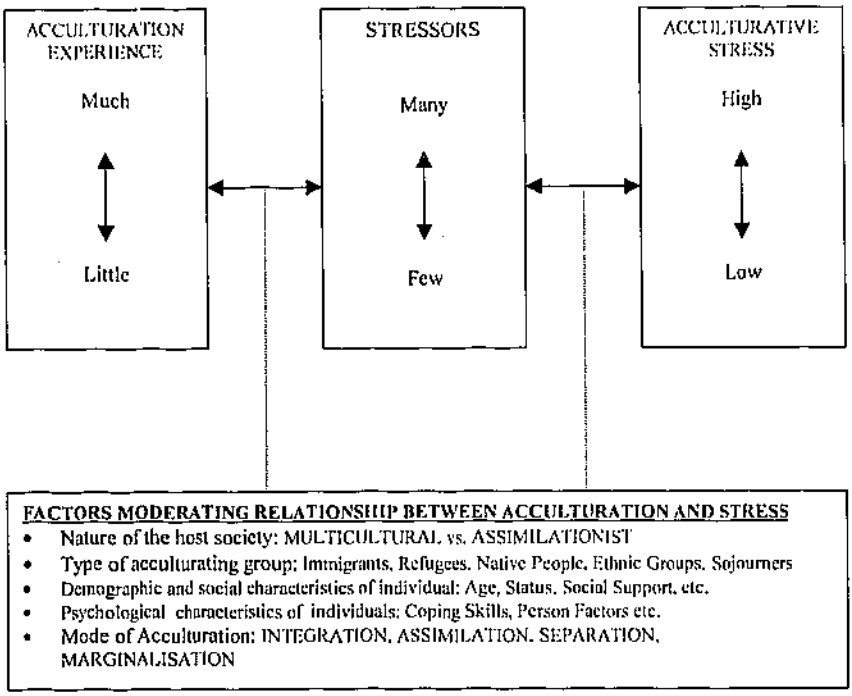

Figure2. Variables which can predict the coping response and outcome of the acculturative stress (Adapted from Berry & Kim, 1988; Green, 1993)

The research into the influence of the nature of the host society on acculturative stress was summarised by Berry (1998). He suggested four basic requirements of the host society and the acculturating group in order to create and sustain a multicultural society in which all ethnic groups can live and coexist comfortably. In such a society:

(i) a positive "multicultural ideology" is maintained where the majority supports multiculturalism and accepts the consequences of multicultural policies;

(ii) there is generally a low level of intolerance or prejudice;

(iii) various multiethnic groups maintain positive mutual attitudes;

(iv) all ethnic groups share and display a high degree of attachment to the larger society (concept of nation, national symbols, integrity of national interest) and agree on the common national goals.

The second factor modifying the level of acculturating stress is the *type of acculturating group*. Berry and Kim's (1987) framework suggested the existence of five different acculturating groups: immigrants (i.e., people who migrate voluntarily), refugees (i.e., people who are forced out of their homes due to unforeseen and catastrophic events like wars, revolutions or natural disasters), native people (i.e., people who, in the past, have been invaded and overpowered by the colonisation from different countries), ethnic groups (i.e., minority groups who coexisted with the dominant ethnic group on the same territory), sojourners (i.e., revellers, tourists, international students). The most widely studied group has been refugees followed by migrants, ethnic groups/native people and sojourners. A number of studies explored the issue of acculturative stress in migrants and refugees (Berry, Kim, Power, Young & Bujaki., 1989; Dona & Berry, 1994; Kim & Berry, 1985; Taft, 1985). Findings suggested that migrants who voluntarily arrived in the host country adapt much better than refugees who were forced to leave their homelands. Some studies also explored the acculturative experiences of foreign students in the United States, Canada or Australia (Green, 1994; Chataway & Berry, 1989) and reported that Asian students

find the acculturative experience difficult mainly due to a lack of social support. A comparative study of the level of acculturative stress experienced by the five different acculturating groups conducted by Berry, Kim, Minde and Mok (1987) found that when acculturation was the result of involuntary contact between two or more culturally different groups (as in the case of refugees or native people) the resulting acculturative stress was higher than in the case where contact between groups was voluntary (like migrants or ethnic groups).

The third and fourth factors which influenced the acculturation process comprised the *psychological , social and demographic characteristics of the acculturating individual*. Berry and Kim's (1987) framework identified education, age, gender or prior intercultural experiences as the most likely reasons to influence the intensity of the acculturative stress. Similarly, the cognitive style and the type of coping strategies implemented by the acculturating individual can either help migrants to successfully adapt to the new society or hinder such adaptation which may lead to high levels of acculturating stress. Several studies examined the way in which social, demographic and psychological characteristics of the individuals can mediate the level of acculturative stress. Mok (1985), Kim (1984) (both cited in Berry et al., 1987), and Berry et al. (1987) found that a high level of education is consistently associated with low levels of acculturative stress. Berry et al proposed two explanations for this phenomenon. Firstly, the "cognitive" explanation which stated that the higher the level of education of the person, the more cognitive, economic and social resources such an individual possesses to better deal with the stresses of the migration. Secondly, the "social" explanation which demonstrates that the term "education" usually means the European variety which exposes students to a variety of sources of

knowledge and as such provides some initial acculturative information prior to the experience of migration. A study by Liebkind (1996) examined whether Berry's framework could be extended outside English speaking countries. Participants were Vietnamese refugees in Finland. Liebkind sought to determine the influence of sociodemographic characteristics and the social context on the level of acculturative stress. Results indicated that gender, proficiency in the Finnish language and age were the best predictors of the level and the intensity of the acculturative stress. The final factor moderating the level of acculturative stress is the *mode of acculturation.*

The Mode of Acculturation and Acculturation Attitudes

Using Born's (1970) theoretical conceptualisation, Berry (1984) created a framework of acculturation attitudes which he termed: Modes of Acculturation. He theorised that in a multicultural society these four strategies can be defined from the viewpoint of the acculturating group as follows:

(i) **Assimilation** – acculturating individuals mostly seek contact with the host society and do not wish to maintain their cultural identity;

(ii) **Separation** – acculturating individuals mostly seek contact with their ethnic group of origin and avoid contact with the host society;

(iii) **Integration** – acculturating individuals seek to maintain close contacts with both the host society and their ethnic group of origin;

(iv) **Marginalisation** – acculturating individuals have little interest in initiating and maintaining contact with the host society but also show little interest in cultural maintenance.

It is important to note that Berry (1997) specifically emphasised that this framework is valid only when acculturating individuals live in a multicultural society that allows

the choice of acculturation. In more restrictive cultures, where the host society specifically constrains such choices, a different classification must be used. A forced Separation changes into *Segregation* and the forced Assimilation becomes a *Pressure Cooker* rather than a gentle Melting Pot of multicultural societies.

Few studies examining the relationship between acculturative stress and attitudes to acculturation have been conducted over the last two decades. Initially Berry and Annis (1974) examined the relationship between the three acculturative attitudes and the level of acculturative stress. This study examined the three attitudes Assimilation, Integration and Rejection (Rejection corresponds to the attitude of Separation (Berry, 1984)). Marginalisation had not been included in this early study. The results demonstrated that high levels of acculturative stress are associated with the lack of desire to maintain contact with the larger society (attitude of Rejection) while Integration and, to a lesser degree, Assimilation were significantly associated with lower levels of acculturative stress. For example, a study of the Korean community in Canada by Kim and Berry (1985) demonstrated that the Integration attitude followed by Assimilation was the most beneficial to the general well-being of the migrants. Separation followed by Marginalisation is often reported to be related to the experience of stress and marginality. Partridge (1988) found a similar relationship between acculturative stress and acculturative attitudes amongst Westerners living in Japan. A study of Latino refugees in North America by Donna and Berry (1994) found that following levels of cultural maintenance attitudes to acculturation were the best predictors of acculturative stress. The migrants who were in Separation mode were significantly more anxious than those in Integration and Assimilation mode.

The results of the above research confirmed Williams and Berry's (1991) claim that '...those who feel marginalized 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 leads to intermediate levels of stress…' (p. 635). Thus, Berry's framework credits the acculturation attributes with a strong influence on the outcome of the acculturation process.

Australian studies of Acculturation

Australia is a country largely built on immigration. From the time it was founded as a British colony for the purpose of establishing a convict settlement, Australia became a nation in it's own right (Jupp, 1991). The current Australian population is a mixture of immigrant groups of great diversity. There are more than one hundred different ethnic and cultural groups in Australia and 25% of Australia's population is comprised of migrants (Parry, 1998). Australia has become a diverse nation of immigrants and the present policy of multiculturalism encourages all ethnic groups to preserve and maintain their culture and heritage. However, despite the fact that Australia initiated a large-scale immigration program following the Second World War and introduced a large number of migrants from non-English speaking backgrounds, the recognition of the multicultural character of Australian society evolved slowly. Consecutive Australian Governments attempted to address the issue of rising migrant population through different means. For example:

1. Assimilation – this was the official policy towards migrant adaptation during the first six decades of 20th century and was often called the White Australia policy. Non-British migrants were expected to shed their language and culture and assimilate into main English-speaking population as quickly as possible.
2. Integration – this policy was introduced by Liberal-Country Party Government in 1966 to replace the White Australia policy. The policy recognised the hardship of

> newly arrived migrants from non-English speaking countries and attempted to address these difficulties by increased expenditure on migrant welfare and assistance. The integrationist policies were stopped in 1972 by Whitlam's Labour Government and replaced by a policy of multiculturalism (DIMA Fact Sheet, 2000)

In 1972 multiculturalism became Australia's official policy towards migrant population and is officially known as 'Australian Multiculturalism'. The term describes:

> ... the public policies that manage the consequences of the cultural and linguistic diversity of Australian society in the interest of the individual and society as a whole. The Australian Government is committed to a multicultural policy that recognises the social, cultural and economic benefits of the nation's diversity and seeks to ensure that it is a positive force for Australia...(DIMA Fact Sheet, 2000)

In the context of multicultural policies in Australia the findings of Bui and Bertelli (1990) demonstrated that the success or failure of migrant adaptation is an important research and social issue. However, few Australian studies have examined all the five factors influencing the outcome of the acculturation process. From an Australian perspective, research needs to concentrate on issues affecting Australia if we are better able to understand the processes and impact of acculturation in this context.

A review of the research by Jayasuriya, Sang and Fielding (1992) considered the interaction between the stress of immigration, mental health risk factors and the mental outcome of the acculturation process in the migrant population of Australia. They reviewed a large number of epidemiological and cross-cultural studies attempting to create a "...new perspective of transcultural ....psychology..." (p. 30)

Jayasuriya et al's. analysis tended towards the medical perspective of mental disorders, and provided a valuable picture of the overall mental health of Australian migrants, who are particularly affected by depression and schizophrenia.

Several studies by Burvill (1973), Burvill, McCall, Stenhouse and Reid (1973) and Taft (1985) investigated some of the problems facing migrants adapting to Australian mainstream culture and specific factors influencing the mental health of the migrant population. Not much however, has been done to examine Berry and Kim's (1987) framework of factors influencing acculturation in the Australian situation.

Studies by Green (1994) and Gupta (described in Green, 1994) examined some of the factors influencing the acculturative process using the oversees student population of some major universities in Perth (Western Australia). These studies replicated Kim and Berry's (1985) study and used their Acculturation Attitudes Scale modified to suit the population of Chinese students. The results of both studies confirmed Berry et al's. (1989) conclusion that migrants who display Assimilation and Integration attitudes suffer less acculturative stress than those who display Separation or Marginalisation. Both studies attempted to test Berry's framework in the Australian situation, but both suffered from a limited subject base (university students) and none of the studies examined the differences in the general stress level between members of the host society and migrant groups. The present study takes, as a starting point, Green's and Gupta's results, which demonstrated that the Integration attitude followed by Assimilation was the most beneficial to the general well-being of the migrants. The study attempts to replicate Kim and Berry's (1985) design in a wider Australian context using subjects drawn from two ethnic groups comprising Australian multi-ethnic society. The general aim of this study is to examine the extent of the influence of different acculturative variables on the acculturative process of

migrant groups with different cultural backgrounds from the host nation in the Australian context. The first aim is to establish what acculturation strategies are being employed by two different migrant groups selected from the multitude of ethnic communities comprising the Australian society. Two groups chosen for the present study are: Singaporean Chinese migrants and Polish migrants. The choice of these two particular migrant groups for comparison was to some extent dictated by the ease of obtaining enough data to conduct a meaningful analysis (convenience sample) and partially by surface similarities between the groups. Firstly, both groups are well represented in Australia. Polish migrants constitute a reasonably large group in Australian society and the number of Poles living in this country has been estimated between 160,000 and 180,000 people (Wielka Encyklopedia Multimedialna, 2000), while the emigration of Chinese Singaporeans to Australia increased slowly in 1970's and since 1980 has reached a steady rate of around 3000 people a year (Low, 1995). Secondly, both groups may be characterised as culturally homogenous, relatively young and fairly well educated. The majority (72%) of Polish migrants who left their country of origin after 1980 (the so called "Solidarity migration") were quite young (20-29 years) and the vast majority (82%) possessed secondary or tertiary qualifications (Frejka, Okolski & Sword, 1998). The current Singaporean Citizen's Registry data (cited by Low, 1995) shows that 71% of the Chinese Singaporeans migrating to Australia were young (20-29 years), 51% of those migrants were females, and 44.5% of the whole migrant group possessed secondary or higher education. Thirdly, both groups came to Australia from relatively politically restrictive (though quite different in nature) conditions looking for a country that offered more personal freedom. Although, most Polish migrants from "Solidarity migration" left their country as political refugees, they usually did it voluntarily without the pressure of

war or other similar calamity. They predominantly cited social factors (personal freedom) followed by economic factors as the main reasons for migration (Frejka, Okolski & Sword, 1998). According to Low (1995), the Chinese Singaporeans rarely quote purely economic reasons for emigration, but social factors are prominently listed. Australia is perceived as a country with a more relaxed lifestyle that allows Singaporean migrants to realise some material aspirations (i.e., land ownership, motor vehicles etc.) that they would never have realised in the Singapore.

The second aim of this study is to explore the relationship between the acculturation strategies of the migrant groups and the stress experienced by the migrant cultures. This investigation is guided by the research suggesting that there is a link between Acculturation Attitudes adopted by the migrants and the level of stress experienced by them (Kim and Berry, 1985; Gupta (described in Green), 1994; Green, 1994). However, the present investigation will employ a general population sample rather than a sample of university students.

The third aim of this study is to compare the stress measures between European participants of Polish origin and Asian participants of Singaporean-Chinese origin and the Anglo-Australian control group in order to examine the role of the acculturative stress component in the general stress level of the two acculturating groups. The general stress level of the host nation's participants will be compared with the general stress level of the acculturating groups in order to determine the acculturative stress component. Additionally, the study will attempt to establish which demographic variables predict the level of the acculturative stress in both migrant groups.

This study will endeavour to answer the following four research questions:

1. What are the prevailing acculturation attitudes of Singaporean Chinese compared to Polish migrants in Australia?
2. What is the relationship between the acculturation attitudes and the level of stress displayed by the Singaporean Chinese as compared with Polish migrants in Australia?
3. What is the level of General Stress of the two migrant groups as compared with the General Stress level of the Anglo-Australian control group?
4. What acculturative variables (i.e., age, gender, language fluency, length of residency in Australia, general stress level and Acculturation Attitudes) are the best predictors of the level of Acculturative Stress in both migrant groups?

Method

Participants

A total of 105 people participated in the study. There were 49 males (**M**=34.81 years, **SD**=9.96 years) and 56 females (**M**=35.14 years, **SD**=8.73 years). Participants were recruited from three groups: Polish migrants, Singaporean migrants of Chinese origin and white Anglo-Australians. In each group there were 35 participants who represented different social backgrounds and occupations. Participants had been in Australia on average 11.60 years (Singaporean Chinese: **M**=5.71, Poles: **M**=17.48) with the extremes ranging between 2 years (recent arrivals) and 32 years (well adapted migrants). All participants were *first generation migrants* who spent at least 20 years in the countries of their origin.

A minimum age limit of 20 years was adopted, as it was assumed that children, who were not born in Australia but who grew up and were educated here,

would exhibit a stress level similar to white Anglo-Australians and would not be affected by acculturative stress as much as the older generation of migrants. Participants were required to exhibit competence in the English language in order to read the questionnaire and answer the questions.

Participants were asked to self-assess their level of English language fluency on a scale from 1 to 5 as a working knowledge of English is an important factor influencing the acculturative stress. The fluency indicator for the whole migrant population was 4.40 (Singaporean Chinese: $\underline{M}$=4.56, Poles $\underline{M}$=4.25) meaning that on average both migrant groups mastered English very well. English is the main language used for the large majority of the Singaporean Chinese population (91.6%) while only 37.1% of the Polish population reported English as being their everyday main language. The demographic data for Singaporean Chinese and European migrant participants is summarised in Table 1.

Table 1
Demographic data for Singaporean Chinese and Polish participants

PARTICIPANTS	SINGAPOREAN CHINESE		POLISH	
POPULATION	N = 35		N = 35	
	Female	46%	Female	51.4%
	Male	54%	Male	48.6%
AGE	< 30	74%	< 30	2.9%
	31-45	26%	31-45	68.5%
	> 45	0%	> 45	28.6%
LENGTH OF RESIDENCE IN AUSTRALIA	≤ 5 yrs.	60%	≤ 5 yrs.	0%
	6-15 yrs.	34%	6-15 yrs.	26%
	≥ 15 yrs	6%	≥ 15 yrs.	74%
ENGLISH LANGUAGE SPOKEN	Not at all	0%	Not at all	0%
	Poor	0%	Poor	0%
	Somewhat	2.9%	Somewhat	8.6%
	Fairly well	28.6%	Fairly well	51%
	Very well	68.7%	Very well	40%
MAIN LANGUAGE SPOKEN	English	91.4%	English	38%
	Other	8.6%	Polish	62%

Instruments

All measures were presented in the form of questionnaires. Acculturative stress in all three participant groups was measured by using the Acculturative Stressors Scale (Green, 1994) that was based on the instrument created by Cawte, Bianche and Kiloh (1968. This scale was modified by the experimenter to accommodate distinguishing characteristics of Singaporean Chinese, Polish and Anglo-Australian participants. Two versions of the same stress questionnaire (one for the Polish and one for the Singaporean Chinese participants) and one general experiences questionnaire for the Anglo-Australian controls were used.

Each questionnaire contained the following sections:

(i) **Background Information** (for migrant participants) /**General Background Information** (reduced and adjusted for the control group of Anglo-Australian participants (e.g., all the questions concerning ethnic background were deleted etc.)) - consisted of questions related to the demographic details (e.g., gender, age, ethnic origin and length of stay in Australia) and questions related to general acculturative issues (e.g., fluency of written/spoken English language, language spoken at home etc.).

(ii) **General/Acculturative Stress Measure** (called "Your Experiences in Australia" for migrant participants and called "Your Experiences in General for the control group) – it is a measure of stress consisting of 39 items divided into two scales: **Symptoms of Stress** (applied to migrant participants and controls) and **Acculturative Stressors** (applied only to migrant participants). The Symptoms of Stress Scale consisted of 20 items representing the original scale of Cawte et al. (1966) modified by Green (1994) and Gupta (described in Green, 1994). Ten items measured physical symptoms of stress and ten items measured psychological symptoms of stress. The subject responded on a 1-5 scale. The Acculturative Stressors Scale consisted of 19 items and was a modification of Green's (1994) scale. The 10 items measuring acculturative stress were randomised with buffer items and participants were asked to assess the stressfulness of the situation on 1-5 scale. Only responses to the 10 specific acculturative stress measures were averaged to provide an acculturative stress score for each subject. A high score indicated a high level of acculturative stress. The General and Acculturative Stress Measure for the control group contained only the Symptoms of Stress Scale which

allowed isolation of the general stress factors not influenced by acculturative stress. The reliability analysis of the scale used in the present quasi-experiment revealed Cronbach's ∝ for the Acculturative Stressor Scale at **0.84** and Cronbach's ∝ for the General Stressors scale at **0.85**

(iii) Acculturation Attitudes Scale is a variation of Kim and Berry's (1985) *Attitudes to Acculturation Scale* that demonstrated acceptable psychometric properties of consistency and reliability. The scale used seven general life themes: food preferences, friendship, success, affection, accommodation preferences and participation in organisations. For each topic four attitudes was assigned: Integration, Assimilation, Separation and Marginalisation resulting in a 24 item questionnaire. The statements were randomised to minimise the effects of previous responses. The relevant items on each scale are summarised in Table 2.

Table 2
The relevant attitude items on each scale

ATTITUDE	RELEVANT SCALE ITEMS
INTEGRATION	3;6;8;14;22;24
ASSIMILATION	7;13;19;20;21;23
SEPARATION	1;2;10;11;16;17
MARGINALISATION	4;5;9;12;15;18

Gupta (1993 cited in Green (1994)) reported the following internal consistency levels (**Cronbach's α**) for each attitude type: Integration 0.35, Assimilation 0.55, Separation 0.70, Marginalisation 0.65. The combined Outgroup orientation (Separation and Marginalisation attitudes) has an internal consistency level $\alpha = 0.73$ while the combined Ingroup Orientation (Assimilation and Integration attitudes) has an alpha level $\alpha = 0.53$. The reliability analysis of the scale used in the present quasi-experiment revealed the following Cronbach's α for each attitude type: Integration

0.64, Assimilation 0.47, Separation 0.48, Marginalisation 0.49. Copies of the questionnaires are included in Appendix A, Appendix B and Appendix C.

Procedure

Polish participants were recruited from amongst patrons of various Polish clubs in Perth (Western Australia) while Singaporean Chinese participants were recruited through friends, colleagues and associates of the investigator. Participation was voluntary and there was no aversive or unpleasant stimuli applied to participants and therefore a consent form was not necessary. Participants were assured that all responses would be treated with confidentiality. Each questionnaire was distributed to the subject by the experimenter and collected at a time convenient for participants. The questionnaire required approximately 45 min. for completion. The Anglo-Australian control group required 25 minutes to complete the task. Participants were not informed about the exact aim of the study and the investigator explained that the main goal of the study was to determine the extent of people's adjustment to migration.

Results

The results were analysed using SPSS for Windows. The descriptive data on the responses of two groups of migrant participants and Anglo-Australian controls was obtained in the form of means and standard deviations for each measures in the Background Questionnaire, Stress Questionnaire and Acculturative Attitudes Questionnaire. To evaluate the assumptions of the regression, the guidelines outlined in Tabachnik and Fidell (1989) were followed and the data were examined for univariate outliers by examining standardised scores and histograms. No cases of univariate outliers were found in the data set. Univariate normality, linearity and

homoscedasticity were established by examining residual scatterplots. Multivariate normality was also checked through standardised residuals. No cases had missing data.

The results of the comparison of the prevailing acculturation attitudes (i.e., Integration, Assimilation, Separation and Marginalisation) of Singaporean Chinese and Polish migrants are summarised in Table 3 .

Table 3
Attitudes scores for Singaporean Chinese and Polish participants

Subjects	Polish	Chinese
Variable	M (S.D)	M (S.D)
Integration	4.08 (0.62)	3.34 (0.43)
Assimilation	1.08 (0.5)	2.27 (0.32)
Separation	2.23 (0.39)	2.65 (0.62)
Marginalisation	2.09 (0.57)	2.11 (0.65)

The comparison of attitudes towards acculturation between the two migrant groups demonstrates that Polish participants display significantly more Integration attitudes ($F(1,68) = 32.61$, $p<.05$) and significantly less Separation attitudes ($F(1,68) = 6.98$, $p<.05$) while the Singaporean Chinese participants show significantly higher Assimilation attitudes score (($F(1,68) = 21.59$, $p<.05$).

The results of the comparison of the Acculturative Stress measures between European participants of Polish origin and Asian participants of Singaporean-Chinese origin are summarised in Table 4. The stress measures were compared in order to examine the relationship between the acculturation attitudes adopted by different ethnic groups and the level of acculturative stress experienced by them while the comparison has been guided by the assumption drawn from the available research suggesting that more prevalent embracing of the Marginalisation and to the certain extent the Separation attitudes is predictive of a higher level of Acculturative Stress

amongst the migrant groups that adopted them (Kim and Berry, 1985; Gupta (described in Green), 1994; Green, 1994).

Table 4:
Acculturative stress scores of Singaporean Chinese and Polish participants

PARTICIPANTS	N	ACCULTURATIVE STRESS SCORE M (S.D)
Chinese	35	2.21 (0.52)
Polish	35	1.72 (0.47)

The ANCOVA procedure has been used to determine which acculturative stress scores are significantly different from each other. The general stress level, the length of residence and the subject's age may be related to acculturative stress level and therefore were included as covariates in the analysis-of-covariance (ANCOVA) equation. The results show that, even though the acculturative stress level for both groups of migrants together was fairly low (**M** = 1.97, **S.D**=0.55), the Polish migrants, who more readily embrace the Integration attitudes, show significantly (**F(4,65)** = 19.16, **p**<.05) lower levels of the Acculturative stress than Singaporean Chinese, who more often choose Separation as their preferred mode of acculturation.

The means shown in Table 5 allow a comparison between the general stress level of the three subject groups. The objective was to measure a general stress level for both groups of migrant participants and contrast it with the general stress scores of an Anglo-Australian control group who had not experienced emigration in order to examine the role of the acculturative stress component in the general stress level of two acculturating groups. The acculturative stress component may increase an average general stress level of the migrant participants as compared with the average level of stress of those who did not experience emigration (Berry, Kim, Minde & Mok,1987; Chataway & Berry,1992; Dona & Berry,1994; Gupta,1994; Green,1994).

Table 5
General Stress level for three groups of participants.

PARTICIPANTS	N	GENERAL STRESS SCORE M (SD)
Chinese	35	1.83 (0.60)
Polish	35	1.63 (0.20)
Anglo-Australian	35	1.58 (0.27)

Again, the ANCOVA procedure has been used to determine which general stress scores are significantly different from each other. The length of residence and the subject's age may be related to stress and therefore were included as covariates in the analysis-of-covariance (ANCOVA) equation. The results demonstrated that the Anglo-Australian controls, who did not experience emigration, scored significantly ($F(3,101)$ =3.04, $p<05$) lower on a general stress index than both Singaporean Chinese and Polish participants who, on the other hand, experienced the emigration and the relatively intensive acculturative stress.

Multiple regression results

A linear multiple regression analysis was performed for the Singaporean Chinese and Polish migrant samples separately to establish which independent variables are significant predictors of Acculturative Stress in both groups. The independent variables placed in the multiple regression equation were: gender, age, English language fluency, length of residency in Australia, general stress score, Integration, Assimilation, Separation and Marginalisation attitudes. The dependent variable was the acculturative stress score. The results for Singaporean Chinese participants are shown in Table 6.

The multiple regression for Singaporean Chinese migrants produced three significant variables. The general stress level was the strongest predictor of

acculturative stress ($\beta = .77$, $p < .05$) followed by the Assimilation ($\beta = -.42$, $p < .05$) and Marginalisation ($\beta = -.14$, $p < 05$) attitudes. While the gender variable did not reach significance ($\beta = -.15$, $p = 058$) there is some evidence that a relationship may exist indicating that older people may experience greater levels of acculturative stress than younger migrants.

Table 6
Summary of linear regression analysis for variables predicting the level of acculturative stress in Singaporean Chinese migrants

Predictors	B	SE B	β	p
Subject's Age	-.03	.02	-.31	.192
Gender	-.16	.16	-.15	.058
English fluency	-.16	.16	-.11	.335
Length of residency in Australia	.01	.03	.10	.652
General stress level	.66*	.23	.77	.008
Integration score	-.07	.15	-.09	.634
Assimilation score	-.42*	.24	-.26	.038
Separation score	.15	.13	.18	.264
Marginalisation score	-.14*	.21	-.17	.049

*p = < .05
Note. $R^2 = .68$; $^{\Delta}R^2 = .57$

The results of regression analysis for Polish participants are shown in Table 7. The multiple regression for Polish migrants produced two significant variables. The General stress level score ($\beta = .31$, $p < .05$) was the strongest predictor of acculturative stress followed by the English fluency score ($\beta = -.27$, $p < .05$). Again, the Integration attitude score indicated that a relationship may exists between this

variable and the level of acculturation stress, but it did not reach the level of significance ($\beta = -.06$, $p = 066$).

Table 7
Summary of linear regression analysis for variables predicting the level of acculturative stress in Polish migrants

Predictors	B	SE B	β	Sig. p
Subject's Age	.00	.02	.03	.890
Gender	-.14	.15	-.15	.347
English fluency	-.21**	.13	-.27	.016
Length of residency in Australia	.00	.02	.07	.743
General stress level	.72**	.45	.31	.012
Integration score	- .07	.20	-.06	.066
Assimilation score	-.05	.20	.05	.789
Separation score	.26	.26	.21	.343
Marginalisation score	- .11	.21	.12	.608

**Sig. p = < .05
Note. $R^2 = .46$; $^{\Delta}R^2 = .26$

Discussion

The area of migrant adjustment, acculturation experiences and psychological problems associated with such experiences have been the domain of productive scholarly activity for at least four decades. Berry (1984, 1990, 1992, 1998) developed a framework for acculturative research, that includes both group and individual level variables influencing the experiences of the individual who is undergoing the acculturation. Berry's research has been summarised by Ward (1992) who concluded that he "… has largely demystified the acculturative process by showing that the

process and product of changing cultures can be understood in familiar terms and interpreted in the light of existing theories in mainstream psychology..." (p. 58). Ward noted that Berry's framework describes the influence of coping strategies adopted by acculturating individuals (acculturative attitudes) on the overall outcome of the process of acculturation. Much research on acculturative stress appraisal has emerged over the last twenty years but a survey of the available literature reveals that from among the five main groups of factors influencing the outcome of the acculturation process, some are much better researched than others. The aim of this study was to investigate some factors involved in the acculturation experience of two group of migrants in Australia: Chinese Singaporeans and Polish migrants. The main focal point was the influence of a number of situational and attitudinal variables on the outcome of the migrant adaptation process and on the level of stress that usually accompanies acculturation

The first aim of this study was to establish what acculturation strategies are being employed by Singaporean Chinese migrants and Polish migrants in Australia. The comparison of acculturation attitudes demonstrated that Polish participants displayed significantly more Integration and significantly less Separation attitudes and less Marginalisation attitudes than Singaporean Chinese.

The second aim of this study was to explore the relationship between the acculturation strategies adopted by migrants and the level of stress experienced by them exploiting the link between these two variables suggested by the research results of Kim & Berry (1985), Gupta (1994, described in Green) and Green (1994). Generally, the Singaporean Chinese participants display a significantly higher level of the general stress then the Polish migrants. The level of acculturative stress is also

significantly higher within Singaporean Chinese subject population than in Polish migrant group. The results of present study demonstrated that the stronger attitudes of Integration found in Polish migrants coupled with weaker attitudes of Separation and Marginalisation translated directly into the lower level of the acculturative stress score displayed by Polish participants. This confirms Kim and Berry's theoretical prediction that migrants who display strong attitudes of Integration followed by lower attitudes of Assimilation, Separation and Marginalisation will display lower levels of acculturative stress. This relationship has been empirically demonstrated by Berry et al. (1989) and his study on migrant groups in Canada, Donna and Berry's (1994) study with refugees from South and Central America, Berry and Annis (1974) and their investigation of Canadian native Indians and Kim and Berry's (1985) study with Korean migrants in Canada. What is crucial is that present results have been achieved in a uniquely Australian context with a solely migrant population unlike Green (1994) and Gupta (1994) who used a purely sojourner population in similar analyses.

The third aim of this study was to examine the role of the acculturative stress component in the general stress level by comparing the stress scores of Polish and Singaporean Chinese migrants with general stress level of white Anglo-Australians. The results demonstrated that white Anglo-Australians are, on average significantly less stressed than migrant subjects from both ethnic groups. This confirms Kim and Berry's (1985) prediction that the strains associated with experiences of migration are directly translatable into the level of acculturative stress and through it into the general level of stress.

Finally, the fourth aim of this study was to establish which acculturative variables predict the level of acculturative stress in both migrant groups. The general

stress level followed by the Marginalisation and Integration attitudes was the strongest, significant predictor of acculturative stress in Singaporean Chinese participants while the general stress level score and the English fluency score was the strongest predictor of acculturative stress in Polish migrant group. The importance of the general stress level on acculturative indicates the possibility that these individuals who are generally more anxious will suffer more adjustment problems as migrants, while people who are more calm by nature may adjust more easily as migrants. Nevertheless, the relationship between general stress and acculturative stress is complex and requires further study.

However, caution is needed when extending the results of this study to the wider context. The reliability analysis of the scale used in the present quasi-experiment revealed that the Cronbach's α levels for each attitude type was low which questions reliability of the scale. An Acculturative Attitudes Scale designed for the Australian context is needed to address this question. Additionally, there are some features of the subject population and the design of the study that require one to view the results with some measure of caution. The small subject population of the study and the nature of the sampling process may have altered the results. Future research using a larger population is needed to confirm this results.

Still, despite the study's methodological shortcomings, it contributes to the small number of studies in acculturative stress within an Australian context using the acculturation framework proposed by Berry et al (1987). In particular, the importance of this study lies in its specific focus on the two growing migrant populations in Australia that have not previously been compared. The results of this study demonstrated that Berry's acculturative framework is a useful starting point for such an analysis. In addition, this study demonstrates that there is a need to build a body of

knowledge in the area of acculturative stress. Future researchers may be guided by current approaches, but could widen the research area by examining the differences in the general stress level between members of the host society and migrant groups and exploring the cultural differences existing between acculturating groups (cultural distance) and the influence of those differences on the outcome of the acculturative process. The area could also benefit from a longitudinal study with migrants. This would provide the opportunity to examine the changes of the level of acculturative stress in time. Current approaches provide a "snapshot" picture of acculturative stress and are unable to answer the question whether the level of acculturative stress rises or falls in time and what factors are affecting such changes. Future studies should attempt to examine some of these issues.

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Appendix A: General stress measure for control participants: Your Experiences in General

BACKGROUND INFORMATION

*Answer the question by **circling** the appropriate number.*

1. Gender **Male** **Female**

2. Age .....

3. Did you at any time travel or live outside Australia ?

Yes **No**

YOUR EXPERIENCES IN GENERAL

In this section we are interested in how your health has been **during last five years**. There is no right or wrong answer, but it is important that you answer accurately and for yourself. ***Circle the number that is closest to your response.***

	Never	Rarely	Some times	Often	All the time
1. Have you have difficulties getting to sleep and staying asleep?	1	2	3	4	5
2. Have you have pains in the heart or chest?	1	2	3	4	5
3. Have you suffered from bad constipation?	1	2	3	4	5
4. Have your muscles and joints felt stiff?	1	2	3	4	5
5. Have your skin been sensitive or tender?	1	2	3	4	5
6. Have you suffered from severe headaches?	1	2	3	4	5
7. Have you suffered from dizzy spells?	1	2	3	4	5
8. Do you wake up tired or exhausted?	1	2	3	4	5
9. Have you found yourself shaking or trembling?	1	2	3	4	5
10. Are you very worried about your health?	1	2	3	4	5
11. Have you broken out in cold sweat due to fear?	1	2	3	4	5
12. Have you felt frightened by strange people or places?	1	2	3	4	5
13. Have you felt depressed?	1	2	3	4	5
14. Have you felt irritated by other people?	1	2	3	4	5
15. Have you been easily offended or hurt?	1	2	3	4	5
16. Have you wished you were dead?	1	2	3	4	5
17. Has worrying got you down?	1	2	3	4	5
18. Have you felt angry when anyone tells you what to do?	1	2	3	4	5

Appendix B: General/Acculturative stress measure for migrant participants: Your Experiences in Australia.

BACKGROUND INFORMATION

*Answer the question by **circling** the appropriate number.*

1. Gender **Male** **Female**

2. Age .....

3. Country of origin .....

4. Year of arrival to Australia .....

5. Before you came to Australia, did you at any time travel or live outside your home country?

Yes **No**

6. Is English the main language spoken among your family at home?

Yes **No**

7. English language ability (Circle a number)

	Not at all	Poor	Some what	Fairly well	Very well
How well do you understand English spoken by Australians?	1	2	3	4	5
How well do you speak English?	1	2	3	4	5
How well do you read English?	1	2	3	4	5
How well do you write English?	1	2	3	4	5

YOUR EXPERIENCES IN AUSTRALIA

*In this section we are interested in your experiences in Australia and your reactions to the process of assimilation in this country **during last five years**. There is no right or wrong answer, but it is important that you answer accurately and for yourself. **Circle the number that is closest to your response.***

	Not at all	Rarely	Some times	Often	All the time
1. Have you have difficulties getting to sleep and staying asleep?	1	2	3	4	5
2. Have you have pains in the heart or chest?	1	2	3	4	5
3. Have you suffered from bad constipation?	1	2	3	4	5
4. Have your muscles and joints felt stiff?	1	2	3	4	5
5. Have your skin been sensitive or tender?	1	2	3	4	5
6. Have you suffered from severe headaches?	1	2	3	4	5
7. Have you suffered from dizzy spells?	1	2	3	4	5
8. Do you wake up tired or exhausted?	1	2	3	4	5
9. Have you found yourself shaking or trembling?	1	2	3	4	5
10. Are you very worried about your health?	1	2	3	4	5
11. Have you broken out in cold sweat due to fear?	1	2	3	4	5
12. Have you felt frightened by strange people or places?	1	2	3	4	5
13. Do you feel depressed?	1	2	3	4	5
14. Have you felt irritated by other people?	1	2	3	4	5
15. Have you been easily offended or hurt?	1	2	3	4	5
16. Have you wished you were dead?	1	2	3	4	5
17. Has worrying got you down?	1	2	3	4	5
18. Have you felt angry when anyone tells you what to do?	1	2	3	4	5

	Not at all	Rarely	Some times	Often	All the time
19. Have you felt worried about your ability to understand Australian accent?	1	2	3	4	5
20. Have you felt anxious about your opportunity to mix and talk with Australians?	1	2	3	4	5
21. Do you often feel lonely?	1	2	3	4	5
22. Have you felt homesick.	1	2	3	4	5
23. Have you wished that you can understand Australians social customs better?	1	2	3	4	5
24. Do you have problems communicating with Australians?	1	2	3	4	5
25. Do you miss food from your home country?	1	2	3	4	5
26. Do you feel anxious while speaking in English in front of a large group of people?	1	2	3	4	5
27. 27. Have you felt worried about loosing confidence in yourself?	1	2	3	4	5
28. Have you been worried about your family living in your country of origin?	1	2	3	4	5
29. Have you worn yourself out worrying that you are going to fail in Australia?	1	2	3	4	5
30. Have you experienced a relationship problems with Australian girl/boyfriend?	1	2	3	4	5
31. Have you experienced financial difficulties in Australia?	1	2	3	4	5
32. Have you felt uncertain about your future in Australia?	1	2	3	4	5

Appendix C: Acculturation Attitudes Scale

YOUR ATTITUDES

In this section we are interested in your attitudes. Do not spend too long on any one item. Your initial thoughts and views are important here. Indicate the extent to which **you agree** with each statement by circling the number which best describes your answer.

	Strongly Agree	Disagree	Neutral	Agree	Strongly Disagree
1. My close friends are mostly from my country of origin because I feel more comfortable around them than Australians	1	2	3	4	5
2. The Australian society will not look after interests of migrants in Australia; my people must stick together and help each other.	1	2	3	4	5
3. Living in Australia as a migrant I would want to know how to speak both English and the language of my country of origin.	1	2	3	4	5
4. These days it is hard to find someone you can relate to and share your inner feelings and thoughts.	1	2	3	4	5
5. Success only depends on being in the right place at the right time.	1	2	3	4	5
6. I enjoy the taste of both Australian and the food of my country of origin.	1	2	3	4	5
7. Because I am in Australia I do not need to know the language of my own country and I should focus my attention on speaking only English.	1	2	3	4	5
8. I would like to participate in my ethnic organisations as well as in Australian organisations.	1	2	3	4	5
9. I often feel helpless because I can't seem to express my thoughts and feelings in words.	1	2	3	4	5

	Strongly Agree	Disagree	Neutral	Agree	Strongly Disagree
10. To be successful in this country my people should stick together and help each other rather than assimilate and mix with Australians.	1	2	3	4	5
11. In other to maintain our heritage in Australia we must speak the language of our origin as much as possible rather than English.	1	2	3	4	5
12. If I could choose accommodation I would prefer to live on my own.	1	2	3	4	5
13. My close friends are Australians because I feel comfortable around them and I don't feel the same way with people from my own country.	1	2	3	4	5
14. To be successful in Australia we must participate fully in various aspects of Australian life while maintaining our own culture and heritage.	1	2	3	4	5
15. Enjoyment of food is a luxury I cannot afford when I have so many other problems.	1	2	3	4	5
16. If I could choose accommodation I would prefer to share with people from my own country.	1	2	3	4	5
17. I enjoy food from my country of origin much more than Australian food.	1	2	3	4	5
18. It is hard to work with other people since most people are interested only in their selfish gain.	1	2	3	4	5
19. To be successful in Australia we must give up our traditional culture and heritage.	1	2	3	4	5
20. If I could choose accommodation I would prefer to live with Australians.	1	2	3	4	5

21. I eat Australian food because I enjoy it much more.	1	2	3	4	5
22. My close friends are Australians and people from my own country as I feel comfortable with people from both cultures.	1	2	3	4	5
23. If we only work with people from our own ethnic group it will hinder our assimilation into Australian society.	1	2	3	4	5
24. I would share accommodation with both Australians and people from my country.	1	2	3	4	5