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ACKNOWLEDGEMENTS

Very warm and sincere thanks to my supervisor, Dr. Judy Brook for her guidance, support and encouragement throughout the course of this research. I wish to thank Mr. Victor Soeterik, my second supervisor whose interest, enthusiasm and help was much appreciated.

Many thanks are due to all the people who helped me gain access to the subjects in the study and to the interpreters, translators and the subjects themselves.
ABSTRACT

A survey of available literature on mental health status of refugees and immigrants has indicated that this population is at risk for anxiety and depression. The aim of the present study was to identify pre- and post-migratory factors related to self-reported symptoms of anxiety and depression and to investigate differences in psychological functioning among migrants in New Zealand. Goldlust and Richmond's (1974) multivariate model of the immigrant adaptation process, Sluzki's (1986) model of the migratory process and Murphy's (1977) circumstances of migration were tested. 129 Indochinese refugees, 57 Pacific Island immigrants and 63 British immigrants to New Zealand were surveyed. A questionnaire and the Hopkins Symptom Checklist-25 (HSCL-25), in English and in three Indochinese translations, were administered face-to-face. All respondents were over 18 years of age and had arrived in New Zealand within the last 15 years. The findings suggested that post-migratory factors distinguish between refugees and immigrants and were related to levels of depression and anxiety. Pre-migratory characteristics were not associated with symptom levels. The study confirmed that circumstances of migration (Murphy, 1977) affect symptom levels. However, Sluzki's (1986) model of the migratory process tended to be contradicted, as refugees and immigrants did not experience a symptom free period in New Zealand. Goldlust and Richmond's multivariate model was generally confirmed. Recommendations for future research and the practical implications of the study were discussed.
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CHAPTER 1

REFUGEES AND VOLUNTARY IMMIGRANTS

INTRODUCTION

Immigration has been and remains an essential element in New Zealand’s development. It has contributed significantly to economic growth and prosperity, it has presented new challenges for society and it has created pressures for social change. However, it has been a common observation in many parts of the world that the immigrant’s mental health status varies from that of the non-immigrant (Garza-Guerrero, 1974; Cochrane, Hashmi, & Stopes-Roe, 1977). Furthermore, it has been stated in overseas literature, that refugees have more mental health problems than voluntary immigrants (Lin, Tazuma, & Masuda, 1979; Cohon, 1981). To date no systematic attempt has been made in New Zealand to study the psychological effects of the migration and resettlement of immigrants and the effects of past trauma and persecution of refugees. On the whole examination of immigrants' mental health and psychological functioning in New Zealand has been neglected.

This study compares the mental health of three groups of immigrants who have arrived and settled in New Zealand within the last 15 years. These groups are the Indochinese refugees (from Vietnam, Kampuchea and Laos), the Pacific Island immigrants (Tongans, Fijians and Samoans) and the British immigrants. For an
account of some historical background of these three groups see Appendix A.

For the purposes of the present study terms such as 'mental health', 'refugee' and 'immigrant' need to be defined.

The concept of 'mental health' is generally used to designate a person who is functioning at a high level of behavioural and emotional adjustment, rather than one who is simply not mentally ill (Reber, 1985). For example, Fromm (1941) defined people as normal or healthy if they were able to fulfil their social roles. However, a satisfactory conceptual definition is difficult to find and for the purposes of this report mental health is operationally defined as a certain range of scores on an anxiety and depression scale. On the basis of previous empirically determined validity and reliability, it is assumed that such a scale reflects, accurately, a person's level of psychological functioning.

In the present study the distinction between refugee and immigrant, as described by Kunz (1973) in his kinetic model of flight, has been adopted. The key to the model is the idea of 'push'. Refugees are described as being 'pushed out of' their home country and so the reasons for migration are 'push forces'. On the other hand voluntary immigrants are described as being 'pulled away from' their homelands. They are responding to pull forces of the host country, they are attracted by opportunities, such as a better living standard or better job opportunities and education and they have the choice of returning to their countries of origin.

In spite of the fact that many Pacific Islanders in New Zealand have considerable decision-making power, many feel 'pushed out' of their country of origin because of lack of economic resources and educational facilities. Consequently, the term 'semi-voluntary
migrant' might be more appropriate. Likewise, wives of British immigrants might not always be as voluntary as the term implies since much depends on the subjective experience of the individual immigrant (David, 1969). Thus, it is difficult to distinguish clearly between the migrants who migrate voluntarily and those who do not.

Such problems are beyond the scope of this study. Here, the term 'refugee' has been applied to the Indochinese, who have been registered with the United Nations High Commissioner for Refugees before arrival, while Pacific Islanders and British migrants are considered voluntary immigrants.

The present study was carried out in Palmerston North and in Wellington.
IMMIGRATION IN NEW ZEALAND

In New Zealand, the Maori people established themselves as the Tangata Whenua ('the people of the land') after migrating from countries in the Pacific. Following them, in the last 200 years, immigrants from European countries, particularly from Great Britain, have changed the ethnic balance and altered the culture and customs of New Zealand. More recently, the balance has been altered once more with migratory movements from the South Pacific and by refugees from all over the world, particularly from South East Asia.

As the success or failure of settling immigrants and refugees in New Zealand depends in part on official attitudes, immigration policies and settlement programmes, all these factors need to be outlined.

In the 19th century immigration to New Zealand was largely unrestricted in recognition of the fact that the country depended on immigrants for its economic development and growth. Since then immigration policy has become more controlled and selective in response to changing circumstances and foreign policy aims. The objectives in the 20th century have always fallen into two main categories: those serving specific national interests, such as providing needed staff resources for industrial and economic development, and those of a humanitarian nature, such as family reunification and acceptance of refugees (Department of Labour, 1986a).
Most immigrants to New Zealand provide the needed staff resources and enter either on occupational grounds, offering skills on the current Occupational Priority List, or provide skills which it is not practicable to develop in New Zealand. These immigrants have been personally interviewed by staff at New Zealand overseas posts and they have had to demonstrate English language ability, good health, a steady work record, recognisable qualifications, and good employment skills. The New Zealand government's main concern is to ensure that an immigrant or his family is in a position on arrival in New Zealand to secure adequate accommodation without recourse to government assistance. That will be determined principally by the income of the breadwinner and the amount of capital the individual or the family has available to transfer to New Zealand. Therefore the majority of immigrants are a select group who speak English, have a specific job and are often helped by their employers with travel expenses, housing and settlement in New Zealand. They generally have a reasonable economic basis, their knowledge of English is adequate and they enjoy a cultural affinity that helps them manage the transition.

The case is different for immigrants coming to New Zealand as part of family reunification programmes, or for immigrants who have no skills and have therefore to accept low paid labouring jobs. This applies mainly to South Pacific Islanders who have been admitted to New Zealand by bilateral agreements between their home government and the New Zealand government. They have to meet normal immigration requirements relating to age, health, character and employment, but they are not restricted to the list of skills on the current Occupational Priority List. The governments of Fiji,
Tonga, Tuvalu and Kiribati have individual arrangements with New Zealand, particularly regarding work schemes with fixed lengths of stay. All of these people are subject to a quota system (Department of Labour, 1986b).

A very high proportion of these immigrants have no skills and come from a very different cultural background, with little or no knowledge of English. Most of them have low incomes and face accommodation problems but some at least have the support and assistance of family members already in New Zealand (Trlin, 1986).

Limited numbers of people have been allowed to migrate to New Zealand on humanitarian grounds. Apart from family reunification, this section of the immigration policy applies mainly to refugees. The government acknowledges its preference for people who can adapt quickly to New Zealand, and it takes into account any previous contacts the refugees may have had with New Zealand through friends or relatives.

Since 1944 New Zealand has accepted refugees from various countries in Europe, Asia, South America and Uganda. Refugee schemes are considered by the government of New Zealand in response to requests from the United Nations High Commissioner for Refugees (UNHCR) and following consultations with the Inter-Church Commission on Immigration and Refugee Resettlement (ICCI). The ICCI was set up on the initiative of the National Council of Churches and became the co-ordinator for all religious and secular agencies concerned with refugee resettlement in New Zealand (Fitzgerald, 1982).

The main government assistance to refugees has been the establishment of the Mangere Refugee Hostel in 1979. In its first
two years of operation, refugees stayed there for a maximum of four weeks. Apart from medical check-ups, English is taught intensively during this time. Since 1981 the period of residence at the Hostel has been extended to six weeks (C. Hawley, personal communication, September 3, 1987).

The TAP (now called ACCESS) courses for unemployed immigrants and refugees have been valuable in helping migrants to settle. Skills training is emphasised as much as English language acquisition.

In most Western countries nearly all funding for the resettlement of refugees comes from the government and, therefore, the taxpayers of these countries share the costs (Wright, 1981; Neuwirth & Clark, 1981). New Zealand is an exception in that sponsors are mainly responsible for the settlement of the refugees. These sponsors are volunteers and come predominantly from New Zealand's active church people who either individually or as a group, assist the refugees in arranging accommodation and employment and offer support and friendship (Farmer, 1985).

For the large numbers of refugees coming to New Zealand as to any other country, migration is not a voluntary, planned or organized action from their point of view. It is in most cases, a forced and hasty flight into a country of first asylum. They have had to abandon all their material possessions and personal documents and many are likely to have lost family members, had dangerous journeys, or have spent months if not years of uncertainty in refugee camps. Eventually they have come into an environment in which the language and culture is totally alien to them. Furthermore, before coming to New Zealand they would have had to
sign a statement acknowledging the possibility that their occupational qualifications would not be recognized (Farmer, 1985). The process of settling in New Zealand under these conditions could be considerably prolonged.

Because of its geographical location and its island position, New Zealand has had the advantage over other countries of receiving mainly the 'quota-refugees' whose arrival is legal and organized (Paludan, 1981). Between 1944-1952 New Zealand accepted a total of 4582 refugees from Europe and since 1975 (the fall of Saigon) New Zealand has made annual decisions on how many Indochinese refugees it is able to settle. The number accepted has remained steady over the last few years at around 650 per annum (Hawley, 1986). There are now about 20,000 refugees from all over the world living in New Zealand (C. Hawley, personal communication, September 3, 1987).

Whatever the reason for the departure from the country of origin and however well disposed the newcomers may be to New Zealand, they are likely to have varying degrees of difficulties in adjustment.

The evidence that there is an association between migration, health status and mental health has come from medical doctors, mental health professionals, sociologists, economists and administrators. This evidence is discussed in the next chapter.
CHAPTER 2

LITERATURE REVIEW

MIGRATION AND HEALTH

The migrant's health is affected by both the geographical and climatic changes in the environment and by cultural and psychological factors. Seguin (1956) demonstrated in his studies of Peruvian Indians, how both physical and emotional functioning can be altered by migration, and that attention has to be paid to their interactive effects. The Indians moved from the mountains at 13,000 ft altitude to sea level in Lima. They exchanged the close family, clan and community life in the primitive villages of the agricultural highlands for the struggle for survival necessary in the industrial coastal city. Language and landscape, as well as a whole way of life, separated the highland Indians from the coastal people. The resulting physiological disorganization was attributed to the descent from high altitudes. The migrant Indians were unable to do as much strenuous work as they had done before and seemed to have less resistance to illness, especially respiratory problems. After three to four months on the coast, chemical and physiological deviation from normal standards remained. Other somatic symptoms involved cardiovascular or gastro-intestinal systems, plus anxiety and depression. Seguin (1956) claimed that the reduced functioning and the resulting illness might reasonably be interpreted as emotionally as well as physically induced. This interactive effect of the psychological and physical factors on the
health of the migrant has received considerable attention and recognition. However, most researchers have concentrated on the physical aspects which are more easily identified, measured and recorded.

Migration influences health directly at the biological level via dietary changes, differences of local pathogens, lack of appropriate immunity and through the risk of accidents in the new situation. Climatic factors, altitude, air pollution, humidity, temperature, amount of solar and other irradiation and intercurrent disease can all influence the health of the migrant directly and indirectly through food, air and skin and possibly in other ways (Hull, 1979). The social-psychological effects may influence health indirectly via the physiological effects of stress which affect the immunity to endogenous and exogenous infections, and by hastening systems failure in chronic disease (Scotch, 1963).

A body of overseas literature states that migrants, both between countries and between social and cultural groups are more at risk than the local population of coronary heart disease, hypertension, and cancer at certain sites, as well as other diseases (Morris, 1959; Stamler, Kjelsberg, & Hall, 1960; Scotch, 1963; Syme, Hyman, & Enterline, 1964). Catanzaro and Moser (1982) reported on the high prevalence of medical disorders among the Indochinese community in the San Diego area of the United States. The health problems included tuberculosis, depression, anaemia, intestinal parasites, malnutrition and hepatitis.

In New Zealand there has been considerable concern that foreign born immigrant employees have more days off work because of ill
health, than New Zealand born employees. It has also been noted that a high proportion of the immigrants left their workplace after a few months and returned to their country of origin (McNaughton et al., 1983). Thus, several researchers have investigated the relationship between immigration and the general health of the immigrant population, and overseas findings have been largely confirmed in the New Zealand context. Such conditions as, for example, coronary and hypertensive heart disease, diabetes, high blood pressure and ulcers have been associated with immigration (Prior, 1986). An early study by Eastcott (1956) revealed a high rate of lung cancer among British immigrants, an observation that was later confirmed by Heenan (1976) in his examination of respiratory disease mortality among birthplace groups in New Zealand.

A great deal of emphasis has been placed on the effect of immigration on the health of Polynesian immigrants and all studies (Sutherland, et al., 1984; Jackson, Beaglehole, Rea & Sutherland, 1982) report very high rates of diabetes and asthma -- among the highest in the world. Since 1967, Prior (1986) has collected medical data from a total of 4,300 Tokelaun adults and children resident in Tokelau and New Zealand in order to explore the health consequences of the different life style and dietary changes. He found in his longitudinal study that blood pressure and the incidence of diabetes and asthma had increased significantly for Tokelauns living in New Zealand, and so confirmed earlier results.

The morbidity rate of British born European immigrants to New Zealand, the most significant immigrant group (52% of the New Zealand resident immigrant population), has been examined by McNaughton et al. (1983). He and his colleagues concluded that, for
all investigated diagnostic classes, the admission rates for British born European immigrants was higher than for New Zealand born Europeans, with significant differences in the incidence of diabetes mellitus, alcohol-related liver diseases, duodenal ulcers and gastric ulcers. McNaughton et al. suggested that these physical conditions have a stress component as part of their aetiology, although the issue of stress is neither defined nor examined.

A few studies with Pacific Island immigrants mention psychological effects on health but do not investigate this matter systematically (Gluckman, 1977). T. D. Graves and N. B. Graves (1985) attempted to examine the impact of stressful environmental circumstances on the incidence of illness in Polynesian immigrants to New Zealand and found that social support systems, instead of buffering against stress as anticipated, caused more stress in the Samoan immigrants.

Since 1978 the health problems of the Vietnamese, Kampucheans and Lao refugees to New Zealand have been assessed and treated in the Mangere Immigration Centre, prior to settlement. Over the years tuberculosis has continued to be the disease requiring the greatest medical effort with worm infestation being the second most frequently occurring health problem (Prior, 1986). These findings confirm results from the United States (Catanzaro & Moser 1982).

In summary, there is considerable evidence in overseas literature and in New Zealand that immigrants and refugees have a high incidence of medical disorders. The investigation of the relationship between immigration and mental health has not received a similar amount of attention in New Zealand. Much of the current overseas literature supports the
association between migration and high rates of mental disorders although in some studies a reverse trend has been noted. Several theories have been proposed which attempt to explain the effects of migration on mental health, and these are outlined in the next section.
THERE IS A THEORETICAL INTEREST IN MIGRATION AND MENTAL HEALTH

The earliest awareness of an excess of mental disorder among immigrants seems to have been by the superintendents of American asylums in the 1840's. Some blamed this phenomenon on the hard conditions the immigrants had to endure while others thought that immigration only attracted the destitute and unstable. In the subsequent hundred years data was collected to support each rival argument. The early literature dealt primarily with populations of institutions and compared the proportions of the foreign and native populations in mental hospitals. The authors estimated the numbers of the mentally ill among the foreign born, speculated about precipitating circumstances, examined claims that the mentally ill had been induced to immigrate from some particular countries and suggested procedures for more adequate screening at ports of entry into the United States. The early publications were relatively uncontroversial and apolitical. Later literature reflected the developing political pressures against the entrance of new immigrants, particularly against the influx of Eastern Europeans. Only a few articles contributed fundamentally to knowledge and formulated testable inferences. Their methodology has been criticised and, as Malzberg and Lee (1956) pointed out, many authors committed an important statistical error since they did not take into account the different age distribution of the native born versus the foreign born population groups. Without correction, this factor would influence
the ratio of mental illness making it spuriously high for the foreign born. Improvements were made in the quality of the data which was collected, but no suggestion of a viable theory occurred until Ødegåard's work in the 1930s.

Social selection theory
Ødegåard linked clinical observation to sound epidemiology. He came to the conclusion that, mainly in respect to schizophrenia, immigrants were liable to have an excessive incidence rate, because, in part, this disease interferes with its victim's attachments to his native community and makes him disproportionately liable to emigrate (Ødegåard, 1936).
Ødegåard suggested that constitutional vulnerability to mental illness predisposes the person to migrate. The studies of Ødegåard (1936, 1945) were based on admission rates in Minnesota for Norwegian born immigrants compared with native Americans; and for the general population in Norway compared with returned migrants to Norway. The analysis took into account both the selection process operating in immigration (by comparing immigrants with the parent population), and the differentials emerging in the process of assimilation (by comparing immigrants with the indigenous population in the area of settlement). Ødegåard found that the Norwegian born immigrants to the United States had a 30-50% higher admission rate than the American born. There was a higher admission rate for Norwegians born in Minnesota, than for the population of Norway. Returned migrants to Norway had twice as high an admission rate to mental institutions as the Norwegian general population.
Ødegaard concluded that he had found strong evidence that the high incidence of mental disorder in the immigrant population was due to the prevalence of certain psychopathic tendencies in the constitution of those who migrate. Social selection seemed the only possible explanation for this phenomenon. Ødegaard's social selection theory was supported by Clark (1948), Malzberg and Lee (1956) and Mezey (1968). Clark standardized his data for social class, Malzberg and Lee looked at internal migration within the United States, while Mezey investigated personal characteristics of Hungarian refugees. All studies found a higher incidence of psychoses in the migrant population.

The social selection theory, also called the premorbid personality theory (Eitinger, 1959), or the self selection theory (Sanua, 1969), was soon considered too deterministic. Moreover, it ignored disorders other than the psychoses as well as the obvious hardships of immigrant life at that time.

**Social causation theory**

An alternative theory, sometimes referred to in the literature as the external stress theory (Eitinger, 1959), the stress hypothesis, or the general hazard theory (Sanua, 1969), emphasizing social causation was suggested by later researchers. This theory implicated the severe stressors associated with migration as the precipitating factors of the immigrants' high incidences of mental disorder. These stressors included cultural changes and economic and social difficulties. It was supported by Ruesch, Jacobson and Loeb (1948) and by the Manhattan study (Srole, Langner, Michael, Opler, & Rennie, 1962), both studies
dealing with non-psychotic disorders in the community. Soon the social causation theory appeared equally simplistic and pessimistic and it became clear that prevention could not be implemented unless society was restructured (Murphy, 1977).

While both the social selection theory and the social causation theory were initially useful, they had limitations. In the early 1960s attention was drawn to data that came from countries other than the United States of America. These suggested that immigrants could have a lower admission rate for psychoses than non-immigrants. The former belief, that immigrants always suffer from an excess of mental disorder, was questioned, and the polarity of the two theories lost much of its relevance (Murphy, 1977). This brought about a change in the nature of the question being asked. Instead of asking why migrants have a higher rate of mental disorder, it became necessary to ask under what conditions do they have these higher rates.

The first reliable evidence of migrants having lower rates than non-migrants came from Astrup and Ødegåard (1960). They found that although internal migrants moving to the capital city of Norway had higher rates than natives of that city, migrants moving to other parts of the country tended to have lower rates than non-migrants there. Similar findings were reported from Israel and Canada, the difference applying mainly to the non-schizophrenic psychoses but sometimes appearing in schizophrenia as well (Murphy, 1965).

Assessment of minor disorders across cultures has always presented difficulties and the data cannot be accepted with the same confidence as data regarding the psychoses. However, there is
sufficient evidence and support for the general conclusion that immigrants need not have higher rates of mental disturbances than non-immigrants. Migration, in itself, is no longer related to mental disorders and researchers have found it is necessary to examine the elements that comprise the process of migration. Since different immigrant groups are differentially exposed to each of these elements, the traditional division into immigrants and non-immigrants or foreign-born and native-born no longer applies.

**Multivariate model of the immigrant adaptation process**

Instead of favouring either the social selection or the social causation theory, Goldlust and Richmond (1974) after studying the native and foreign born population in Toronto, proposed a multivariate model of the immigrant adaptation process. This model considered pre-migration conditions and characteristics, the situational determinants in the receiving society, and the length of residence in the society of settlement (see Figure 1).

Goldlust and Richmond emphasized the importance of individual characteristics of the immigrant by defining three elements within the immigrant's subjective state:

(i) *identification*, involving modification of the sense of personal identity and the transference of loyalty

(ii) *internalization*, referring to the changes of attitudes and values that were part of the socialization process, and

(iii) *level of satisfaction* with various aspects of the immigrant's life relative to his or her pre-migration situation as compared with specific reference groups against which the immigrant measured
Figure 1.
Multivariate Model of the Immigrant Adaptation Process
(from Goldlust & Richmond, 1974)
himself. This emphasis on the individual personality of the immigrant was consistent with the findings of Ruesch et al. (1948).

Most researchers favoured the multivariate model of the immigrant adaptation process as it took into account pre-migratory and post-migratory factors, individual characteristics and the length of residence in the society of settlement. Several mental health workers such as Tyhurst (1977), Cohon (1979) and Sluzki (1986), who worked with refugees and immigrants, selected one component of Goldlust and Richmond's model such as the length of residence in the receiving society, tested it and suggested different time patterns of adaptation. Tyhurst (1977) proposed a pattern of refugee adjustment dynamics which he called the Social Displacement Syndrome. He reviewed 27 years of clinical experience and field work with refugees in Canada and aimed at an all-inclusive picture of the psychological reactions of refugees. Four groups of refugees to Canada were studied: the displaced people, who arrived in the late forties and early fifties, the Hungarian refugees admitted in 1956, the Czechoslovakians who came in 1968, and the Asians expelled from Uganda in 1972. Tyhurst formulated three inter-related stages in the clinical phenomena that emerged among refugees, and considered that the general structure of these stages has been consistent for all refugee groups. The first stage or the initial period lasts about two to three months after arrival and consists of an 'incubation period' that is symptom free and during which the refugee's outlook is often positive, even euphoric. This is followed after three months by the onset of general personal disequilibrium in the refugee subjects
which reaches its peak six months after entry. This second stage is
classified by a cluster of symptomatology presented by
(i) a range of paranoid behaviors from suspiciousness to acute
paranoid psychotic episodes
(ii) generalized hypochondriasis with pain as the central complaint
and fatigue often being the earliest subjective symptom, and
(iii) a mix of anxiety and depression with somatic complaints
predominating.
Tyhurst states that the paranoia observed during this stage is mild
and benign except in cases of refugees with concentration camp
experience.
The third stage of the Social Displacement Syndrome consists of a
series of phenomena that are situation specific and affect the
individual's sense of continuity of self, his orientation to place and
time, with accompanying fluidity of mood, and at times vivid
hallucinations related to the previous experience of flight. Another
characteristic of this third stage is impairment of interpersonal
and social skills manifested by contradictory tendencies of social
withdrawal or hostility. Tyhurst did not suggest whether symptoms
gradually ameliorated after reaching the peak after six months of
residence in the society of settlement or when this might occur.
Cohen (1979) suggested a similar pattern of refugee adjustment
but with different time intervals. In his analysis of data collected
on 54 Indochinese refugee-clients treated in the San Francisco
area, he noted that during the first year of residence in the United
States the most frequent difficulties were related to socialization
as, for example, issues related to housing or other practical
matters. From a mental health point of view, however, the first
year of residence was symptom free. Beginning with the thirteenth
month and slowly increasing in frequency, depression was the mental health problem diagnosed most often. For refugees who lived in the United States longer than two and a half years, severe depression was the problem of most concern, and was diagnosed in 92% of the cases. Therefore, the peak of presenting mental problems occurred after two and a half years.

Sluzki (1986) proposed a model of the migratory process that applies to all migrants and not only to the displaced people or refugees. The model is 'culture free', regardless of how culture-specific the styles of coping may be. In his investigation of immigrant families, Sluzki suggested that a period of overcompensation and euphoria, lasting for some six months is followed by a period of major crisis, one in which the long-ranged responses to migration take place. This period of crisis can last for several years and might reach its peak from one to six years after arrival.

Although Cohon (1979) and Sluzki (1986) generally support Tyhurst's (1977) Social Displacement Model, there are some slight differences in the timing of these events. All three researchers confirm an initial symptom free period, for three months (Tyhurst, 1977), six months (Sluzki, 1986) or one year (Cohon, 1979). In Tyhurst's Social Displacement Model the onset of crisis occurs after 3 months, reaching its peak at about 6 months, whilst Cohon found that problems increased after one year and that after two and a half years symptoms of depression were most severe. Sluzki stated that with immigrants and refugees the peak of the crisis could be found between one year and six years. None of the authors explicitly stated a drop of symptom levels after the crisis or the
peak has been reached, although it appears that this is implied (see Figure 2).

Tyhurst

Cohon

Sluzki

<table>
<thead>
<tr>
<th>time scale (years)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>6 months</td>
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<td>2.5 years</td>
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<td>3 months</td>
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Figure 2.
Diagramatic representation of three different time patterns of adaptation (Tyhurst, 1977; Cohon, 1979; Sluzki, 1986).

Murphy (1977) agreed with Goldlust and Richmond's (1974) multivariate model in general outline, but formulated it with slight differences in detail. He suggested additional factors of importance to migrants' mental health. He proposed that the mental health of a migrant group is determined not only by factors inherent in the, (i) *society of origin* (including personal characteristics), and by elements operating in the, (ii) *society of settlement*, including the length of residence, but as well by, (iii) *circumstances of migration*
According to Murphy, all three sets of factors need to be considered if understanding and reduction of the level of mental disorder in any immigrant group is to be achieved.

(i) The society of origin
The society of origin plays a crucial role in shaping the attitude of the individual and how emigration is perceived. In Europe, for example Holland has, overall, encouraged emigration during the last 100 years, seeing it as an admirable act, requiring courage and the willingness to work hard. Under these circumstances a positive selection (that is, a selection of people likely to have no prior mental health problems) is likely to take place, whereas if emigration is looked upon as a desertion or a betrayal to the community, then negative selection is likely to occur. This view is based on personal observation by Murphy (1977) who found that Dutch immigrants to Canada had lower rates of mental hospitalization than immigrants from France. He speculated that France, with a lower birth rate and a greater need for soldiers, has been traditionally critical of emigration. Thus, negative selection could be a contributing factor for higher rates of mental disorders.

The information provided to emigrants regarding conditions in the country of settlement is similarly relevant. Weinberg (1954) and David (1969) found a general consensus in the literature, namely, that emigrants who were prepared and well-briefed on their new socio-cultural environment tended to adapt more readily than those who were ill-informed. The transition into the new society was better accomplished and, as a consequence, the incidence of mental disorder was lower.
Consideration must be given, too, to the fact that certain societies seem to have a high predisposition for, and therefore a high incidence of, certain disorders, such as schizophrenia in the case of the Irish (Murphy, 1975). On these grounds it would be expected that the Irish immigrant population would show a higher rate of this condition than other immigrant groups. Similarly, a high incidence rate of peptic ulcers in the Japanese immigrant cannot be solely attributed to immigrant stress since Japan has the highest rate of this disorder in the world (Stocks, 1968).

Furthermore, Nguyen (1984) in accordance with Goldlust and Richmond (1974) suggested that the immigrant's characteristics, his or her age, sex, educational level, social class, personality and the language and culture of the society of origin have to be considered, if one seeks to understand the mental health problems of any immigrant group.

(ii) The society of resettlement

In the society of resettlement the factor most likely to affect mental health is the relative size of the immigrants's own minority group (Sanua, 1969). In Singapore, for example, where the Chinese population is divided by marked language differences, it was found that there was a strong inverse correlation between the size of the language group and the incidence of mental disorders (Murphy, 1977).

Until very recently governments have tried to discourage the establishment of immigrant communities or ghettos. The 'melting pot', a romantic American idea, was considered to be the ideal. It was hoped that both the native and the immigrant or refugee would be changed and merged into a new, supposedly stronger, alloy
(Stein, 1981). It was slowly recognized, however, that small resettlement communities had poorer mental health than larger ones (Murphy, 1973). Murphy's findings were consistent with the idea that ethnic enclaves are important for recently arrived refugees and immigrants, serving a mediating function between the newcomer and the host culture (Brody, 1969). Thus, the model of assimilation considered appropriate became cultural pluralism, and some governments have encouraged it. It was hoped that the immigrants or refugees would adapt to the dominant cultural patterns, particularly in politics, play, education and work, while at the same time preserving their communal life and much of their culture (M. M. Gordon, 1964). This meant, from the point of view of mental health, that migrants who were linguistically and culturally very different from the society of resettlement, should be encouraged to settle in large groups of the same origin. Unfortunately, many governments are still resisting this type of cultural pluralism. They do not consider that the forced dispersion of immigrants, the so called 'pepper pot' policy, while possibly reducing political risks, increases the psychiatric ones.

The greatest protection against mental health problems is not only the existence of large clusters of people of the same origin but, as well, the recognition of the full professional equality of migrants, their social acceptance and respect for their vocational and cultural aspirations (David, 1969). Krupinski, Stoller, and Wallace (1973) have shown that in Australia, central European professionals had quite abnormally high rates of mental breakdown which appeared to be linked to the fact that recognition of their professional qualifications was denied for many years. Vignes and Hall's (1979) Louisiana study confirmed the findings of Krupinski et
al., and called attention to the risk factors for psychopathology if there was status dislocation, loss of professional identity and the loss of employment status among heads of households. Many immigrants experience a xenophobic hostility, directed by the population of the host country toward their particular minority group. Most Pacific Islanders to New Zealand face negative stereotyping (Gluckman, 1977; Misa, 1987). Prejudice in the society of resettlement is felt strongly by some ethnic groups, especially when great distances in religious, ideological, and other cultural traits exist, or when there are obvious physical and anthropological differences (Lazarus, Locke, & Thomas, 1963). The resulting discrimination, social isolation, and the sense of not belonging, can influence negatively the mental health status of many refugees and immigrants (Weinberg, 1954).

In the society of resettlement, factors such as remaining in one residence, closeness or distance from people of the same ethnic group, English language ability, the presence of relatives and support groups, and an adequate social network seem to affect the mental health of the immigrants. Westermeyer, Vang & Neider (1983a) compared patient status with premigration and postmigration factors in a group of Hmong refugees to Minnesota. The findings suggested that remaining in one residence and greater distance from other Hmong, were significantly correlated with fewer emotional problems. However, the relative drop in occupation or social class, insufficient English language acquisition, and lack of relatives and support groups, were associated with higher symptom levels and patient status. Formal English instruction, however, was found to have only limited effects. Another universal risk factor for mental health problems mentioned in the literature
is the lack of an adequate social network (Yamamoto & Satele, 1979).

(iii) The circumstances of migration
The conditions of migration appear to influence the future psychological functioning of the immigrant. Of these conditions the most important is whether the migration has been forced or free. If it has been forced, as in the case of refugees, by real threat of persecution, famine or war, the trauma created by these experiences, and the fact that the migration has been undertaken without adequate preparation, can be the cause of considerable mental health problems.

Researchers from all over the world have confirmed that refugees are more psychologically at risk than voluntary immigrants (Koranyi, Kerenyi, & Sarwer-Foner, 1963; Krupinski, Stoller, & Wallace, 1973; Garza-Guerrero, 1974; Cohon, 1981).

Summary
The above outline of theories of mental health describes the shift away from the social selection and social causation theory to a multivariate model of the immigrant adaptation process. Ødegåard's social selection theory proved to be unsatisfactory in explaining the relationship between immigration and mental health. It attributed the occurrence of mental health problems in the immigrant population to a predisposition of the individual to mental disorder. It ignored the difficulties experienced by the immigrants in the society of settlement and the mental disorders other than the psychoses.
The alternative theory, the social causation theory, which was supported by Eitinger (1959) and Sanua (1969) was equally limited, in that it attributed mental illness in immigrants to external stress alone.

It became apparent in the 1960s that the two theories were not separable. The predisposition of an individual to mental disorder and the stress experienced by the immigrant both contributed to an increase of mental health problems.

Thus the multivariate model of the immigrant adaptation process, proposed by Goldlust and Richmond (1974) which took into consideration pre-migration conditions, post-migration factors in the society of settlement, the length of residence, and individual characteristics, offered plausible suggestions to the relationship between immigration and mental health.

An important component of Goldlust and Richmond's model: the length of residence of the refugee in the society of settlement, was further investigated by Tyhurst (1977) who proposed a distinct pattern of refugee adjustment. His Social Displacement Model, suggesting three months of euphoric feelings before the onset of severe symptoms which reach a peak at six months was generally supported by Cohon (1979) and Sluzki (1986). The latter two proposed slightly different time intervals. Cohon suggested a symptom free period of one year. Sluzki in his work with immigrants and refugees found that they were symptom free for six months, and that problems increased steadily, reaching a crisis point between one and six years.

Murphy (1977) suggested one further factor: the circumstances of migration, that is whether migration was forced or voluntary,
which appears to influence immigrants' and refugees' mental health.

The present study is adopting Goldlust and Richmond's (1974) multivariate model of the immigrant adaptation process. Some pre-migratory factors and several post-migratory factors and conditions in the society of settlement will be examined to determine their relationship to psychological functioning. The central component, the length of residence in the society of resettlement will be considered. In particular Sluzki's (1986) model of the migratory process, as it applies to both the immigrants and refugees, will be tested. Furthermore, the question whether being an immigrant or a refugee is a significant factor determining psychological functioning will be explored.

In the next section existing clinical data on immigrants, refugees and mental health will be reviewed, in order to determine whether there are recurrent symptom clusters, or diagnostic groups, that appear in particular migrant populations.
A number of diagnostic groups have been identified with respect to the mental health of refugees and immigrants.

Paranoid schizophrenia - paranoid psychotic reactions

Persecutory trends

Paranoid schizophrenia and paranoid psychotic reactions with persecutory trends were common diagnoses for a wide range of immigrant groups. Eitinger (1959) found among a group of refugees in Norway high incidences of persecutory delusions, conversion symptoms and frequent somatic complaints. Eastern European refugees who arrived in Australia between 1945-1954 were the subjects of a study by Krupinsky, et al. (1973). Paranoid schizophrenia was the most commonly diagnosed disorder, apparently related to war experiences. Another study of mental disturbance observed among World War II refugees was conducted by Pedersen (1949) in Sweden. He drew from a small sample of four cases and noted that paranoid reactions were the central clinical features occurring in widely different personality structures. The degree of paranoia varied from the mild to psychotic with delusions, and Pedersen concluded that paranoid reactions were a result of severe social trauma. Research among Hungarian refugees by Meszaros (1961), Mezey (1960, 1968), Koranyi, Kerenyi, and Sarwer-Foner (1963) reported a high incidence of schizophrenia and paranoid psychotic reactions.

However, paranoid schizophrenia, paranoid psychotic reactions with persecutory trends, were not diagnosed in the refugee population.
alone. Krystal and Petty (1963) found frequent paranoid reactions among immigrants to the United States, with the common delusion that American food was poisoned, or that relatives intended to poison them or their pets. E. B. Gordon (1965) found paranoid features in 54 out of 112 West Indian immigrants hospitalized in England for psychoses and London (1986), in his review of mental illness among immigrant minorities in England, found psychotic reactions and somatization the most prevalent symptoms. Similar findings were reported by Yeh (1972) for Chinese students studying abroad and by Haavio-Mannila and Stennis (1974) among new ethnic minorities in Sweden.

The symptoms observed in these groups ranged from heightened suspiciousness to overt delusions and hallucinations of being followed with marked ideas of reference (such as being talked about or having the mind read).

Affective disorders

Affective disorder was an equally frequent diagnosis among all groups of immigrants. The Swiss Director of Mental Health Services, Pfister-Amende (1949) commented on the Russian refugees living in work camps in Switzerland between 1943-1945. She found that women, in particular, suffered from reactive-depressive states and that emotional swings were more frequent and 'greater' in all Russian refugees than observed in the Swiss population in general. In a study by Tyhurst (1951) of 48 displaced persons in Montreal, the most frequent symptoms observed were anxiety and depression, followed by somatic complaints and suspiciousness with paranoid tendencies. Eitinger (1960) reported
that most refugees in Norway suffered from reactive depression, restlessness, emotional outbursts with fainting and crying as symptomatic manifestations, together with a high degree of somatic complaints. R. D. and R. G. Rumbaut (1976) describe the psychiatric symptomatology of Cuban expatriates as being that of overwhelming anxiety, depression and an inability to cope. Pedersen (1949) listed depressive symptoms, suicide attempts and increased withdrawal as reactions to extreme social displacement.

Although there are many methodological difficulties in the analysis of suicide rates in migrants, Burvill, Woodings, Stenhouse and McCall (1982) found that their age-standardized rates for immigrants to Australia (including United Kingdom immigrants, Scandinavians, Austrians, Germans, Poles and Indians) were, on the whole, greater than those of the Australian-born, second generation, immigrants. Burvill et al. did not explore the relationship between affective disorders and suicide in their research, but Alley (1982), in his assessment of the suicidally inclined Indochinese refugees, stated that all of them suffered from severe reactive depression. Similar findings were reported by all mental health workers attending the Vietnamese, Kampuichean and Lao refugees. Nguyen (1982, 1984) in Canada and Kinzie (1981), Westermeyer, Vang, and Neider (1983a, 1983b) and Mollica and Lavelle (1986) in the United States, agreed that depression and anxiety were the most common mental health problems among the refugees. These symptoms were present in every person including psychotic patients.

Depression and anxiety were the most common symptoms observed in all voluntary immigrant groups in the immigrant minorities in
England (Rack, 1980; London, 1986), in the British immigrants to Australia (Appleyard, 1964), the Western expatriates to Hong Kong (Yap, 1972) and in the Pacific Island immigrants to New Zealand (Beaglehole, 1969; Gluckman, 1977).

The prevalence of somatic complaints, which were contributing symptoms in the diagnosis of depression and anxiety have been mentioned by many researchers dealing with Indochinese refugees (Nguyen, 1982, 1984; Westermeyer et al., 1983a, 1983b; Kinzie, 1981, 1985). Kleinman (1977) and Cheung (1982) have found that Chinese patients express depression and other psychological problems predominantly through a somatic idiom and not through Western depressive symptoms.

The emphasis on the dominance of somatization over psychological insights by Asians has stirred considerable controversy. Singer (1975) claimed that some studies did not control for social class, age and sex, and she demonstrated in her epidemiologic community survey in Hong Kong, that psychological symptoms were mentioned as frequently as somatic complaints by Chinese.

Kleinman's recent study in China (1982) appears to have resolved the issue. He claimed that the dominance of somatization did not mean that the individuals did not experience depressive feelings or had no insight into their psychological difficulties. Instead they treated those symptoms as secondary to their somatic complaints. Kleinman stated further that as mental illness is highly stigmatized amongst Chinese, its presence in a family can lead to labeling that family's offspring unfit for marriage. As a consequence labels for mental illness cover only indisputably psychotic behaviour and mental retardation. Minor psychiatric problems such
as depression and hysteria, are most commonly labeled as medical illness. That is, the secondary physical complaints accompanying the psychological disorders are labelled as medical problems, while the psychological issues are systematically left unlabeled. This provides the Chinese with a legitimate illness but a medical one, which releases the patients from responsibilities and obligations, sanctions failure and affords them care.

These findings were supported by Mollica and Lavelle (1986) who also disputed the somatization concept as it appeared to function more as a superficial and prejudicial mode of dismissing complex psychocultural realities and of discrediting the experience of human suffering of different social classes.

There is sufficient evidence in the literature that somatization of personal and social distress exists simultaneously with depression and is not confined to Asian people. Eitinger (1959) and London (1986) observed somatic complaints in depressed European immigrants and Beaglehole (1969) noted it in his survey of mental disorders in the people of the Pacific.


Other symptoms, such as nostalgic reactions, which overlap with other diagnostic categories, have been reported in the literature on immigrants and mental health. Pfister-Ammende (1952) indicated that according to her research and her experience in working with immigrants and refugees, nostalgia as a separate diagnostic
category had not received enough attention. This clinical syndrome was recognized by many clinicians prior to World War I (Krystal & Petty, 1963). However, since then nostalgia or nostalgic reactions have not been classified as such, as it was difficult to make a differential diagnosis between major affective disorders, particularly unipolar reactive depression, hypochondriasis and conversion reaction. Nostalgia, described as a psychopathological condition affecting individuals who were uprooted, has disappeared or has been relabeled in the psychiatric literature of the 20th century.

Post-traumatic stress disorder - chronic or delayed
A new psychiatric nomenclature has been created with the publication of the Third Edition of the Diagnostic and Statistical Manual of Mental Disorders in 1980, which applies particularly to refugees and immigrants with pathologically intense reactions to stressful life experiences. This category, grouped under anxiety disorders, is post-traumatic stress disorder, chronic or delayed, a stress reaction to traumatic events, such as for example war combat, childhood incest, rape, natural disasters, concentration camp experience and crime victimization (Figley, 1985).

Loss of functioning following trauma without discernible physical fractures or dislocations were reported increasingly during the 19th century. It was only at the turn of the last century, following assessment and comparisons of survivors of volcanic eruptions and mining accidents, that some symptoms specific to individuals surviving life-threatening catastrophes emerged (Kolb, 1984).
Brutalization and threat to life in Nazi concentration camps were considered to have induced the stereotypic psychological symptoms of the post-traumatic stress disorder in 95% of the camp survivors (Eitinger, 1961, 1964). With the establishment of the Vietnamese War Veterans Institutions in the United States, the syndrome was systematically recorded and a diagnosis developed. Horowitz (1986) summarized the typical phasic pattern of the stress response as an initial outcry, followed by denial, then intrusion, then working through and finally completion. The denial phase is characterized by emotional numbing, withdrawal of interest in life, and behavioural constriction. Nightmarish dreams, difficulties in relaxing or falling asleep and episodes of severe depression and anxiety, guilt and anger are common in the intrusive phase.

Recent studies reveal that many Indochinese refugees suffer from both depression and posttraumatic stress disorder (Kinzie, Fredrickson, Ben, Fleck, & Karls, 1984; Boehnlein, Kinzie, Ben, & Fleck, 1985; Mollica & Lavelle, 1986). Kinzie et al. (1984) re-evaluated 13 Kampuchean cases that had a history of internment in a Pol Pot prison. These camp victims had been diagnosed depressed and also were found to meet the DSM-III diagnosis for post-traumatic stress disorder. In a follow-up study a year later Boehnlein et al. (1985) reported that most of these refugees displayed persistent symptoms of depression, anxiety and somatic problems, although the intrusive nightmares, the sleep disorder and the startle reaction showed the most consistent improvement.
The examination of the most prevalent diagnostic categories among immigrants and refugees raises a number of important issues:

(i) The research reported here was carried out primarily with adults and there is no evidence how the stress of immigration affects children and adolescents.

(ii) Most of the studies reviewed above have involved recorded admission rates to mental institutions, or to outpatient clinics or have investigated census data. The use of hospital records to estimate the relative frequency of mental disorders has often not been suitable for comparative purposes because of the composition and location of a mental institution. Researchers have examined census material but with its cross-cultural comparison, they encountered extreme difficulties because of differences in resistance of the population to being surveyed. There are differences in sampling, intensity of investigation, criteria of mental disorder or diagnostic category and methods of computing data used by different investigators (Wittkower & Termansen, 1969).

(iii) Bearing in mind the methodological difficulties mentioned above, there is some agreement in the literature, however, on the cross-cultural diagnosis of schizophrenia and the depressive syndrome, which is identified in all cultures (Singer, 1975; Sartorius, Jablensky, Gulbinat, & Ernberg, 1980; Jablensky et al. 1981).

(iv) All studies cited above, relied on treated prevalence rates for determining the true prevalence of psychiatric disorder in a given immigrant or refugee community. The inadequacy of treated prevalence rates has been well established (Vignes & Hall, 1979, Hoang & Erickson, 1982). It does not indicate the presence of
psychiatric disorders, or psychological difficulties, in any community at large.

Summary
The above review of existing clinical data on immigrants and mental health suggests that the most frequent diagnostic categories among both immigrants and refugees are paranoid schizophrenia, paranoid reactions with persecutory trends and affective disorders, particularly unipolar depression and anxiety. The data described, dealt mainly with the traditional Eastern European immigrant and refugee to either Northern Europe, England, the United States, Canada or Australia. All of these investigations were post hoc studies, sometimes completed and reported ten to twenty years after the event of migration (Eitinger, 1959, 1960, 1961, 1964).

The 'new' refugees, such as the Indochinese, have only been the subject of investigation since the late 1970s. Major depressive illness is the most common disorder mentioned in the literature. Since 1984 with the study of Kinzie et al. and the follow-up in 1985 by Boehnlein et al. post-traumatic stress disorder with coexisting affective disorders and anxiety disorders, are the most prevalent diagnoses. The clinical data presented were the treated prevalence rates in out-patient clinics, psychiatric units in general hospitals or special Indochinese psychiatry clinics in the United States.

There have only been a few studies published (Lin, Tazuma, & Masuda, 1979; Westermeyer et al., 1983a, 1983b), documenting the epidemiology of Indochinese refugee psychiatric disorder in the
community. The limitations of these reports are small sample size and simple measures of psychopathology -- such as the Cornell Medical Index and the Zung Depression Scale. Lin et al. compared scores on the psychological section of the Cornell Medical Index (CMI) from a group of 150 refugees, with those previously reported from the United States population. The mean refugee score of 12 was above the point said to indicate serious dysfunction (10 or more) and considerably greater than the 3.5 reported 20 years earlier from the receiving population. Serious doubts have been cast on the comparable validity of such instruments between Asian and European populations (Marsella, Sanborn, Kameoka, Shizuru, & Brennan, 1975). Likewise, studies which have tried to focus on refugee groups to determine the amount of psychopathology have had similar problems. Westermeyer et al. (1983a, 1983b) found that 60% of Hmong (out of 97 respondents) had emotional problems on the basis of a translated Zung depression scale and the Symptom Checklist-90. Marsella et al. mentioned specifically that the Zung scale was giving too high a score, that it had been normed on a European population and that it had a low level of correlation between Asian and European subjects. The results obtained from it would, therefore, have to be treated with caution.

Considering the methodological and cross-cultural validation problems involved, firm conclusions about the incidence rate of psychological dysfunctions among Indochinese refugees, in comparison to the receiving population, are difficult to make.

Schizophrenia is the most common functional psychosis all over the world requiring hospitalization, whereas affective disorders, particularly the depressive psychoses, appear to less commonly
result in hospitalization according to Wittkower and Termansen (1969), or at least come to the notice of psychiatrists less often.

It appears reasonable to assume that an even higher prevalence rate of affective disorder could be present in the refugee and immigrant community than the recorded admission rates to mental hospitals or treated cases in outpatient clinics show. It is also conceivable that, for culturally inherent reasons, and often because of political considerations, many quiet, retarded, seriously depressed and anxious refugees and immigrants are looked after by the close or extended family and do not receive the mental health care needed. Depressed refugees or immigrants might frequently seek help from the local general practitioner for somatic problems, such as insomnia, loss of appetite, stomach pains or frequent headaches. In this way the psychological problems which could be involved do not come to the attention of mental health workers (Boman & Edwards, 1984).

Furthermore, studies from holocaust survivors have indicated long-term effects of traumatic experiences on the victim. It appears possible that the traumatized Indochinese refugees suffering from post-traumatic stress disorder risk a similar development as the concentration camp survivors in the aforementioned studies by Eitinger. If post-traumatic stress disorder is not diagnosed or recognised by clinicians, but is left untreated, this could become a major paranoid or affective disorder in 10 to 20 years time (V. Soeterik, personal communication, December 6, 1987). Moreover Danieli (1985), studying the families of concentration camp survivors in the United States found evidence of the intergenerational transmission of victimization, that is, children
of these survivors display similar psychopathology as their parents.

The early recognition of symptoms of emotional distress in the refugee and immigrant population is of paramount importance not only to prevent suffering and pain, the possible effects of marital discord, substance abuse and disruption to family and working life but as well to avoid the effects of intergenerational transmission. No epidemiological studies exist on the prevalence of mental health problems in any immigrant or refugee community in New Zealand. The lack of such studies is unfortunate, considering the immigrant and refugee community's high risk of serious depression and anxiety, due to migration, trauma of war and persecution (Kuo, 1976; Hull, 1979).

The next section will outline the aims of the present study, which is an initial step in the general direction of overcoming the gap in the New Zealand mental health literature.
AIMS OF THE PRESENT STUDY

The previous section demonstrated that depression and anxiety are the most prevalent disorders in immigrant and refugee populations. The present study is an attempt to examine psychological functioning, which is measured by scores on a depression and anxiety scale in a community setting in New Zealand. The study is based on the Goldlust and Richmond (1974) multivariate model of the immigrant adaptation process (as outlined on page 18). Some parts of that model, such as pre-migratory factors and several post-migratory factors and conditions relevant to New Zealand society will be tested in order to establish which particular aspect could be related to the immigrants' and refugees' mental health.

Pre-migratory factors are: sex, age, religion, marital status and educational level.

Post-migratory factors are: knowledge of English, being satisfied with one's job in New Zealand, having a similar job as in the country of origin, income, housing (rented, home ownership or provided by employer), number of relatives in New Zealand, having close friends, experience of discrimination, financial assistance from the New Zealand Government, from an employer or a church, assistance from relatives, number of people from the same ethnic group living in the neighbourhood, having one's spiritual needs met, length of residence in New Zealand, leisure time spent with one's own ethnic group, migrant status (being a refugee or an immigrant) and employment (being employed or unemployed).
The central component of Goldlust and Richmond's (1974) model: length of residence in New Zealand and its relationship to mental health, will be examined and the model of the migratory process, as proposed by Sluzki (1986) will be tested. The relationship between the circumstances of migration (Murphy, 1977), (being a refugee or immigrant) and pre- and post-migratory factors will be investigated as well. Accordingly the following four hypotheses will be tested.

Hypothesis 1
There will be a difference in psychological functioning, that is, a difference in scores on the HSCL-25 between refugees and immigrants as a group who have been in New Zealand less than six months, longer than six months and up to six years and for more than six years and up to 15 years.

Hypothesis 2
There will be a difference in psychological functioning, that is, a difference in scores on the HSCL-25 between the Indochinese refugees, the Pacific Island immigrants and the British immigrants.

Hypothesis 3
There will be a difference in psychological functioning, that is, a difference in scores on the HSCL-25 of refugee and immigrant groups on the basis of pre-migratory and post-migratory factors.
Hypothesis 4

Pre-migratory and post-migratory factors will be related to migrant status, that is, being a refugee or an immigrant.

However, methodological issues involved in cross-cultural research need to be considered carefully, before the aims of the present study can be tested. The next Chapter will address these problems.
CHAPTER 3

METHODOLOGICAL ISSUES

The methodology adopted in cross-cultural research depends to a large extent on the specific context in which a piece of research is conducted and the circumstances under which respondents' cooperation is obtained. The main difficulty associated with any cross-cultural research is the unusually low response rate and this difficulty is magnified with immigrant and refugee populations from third world countries.

In Canada and the United States, the most frequently encountered problems in doing research with minority groups such as the Mexican American, the Pacific Islanders and the Indochinese refugees are community suspicion, high refusal rates, the very high mobility of the minority group and language barriers combined with status differences between interviewers and interviewees (Yu, 1985).

Australian research studies report very low response rates for questionnaires. For example, Kempen (1982) obtained a mean response rate of 26.99% in a survey investigating the settlement experiences in an Australian refugee community. He found that, generally, government inquiries aroused suspicion and apprehension among the refugee population.

In New Zealand, cross-cultural research confirms the difficulties found overseas. From the ten years of research with Samoan communities in New Zealand, Macpherson (1983) cites a suspicious
attitude to research and unwillingness to participate. He stresses the importance of confidentiality and etiquette and the significance of inclusion of all leaders of subgroups.

Research with refugees and immigrants from third world countries needs to take into consideration:
(i) contextual differences between, for example, war-torn countries and a society at peace,
(ii) conceptual and linguistic problems,
(iii) cultural problems in social interaction with refugees and immigrants,
(iv) sampling problems associated with cross-cultural research, and
(v) issues associated with cross-cultural diagnosis.

In the context of the present study these methodological difficulties and differences need to be considered carefully.

(i) Contextual differences

When the first Vietnamese refugees arrived in the United States, Canada, and New Zealand, their flight was but one of a series of evacuations and relocations that they had made in the past 30 years. Over one million Vietnamese civilians and military dependents crossed the 17th parallel as a result of the Geneva Accord, which formally ended the French-Indochina War (1946-1954) and marked the beginning of American involvement in Vietnam. Since 1954 all over Indochina, displacement of the civilian population has been an integral part of their lives. By the mid-1960's it was estimated that approximately one eighth of the population of Indochina was composed of recently displaced persons (Smith et al., 1967). In addition to this war situation most
Kampucheans have spent several years in workcamps under the Pol Pot regime. Many Kampucheans and Lao people have spent several years in Thai refugee camps, where they experienced appalling living conditions and an uncertain future.

If that situation was contrasted with New Zealand, the United States or Canada, where there have been no bombing attacks, gunfire or movements of armies, the contextual differences between a war-torn country and one at peace are self-evident.

As a result of over 30 years of conditioning in war and ideological turmoil, there is community suspicion, fear and distrust. Research and inquiries on any topic, particularly if initiated by the government, arouses distress. It could conjure images of an investigation by the secret police who are perceived not only as corrupt and exploitative but first and foremost, as life-threatening. It will take years and perhaps another generation for the Southeast Asian refugees to overcome their trauma of war and its aftermath, to acquire a realistic assessment of the threat of communism and to accept that their responses have neither any effect on their relations still at home nor any effect on their personal safety in the society of settlement.

Furthermore, since the end of World War II, Western countries have become accustomed to public opinion surveys, censuses and social science research. The majority of the South East Asian refugees and the Pacific Island immigrants may never have experienced a non-threatening interview in their lives apart from questioning by immigration authorities. If some refugees have had previous experience of being interviewed, it was almost certainly within the context of recruitment to fight the wars, being hounded for their
previous activities in various military operations or being persecuted for their political involvement and affiliations. Previous studies of the use of survey research methods in non-Western nations have indicated that people who have had no previous experience of answering survey questions often give answers that reflect their desire to please the survey interviewers (Hurh & Kim, 1982; Yu, 1985).

Some difficulties encountered by researchers with Indochinese refugees apply to the Pacific Islanders as well who often refuse to participate in research for similar reasons. These include inexperience with social science research (Macpherson, 1983) or fear of being found to be illegal immigrants. Moreover, many feel uneasy at being discovered in overcrowded living conditions or not speaking and understanding English very well.

(ii) Conceptual and linguistic problems
The conceptual and linguistic problems in cross-cultural research apply first of all to the appropriate use of instruments and their translations and, secondly, to interpretation services and interviews. These need to be recognized and considered. The use and translation of psychiatric rating scales in populations with languages other than those for which they were developed is based on the assumption that psychological disturbances or psychiatric disorders are constant, or at least very similar between cultures. Although there is a consensus in the literature that there exists a 'core' depressive syndrome across cultures, it is important to recognize that the list of symptoms on a self-report
instrument as well as the diagnostic scale associated with it are attempts to capture and categorize the ways people experience or report psychiatric disturbances (Kinzie & Manson, 1987). The experiences on which the European, American or Canadian diagnosis is based, is of Western origin. However, different experiences and different languages may engender different manifestations of distress (Kinzie & Manson, 1985). Therefore, it is always advisable to use an instrument which has either been developed for a particular culture and has been cross-validated or, at least has been translated and back-translated into the original language to check for consistency of words.

For the translation of any instrument, Brislin (1980) argues for what he calls an 'emic' (insider's view) - 'etic' (outsider looking in) method. The emic approach attempts to describe items of behaviour occurring in a particular culture, utilizing only concepts employed in that culture, whereas the etic approach describes behaviour using external criteria imposed by researchers. The simultaneous use of emic and etic approaches and the necessity of a back-translation in adapting an instrument to cross-cultural research is also supported by Davidson, Jaccard, Triandis, Morales, and Diaz-Guerrero (1976).

The use of self-rating scales, in addition to some insensitivity to differences in cultural concepts of psychopathology, have several practical limitations: (i) Scales require that subjects are able to read. Thus self-rating scales cannot be administered to people who cannot read or to entire cultures without a written language. (ii) If scales are read out by the researcher, the advantages of easy administration are lost. Furthermore, if the scale is read by an
interpreter, factors that can bias the results, such as the interpreter's relationship with the respondent and the pressure to provide socially desirable responses, are most likely magnified. The effects of reading scales to respondents have not been studied extensively (Kinzie & Manson, 1987). (iii) Self-rating scales have limited use in assessing the total range of psychopathology, as most scales focus on depression.

In interviews employing an interpreter, several unforeseen difficulties may arise. First of all, the differences inherent in two languages carry broad ramifications. The Indochinese languages have a distinctive system of personal pronouns and 'classifiers' that are used in place of the English 'I' and 'you'. These classifiers reflect the important social hierarchies by denoting the age, sex, marital status, social distance, personal achievement and official rank discrepancies between the speaker and the person addressed. Failure to use the appropriate term constitutes a serious breach of etiquette and non-participation in the research project could be a consequence (Yu, 1985). Thus the selection of interpreters is of utmost importance. Even in face to face conversation, the speaker must constantly refer to the person addressed as if he or she were a third party and use the third person pronoun most appropriate for the social status of the person addressed. The interpreter must not only have the respect and trust of the community but, of course, be bilingual, understand the aim of the research, and provide the accompanying researcher with hints about how to behave in particular situations and how to address and treat people (Baker, 1981).
Of course, by employing interpreters well known to the community another problem could hinder the data collection. Respondents who would not hesitate to disclose information to an unfamiliar professional interviewer if anonymity is assured, can be expected to refuse when the interpreter is an acquaintance or friend from the neighbourhood or a well known leader of their community. The only bilingual speakers in cross-cultural research are often members of the same ethnic and neighbourhood group and their presence during an interview can hinder obtaining truthful information in some areas of inquiry. Green (1986) points out that there are considerable difficulties in the use of local interpreters as confidentiality is not insured. Moreover, Indochinese might not be familiar with the concept of confidentiality. Ishisaka, Nguyen and Okimoto (1985) found that some of their Indochinese patients had to be taught about confidentiality and its use in mental health settings. Gluckman (1977) found in his work with Pacific Islanders that interpreters created certain problems. Translation is often modified in accordance with the interpreter's emotional, intellectual and religious dictates. Some interpreters consider it improper to expose secrets of their culture for fear of being ridiculed. Some are ashamed of the views of the patient and try to explain the translation apologetically. Marcos (1979) stated that clinically relevant interpreter-related distortions often lead to misevaluation of the patient's mental status. He suggested pre- and post-interview meetings of clinicians and interpreters as at least one way of minimizing these distortions.
(iii) Cultural problems in social interaction

In addition to the difficulties in communication which range from approaching the community leaders, establishing rapport with them, winning their trust and support, informing the community of the project, and training the translators and interpreters, other cultural problems in social interaction may arise and need to be considered.

Firstly, if the community is politically or otherwise non-homogeneous, care must be taken to give appropriate attention and extend separate but similar recognition to different factions and political divisions within the community. Secondly, because the practice of social research is not always understood no matter how hard researchers try to explain it, misconceptions appear to be unavoidable. Unrealistic expectations could arise, such as, that participation in the research project will bring instantaneous benefits either to the community as a whole or to the individual.

Thirdly, because questionnaires and self-report scales emphasize individual responses, it is desirable that each individual member of a family responds. However, Indochinese refugees and Pacific Islanders see the family as a unit where harmony should reign with a solid expression of accord being presented to an outsider (Henderson, 1987). Fourthly, the politeness and the desire of some to please raises questions about whether a response was given because it was perceived as desirable, or because it was accurate and reflected their real feelings.
(iv) Sampling problems
Obtaining a sample of a refugee and immigrant population can be problematic. The difficulties of obtaining names with correct addresses and of locating the person included in the sample were the three major stumbling blocks encountered by researchers overseas (Yu, 1985). The high rate of mobility of the refugee and immigrant population in the United States and Canada, their suspiciousness of researchers and unfamiliarity with social science research appear to be the cause of these problems.

(v) Issues in cross-cultural diagnosis
The recognition of mental disorders by western clinicians in Asian refugee populations and Pacific Island immigrants raises some important issues. As depression is the most commonly reported disorder of refugees and immigrants, this discussion will focus on the cross-cultural problems of making this diagnosis.

It is generally accepted that depression exists all over the world (Singer, 1975; Jablensky et al., 1981; Kleinman, 1982). The existence of a 'common core' of depressive symptomatology which includes joylessness, anxiety, tension, lack of energy, loss of interest, loss of ability to concentrate and ideas of insufficiency, inadequacy and worthlessness, has been established.

However, it is not always evident that congruence exists between Western categories of psychiatric disorders and those defined by other cultures. Psychiatric cross-cultural studies suggest that assessment of disorders should begin with local phenomenological descriptions which can then be compared to Western psychological
criteria. Westermeyer (1977) during his residence in Laos, was able to identify a number of individuals who were diagnosed within their villages as either having *ba* (insane or crazy), or *sia chit* (literally lost mind, figuratively nervous breakdown or nervous problem). The term *ba* was applied to an individual who sees or hears things not observed by others. The criteria employed by Lao villagers in applying the term *sia chit* included individuals complaining of constant sadness or crying spells, difficulty sleeping, weakness, fright, panic and various physical symptoms. Westermeyer found that independent psychiatric raters who had no experience with Asian culture revealed close agreement between the folk diagnosis *ba* and the western diagnosis of psychosis. Disagreement occurred for the *sia chit* category which was diagnosed by some as psychotic. Westermeyer states that folk diagnosis may be a very useful means of locating severe cases of disorders in a population. He warns, however, that clinicians not familiar with the foreign culture might overdiagnose non-psychotic cases.

Similar investigations into phenomenological descriptions of disorders in the Pacific were presented by Gluckman (1977). He encountered several culture bound syndromes in his clinical work with Samoans in New Zealand such as *musu*, which may be considered phenomenologically as negativism, defiance, dissociation, or depressed mood, and it may be considered clinically as a hysterical reaction, a depressive or a catatonic reaction, or as schizophrenia. *Musu* is best considered as a defence reaction against overwhelming stress, which enables the person to protect himself. This protection may lead to difficulties not envisaged if the clinician is not aware of *musu*. Gluckman refers to
several culturally determined syndromes, as the Samoans, particularly the older Samoans over the age of 50, believe that they are suffering an illness caused by violation of certain laws and customs which are based in pre-European Samoan society. Gluckman agrees with Westermeyer that European diagnostic standards will often lead to the diagnosis of schizophrenia, manic-depressive disorder, psychopathic personality or mental defect if cultural differences are not taken into account. Thus again, there is the danger of over-diagnosis of non-psychotic disorders. According to Gluckman's clinical experience it appears wise to think in terms of reactive depression, reactive anxiety, situational and adaptational difficulties and lack of social and educational opportunities. An erroneous diagnosis of schizophrenia may result from accepting the normal, but unknown values of a culture, as delusions.

In the present study an attempt is made to deal with these problems as explained in the Method section.
CHAPTER 4

METHOD

Sample
The sample of Kampuchean refugees, Pacific Island immigrants and British immigrants was drawn from Palmerston North, a medium size city in the North Island of New Zealand. The Lao and Vietnamese sample were drawn from the large communities residing in Wellington, the capital of New Zealand.

Information on the distribution of the refugee or immigrant population in New Zealand is neither available from the Immigration Department, nor from the Labour Department, Wellington (S. Girvan, personal communication, December 6, 1987). The publication of the New Zealand Census of Population and Dwellings 1986, particularly Series C, Report 6 'Birthplaces and Ethnic Origin' was not completed at the time this report was written. Figures from the 1981 census did not seem relevant as they were outdated. The 1981 census stated, for example, a total of 3,348 Indochinese refugees (Department of Statistics, 1983), whereas a total of about 8,000 Indochinese are now living in New Zealand (C. Hawley, personal communication, September 3, 1987). Furthermore, refugees and immigrants are a very mobile population. Exact distribution figures in the main urban centres in New Zealand will not be available until the publication of the 1986 census data. Thus, it is difficult at this stage to determine how representative the sample, drawn from Palmerston North and Wellington, is of the refugee and immigrant population in New Zealand.
An ESL teacher from Palmerston North provided a comprehensive list of all Kampuchean refugees living in the Palmerston North area from which a systematic sample of 48 Kampucheans was selected. The Kampuchean list provided information on all family members, thus all adult members (above the age of 18) from every second family were selected. Fifteen questionnaires and scale responses were excluded from the sample as the researcher had not been present to control the conditions of administration. Therefore from a total of 48 questionnaires only 33 were included for data analysis.

From a list provided by the ICCI consisting of a total of 48 Lao families, every third family was selected. This provided a sample of 52 Lao people. Similarly, from a total of 120 Vietnamese addresses every sixth address provided a sample of 49 Vietnamese living in the Wellington area. Of the 52 Lao people 50 completed the questionnaire. In one Lao household the head of the family requested that neither his son nor his daughter be interviewed. Of the 49 Vietnamese, 46 people participated in the study.

The President of the ethnic association PACIFICA in Palmerston North supplied addresses of Fijians, Tongans and Samoans, living in Palmerston North. The ministers of the Samoan Congregational Church, the Tongan methodists and the Seventh-day Adventists allowed access to their congregation. Pacific Island workers from the Sanitarium Factory in Palmerston North participated. Thus, a convenience sample of 57 Pacific Islanders were identified and included in the sample.
British immigrants were selected in a similar manner from staff at Massey University, Manawatu Polytechnic, Palmerston North and Lake Alice hospitals. A sample of 63 British respondents were contacted, all of whom were included in the sample. In all subject groups only people aged 18 and over were asked to participate.

Research instruments and format
Two instruments were used. A questionnaire and the Hopkins Symptom Checklist-25.

The questionnaire:
The questionnaire was based on factors which, according to the literature (Westermeyer et al., 1983a, 1983b) were likely to influence refugees' and immigrants' adjustment to new environments. After consultation with ESL teachers, the principal clinical psychologist of the Palmerston North Hospital Board and the director of the New Settlers Education in Wellington, a questionnaire was drafted. It was pilot tested on a University student sample of 21 South East Asians, 7 Pacific Islanders and 8 Canadians, North Americans and Australians. After minor adjustments the final version of the questionnaire was prepared. It contained items referring to demographic features and factors likely to influence immigrants adjustment to New Zealand (see Appendix B). Because of ethical and clinical considerations the questionnaire did not inquire into experiences before coming to New Zealand.
A covering letter which assured respondents of anonymity and confidentiality and gave brief information on the purposes of the research, was attached to the questionnaire. The questionnaire and covering letter were translated into Vietnamese and Lao by translators recognized by the ICCI. The questionnaire and the covering letter were translated into Kampuchean by a translator in Palmerston North, who was recommended by an ESL teacher. As the questionnaire was straightforward, it was not considered necessary to back-translate it blind into English. It was printed in two languages for the Indochinese immigrants, that is, in English as well as either Kampuchean, Vietnamese or Lao. For the Pacific Islanders and the British immigrants an English version only was used (the English language version only is included in Appendix B).

*The Hopkins Symptom Checklist-25*

The Hopkins Symptom Checklist was originally designed in 1954 by Parloff, Kelman and Frank at John Hopkins University, as a self-report symptom inventory to be used for measuring change in the clinical status of psychotherapy patients (Parloff, Kelman & Frank, 1954). The earliest version, called the Discomfort Scale comprised 41 symptom questions, most of which were taken from the Cornell Medical Index (CMI). Several versions have been developed ranging in length from 25-90 items. Karl Rickels, and his colleagues shortened the 58 HSCL and demonstrated the usefulness of a 25-item version in family practice and family planning service settings in identifying patients with previously unrecognized clinically significant emotional distress (Hesbacher, Rickels, Morris, Newman, & Rosenfeld, 1980).
The HSCL-25 uses 10 items from the HSCL-58 anxiety cluster (being suddenly scared for no reason; feeling fearful; faintness, dizziness, or weakness; nervousness or shakiness inside; heart pounding or racing; trembling; feeling tense or keyed up; headaches; spells of terror or panic; feeling restless, not being able to sit still) and 13 items from the depression cluster (feeling low in energy, slowed down; blaming oneself for things; crying easily; loss of sexual interest or pleasure; feeling lonely; feeling hopeless about the future; feeling blue; thoughts of ending one's life; feeling trapped or caught; worrying too much about things; feeling no interest in things; feeling everything is an effort; feelings of worthlessness). It also includes two additional somatic symptoms (poor appetite, difficulty falling asleep or staying asleep). The scale includes four categories of response ('not at all', 'a little', 'quite a bit', 'extremely') in keeping with its primary use as a measure of symptom intensity (a copy of the Hopkins Symptom Checklist-25 is provided together with the questionnaire in Appendix B).

The HSCL-25 was administered to the British immigrants and the Pacific Islanders.

The Indochinese version of the HSCL-25.

For the Kampuchean, Lao and Vietnamese immigrants the Indochinese version of the HSCL-25 was used, as developed in the Indochinese Psychiatry Clinic, at St. Elizabeth's hospital, Brighton, Massachusetts (Mollica, Wyshak, Marneffe, Khuon & Lavelle, 1987). The HSCL-25 had been translated from English into Kampuchean, Lao and Vietnamese by three experienced Indochinese mental health
clinicians fluent in English (members of the Psychiatry Clinic staff). These versions were then back-translated blind into English by three bilingual Indochinese experts in the community who were knowledgeable about mental health concepts. Discrepancies were discussed and resolved by each pair of translators. The resulting versions were used in the clinic for one year. In the final preparation of each Indochinese language version several cultural experts who combined native fluency and a knowledge of mental health issues, were consulted. This group included a nationally recognized authority and a minimum of six other cultural specialists. The final version incorporated a number of the suggested word changes and maintained the terminology that had proven over the trial year to be most understandable to the patient population.

Validation was accomplished by measuring the degree of sensitivity and specificity of the HSCL-25 through comparing the HSCL-25 scores with the DSM III diagnosis given by a psychiatrist blind to the HSCL-25 results.

Scores on the scale were determined for three categories: total (25 items), depression (15 items), anxiety (10 items) and for the purposes of this study a symptomatic score (10, 15 or 25 items) was computed. Indochinese with depression scores higher than 1.75 were classified as having depressive symptoms, clients with scores higher than 1.75 on the anxiety scale seem to experience high anxiety levels, and people with a total score higher than 1.75 on anxiety and depression were classified as having significant emotional distress. Respondents, who scored more than 1.75 on either one or both scales are designated symptomatic. The cut-off point of 1.75 was chosen for its consistency with data obtained
from a random general population sample in California. DSM III diagnoses were determined for the client through a series of clinical interviews (usually three or more) by a psychiatrist blind to the HSCL-25 scores. Comparisons were then made between the HSCL-25 scores and the DSM III diagnoses to determine the HSCL's sensitivity and specificity. The sensitivity and specificity correlation values for the presence of depression (based on scores higher than 1.75 on the 15 HSCL-25 depression items) according to the DSM III diagnosis of major depression were 0.88 and 0.73 respectively. These findings are consistent with previous validations of the HSCL-25 (A. Winokur, D. F. Winokur, Rickels, & Cox, 1984). In that study a high correlation between the patients' self-assessment of clinical improvement and the changes in their HSCL-25 scores was found. The patients who indicated the greatest improvement also had the lowest symptom levels after six months of treatment. Rickels, Lipman, Garcia and Fisher (1972) demonstrated similar findings.

The translations were also assessed for test-retest and interrater reliability. The test-retest coefficients for the three language groups combined were 0.89 for the total score and 0.82 for anxiety and depression; the results for each language group separately were comparable (Mollica, Wyshak, Marneffe, Khuon, & Lavelle, 1987). The interrater reliability for the total, anxiety and depression scores for each of the three language groups was higher than 0.98.
Procedure

Each of the subject groups was approached in a manner most likely to elicit their full cooperation.

The Indochinese.

Preliminary meetings with community leaders and others involved in the research made it possible for the researcher and respondents to become acquainted and the researcher gained credibility and support. This was enhanced by a letter of introduction from the University authorities establishing the credibility of the researcher and assurance that the study was apolitical.

Information about the aims and procedure of the study was broadcast in Lao, announced at Vietnamese church services, Buddhist gatherings and disseminated by the Kampuchean community committee. The interpreters organized in advance the researcher's visit to the various households. It was considered an advantage that the researcher was not a New Zealand citizen, but a European immigrant. This fact was not only important to the refugees, but to the Pacific Islanders and the British immigrant population, as they felt they could answer openly without fear of offending their host country.

The Pacific Islanders.

Leaders of church and social organizations and the foreman of the Sanitarium factory were met and details were given about the research. All of them contacted the respondents to arrange the researcher's visit.
The British immigrants.
The British immigrants were approached directly by the researcher and informed about the study before administration of the questionnaire and scale.

Training sessions
The Lao, Vietnamese and Kampuchean interpreters took part in three training sessions in which an interview strategy was worked out. Possible problems and ways of overcoming them were discussed. The need for confidentiality and anonymity was stressed.

Data Collection
Data was collected between July and September 1987.
The questionnaires and the HSCL-25 were administered by the researcher face-to-face to the Lao, Vietnamese and Kampuchean refugees, to all the Pacific Islanders and to most of the British immigrants. Some British immigrants preferred to fill in the questionnaire and scale on their own. These were collected the following day, with the exception of twelve British responses which were returned by post.
The researcher was accompanied by an interpreter to all households of the Lao, Vietnamese and Kampuchean communities.

Statistical analysis
Computer analysis involved processing data with SPSS-X, the Advanced Statistics Package for the Social Sciences (Norusis, 1985).
(i) Descriptive statistics, summarizing the information obtained, were computed. These included means, standard deviations, percentages and cross-tabulations.

(ii) Analysis of Variance and appropriate statistical tests were used to establish, whether mean differences between the groups were significant.

(iii) Two multiple regression analyses with pre-migratory and post-migratory variables were performed. Depression and anxiety scores were the dependent variables.

(iv) A discriminant analysis was performed to predict group membership, (refugees, Pacific Island immigrants, British immigrants), using pre-migratory and post-migratory variables.
CHAPTER 5

RESULTS

Descriptive statistics of the sample are followed by both univariate and multivariate analyses to test the four hypotheses stated in Chapter 2.

Descriptive characteristics of the present sample - pre-migratory factors
The distribution of pre-migratory factors such as ethnic origin, age, sex, educational level and marital status of the present sample of 249 Indochinese refugees, Pacific Island immigrants and British immigrants are outlined in Tables C-1, C-2 and C-3 (refer to Tables in Appendix C). These characteristics of the three groups are compared, and attention drawn to differences and similarities.

Sex distribution
As a group male refugees outnumbered female refugees. There were 83 (64.3%) males and 46 (35.7%) females in the refugee sample. In the immigrant sample, however, the male/female distribution was much more even.

Age distribution
The refugee group tended to consist of younger people, that is, below the age of 30, while the British immigrant group was mainly middle aged, most of them being in their thirties and forties. On the other hand, the Pacific Island immigrants were approximately
evenly distributed across the range of ages. The average age of all three groups was comparable and lay in the middle to late thirties. As already mentioned in the previous Chapter, information on population distribution figures will not be available until the publication of the 1986 New Zealand census data. However, according to the 1981 information on birthplaces and ethnic origin, male Indochinese refugees outnumbered females (55% males to 45% females) at that time. The sex distribution in the Pacific Island immigrant and British immigrant population was approximately equal. The age distribution in the refugee population in 1981 appeared to be even more extreme than in the present sample, with 71.7% Kampucheans and 87% Lao people being in the age range 20-34 (Department of Statistics, 1983). It is impossible without more recent information to determine exactly how representative the present sample is of the general population. However, from the information available it would seem that it is reasonably representative in terms of age and sex distribution.

**Education**

There were significant differences in educational levels between the refugees, Pacific Island immigrants and the British immigrants. The British immigrants were overall the most highly educated group, with an average number of 16.3 years of education and both men and women were similarly educated. The Pacific Islanders had an average of 11.6 years of education, with more females having had up to nine years of education and males predominating in the more highly educated group. By contrast over half of the refugees had minimal schooling and of the 43 refugee women in the sample, 33 had few educational achievements.
Ethnic origin

While the refugee and the Pacific Island immigrant sample each consisted of three major ethnic groupings, the British immigrants, although predominantly English, also included several people from Scotland, Wales, Ireland and one from the West Indies.

Marital status

Most of the refugees and the British immigrants were married, but of the Pacific Islanders only slightly more than half were married.

Post-migratory factors

Table 1 shows mean values of post-migratory factors such as income, number of relatives in New Zealand, number of household members, length of residence in New Zealand and number of people from the same ethnic group living in the neighbourhood, for the three groups.

Income

The data contained in Table 1 indicated that Pacific Islanders had the lowest mean income of $11.842 per year while the refugees earned only slightly more than the Pacific Islanders. The British had the highest mean income of $30.079 per year.

 Relatives in New Zealand

The British and the refugees had few relatives living in New Zealand, whereas the Pacific Islanders had the highest number of relations (mean of 2.89, 5.8 and 19.24, respectively).
Household members
Refugees and Pacific Islanders tended to live in large households while the British lived with very few people.

Proximity of members of the same ethnic group
Refugees and Pacific Island immigrants lived close to their own ethnic group but this did not apply for the British immigrants.

Years in New Zealand
Pacific Islanders and British immigrants had spent almost the same length of time in New Zealand. The refugees had spent less time in New Zealand

Table 1

| Mean income, no. of relatives, household members, ethnic neighbourhood and years in NZ for the three groups. |
|--------------------------------------------------|----------|-----------------|-----------------|
|                                                   | Refugees | Pacific Island Immigrants | British Immigrants |
| X income                                         | 13,662   | 11,842           | 30,079           |
| X no. of relatives in New Zealand                | 5.8      | 19.24            | 2.89             |
| X no. of household members                       | 5.6      | 5.4              | 3.21             |
| X no. of people of the same ethnic group in the neighbourhood | 10.2     | 10.4             | 3.4              |
| X no. of years in New Zealand                    | 3.6      | 5.5              | 5.09             |
English language ability

Responses to the questions concerning level of English ability are presented in Table 2.

The great majority of the refugees had little or medium knowledge of English. Over half of the Pacific Islanders had a good or very good command of the English language.

Table 2

<table>
<thead>
<tr>
<th>English ability now</th>
<th>Refugees</th>
<th>Pacific Island Immigrants</th>
<th>British Immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>no English</td>
<td>8</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>very little</td>
<td>54</td>
<td>8</td>
<td>--</td>
</tr>
<tr>
<td>medium</td>
<td>44</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>good</td>
<td>16</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>very good</td>
<td>7</td>
<td>15</td>
<td>60</td>
</tr>
</tbody>
</table>

Occupational data for the three groups

As Table 3 indicates most refugees could not find a similar job in New Zealand. In particular, none of the refugee farmers and fishermen were able to find similar work and a large proportion of them are now labourers. Very few professionals, that is, teachers, lawyers, engineers and mechanics, were employed as professional people.
Table 3

Occupational data for the three groups of subjects

<table>
<thead>
<tr>
<th>Occupation before and after coming to New Zealand</th>
<th>Refugees</th>
<th>Pacific Island immigrants</th>
<th>British Immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>before</td>
<td>now</td>
<td>before</td>
</tr>
<tr>
<td>professionals</td>
<td>17</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>salaried workers</td>
<td>23</td>
<td>31</td>
<td>17</td>
</tr>
<tr>
<td>merchant/business</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>farmers/fishermen</td>
<td>24</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>labourers</td>
<td>6</td>
<td>41</td>
<td>5</td>
</tr>
<tr>
<td>unemployed</td>
<td>4</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>housewives</td>
<td>11</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>students</td>
<td>31</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>other - (retired)</td>
<td>6</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Finding a similar job *</td>
<td>yes</td>
<td>no</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>74</td>
<td>49</td>
</tr>
</tbody>
</table>

* n.a. = not applicable
Many of the Pacific Island immigrants, especially salaried workers, found similar jobs in New Zealand. Most of the British immigrants found similar employment. Over one third were professional people and all of them now work as professionals in New Zealand. Similarly, nearly all salaried workers receive a salary now.

Nearly half of the refugees in New Zealand are either working as unskilled labourers or are unemployed. Few refugees are professionals and a large number work as salaried workers. The majority of Pacific Islanders, however, work as salaried workers or as unskilled labourers. Very few of them are unemployed. The British immigrants are mainly professionals or work as salaried workers.

Having close friends
As outlined in Table 4 the majority of people in the three groups had close friends. However, a slightly higher number of refugees than British immigrants reported having no friends. Very few Pacific Islanders had no friends.

Perceived discrimination
Most refugees and Pacific Islanders felt discriminated against in New Zealand, while only very few British immigrants experienced discrimination.
Financial assistance
The majority of refugees and nearly half of the British immigrants received government assistance, employer’s support or financial help from a church in New Zealand. The Pacific Islanders overall did not receive such help.

Leisure time
The overwhelming majority of refugees and of Pacific Islanders spent their leisure time with fellow ethnics. The British, however, spent most of their free time with other people (presumably with other New Zealanders).

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Refugees</th>
<th>Pacific Island immigrants</th>
<th>British immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Close friends in New Zealand</td>
<td>105</td>
<td>24</td>
<td>53</td>
</tr>
<tr>
<td>Experience of discrimination in New Zealand</td>
<td>77</td>
<td>52</td>
<td>29</td>
</tr>
<tr>
<td>Assistance from New Zealand government, employers, and churches</td>
<td>106</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Leisure time spent with own ethnic group</td>
<td>110</td>
<td>19</td>
<td>37</td>
</tr>
</tbody>
</table>
Differences in anxiety and depression scores for refugees and immigrants, measured at three different time intervals.

Two Analyses of Variance were run to test differences in mean anxiety and depression scores across three time periods in New Zealand. There were three ANOVA groups and each group consisted of refugees and immigrants. Seventeen people were in group 1, 149 people in group 2 and in group 3 there were 83 people. The first group consisted of refugees and immigrants who had been in New Zealand for less than six months. The second group covered the time period of six months up to six years, and the third group consisted of refugees and immigrants who have been in New Zealand for longer than six years and up to 15 years.

The data was further analysed by computing a contrast coefficient matrix, to test differences between group 1 and group 2, between group 1 and group 3 and between group 2 and group 3.

As illustrated in Figure 3 the difference in mean depression scores across the three groups who had been in New Zealand for different time periods was significant (F=5.630; p<.0041).

There was a significant difference in mean depression scores between times 2 and 3 (p<.001).
Differences in mean anxiety and depression scores for refugees, Pacific Island immigrants and British immigrants

Two Analyses of Variance were performed to test differences in mean anxiety and depression scores on the HSCL-25 across three groups. Group 1 consisted of 129 refugees, there were 57 Pacific Islanders in group 2 and 63 British Immigrants in group 3.

The data was further analysed by computing a contrast coefficient matrix to test differences between group 1 and group 2, between group 1 and group 3 and between group 2 and group 3.
Figure 4 presents a graphical illustration of mean anxiety score differences on the HSCL-25 between refugees and immigrants. The differences in mean anxiety scores were significant ($F=4.896; p<.0082$) across the three groups.

There was a significant difference in mean anxiety scores between group 1 and group 3 ($p<.009$) and a significant difference between group 2 and group 3 ($p<.004$).

![Figure 4. Mean anxiety score differences on the HSCL-25 between refugees and immigrants.](image-url)
Similarly Figure 5 illustrates that the differences in mean depression scores were significant \((F=1.403; \ p<.0000)\) across the three groups.

There were significant differences between group 1 and group 3 \((p<.000)\) and between group 2 and group 3 \((p<.002)\).

![Figure 5](image)

**Figure 5.**
Mean depression score differences on the HSCL-25 between refugees and immigrants.

Table 5 presents the symptomatic scores of the three sample groups. For the purposes of this study, the designation 'not symptomatic' has been applied to members of those subgroups who scored less than 1.75 on both the HSCL-25 anxiety and depression scales. The members of the subgroups who scored more than 1.75 on either one or both scales are designated 'symptomatic'.

Forty-two (33%) refugees (21 males and 21 females), 15 (26%) Pacific Islanders (7 males and 8 females) and 5 (7%) British immigrants (1 male and 4 females) had scores over 1.75 on the HSCL-25 anxiety factor, depression factor or both, and they were therefore considered symptomatic.

Two (1.6%) refugees scored above 1.75 on the anxiety factor alone, eight (6.2%) refugees scored above 1.75 on the depression factor alone and 32 (25%) were symptomatic on both factors.

Three (5.3%) Pacific Islanders scored above 1.75 on the anxiety factor alone, 2 (3.5%) scored above 1.75 on the depression factor alone and ten (17.5%) were symptomatic on both factors.

No British immigrant scored above 1.75 on the anxiety factor alone, two (3.2%) British immigrants scored above 1.75 on the depression factor alone and three (4.8%) were symptomatic on both factors.

One third of the refugee sample had symptomatic scores and of the Pacific Island immigrants, one quarter was symptomatic, whereas the British had very few symptomatic cases.

Table 5

<table>
<thead>
<tr>
<th>Comparative table of HSCL-25 scores (&quot;symptomatic&quot; ≥ 1.75)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>not symptomatic</td>
</tr>
<tr>
<td>symptomatic</td>
</tr>
<tr>
<td>anxiety</td>
</tr>
<tr>
<td>depression</td>
</tr>
<tr>
<td>anxiety &amp; depression</td>
</tr>
</tbody>
</table>


Predicting anxiety and depression levels, using pre-migratory and post-migratory factors

Two multiple regression analyses (all in) were run, using anxiety and depression scores as the dependent variable. There were 21 predictor variables, five pre-migratory variables, such as age, sex, religion, marital status and educational level and 16 post-migratory variables (see page 43 for a full listing of variables).

The assumption of constant variance and normality appeared to be violated with both the anxiety and depression variables. To obtain a better fit a log transformation was performed. As the improvement was negligible, the results, which are reported are for untransformed variables. All other assumptions were met.

The results in Table 6 indicate that post-migratory factors, such as being employed or unemployed, followed by the experience of discrimination in New Zealand, the leisure time spent with one's own ethnic group and having close friends are significantly correlated with anxiety.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Beta</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>being employed or unemployed</td>
<td>-.257929</td>
<td>&lt;.0032</td>
</tr>
<tr>
<td>experience of discrimination</td>
<td>.188116</td>
<td>&lt;.0050</td>
</tr>
<tr>
<td>leisure time with people from own ethnic group</td>
<td>.174303</td>
<td>&lt;.0258</td>
</tr>
<tr>
<td>having close friends</td>
<td>-.127731</td>
<td>&lt;.0410</td>
</tr>
<tr>
<td>F=3.41824</td>
<td>p&lt;.0000</td>
<td>R²=.25894</td>
</tr>
</tbody>
</table>
The results in Table 7 indicate that post-migratory factors, such as the experience of being discriminated against in New Zealand and not having close friends, are significantly correlated with depression levels.

\[
\text{Table 7} \\
\text{Regression Analysis results: depression as dependent variable} \\
\begin{array}{|c|c|c|}
\hline
\text{Predictor} & \text{Beta} & \text{sig.} \\
\hline
\text{experience of discrimination} & .198919 & < .0025 \\
\text{having close friends} & -.185635 & < .0026 \\
\hline
\text{F=3.91633} & \text{p<.0000} & \text{R}^2=28589 \\
\hline
\end{array}
\]

Predicting group membership, using pre-migratory and post-migratory variables
A stepwise discriminant analysis with Wilks' lambda as criterion statistic, was performed to predict group membership. The dependent variables were three groups. Group 1 consisted of 129 refugees, in group 2 were 57 Pacific Islanders and group 3 consisted of 63 British immigrants. Twenty-two variables, pre-migratory and post-migratory, including depression and anxiety were entered stepwise (see page}
43 for a full listing of variables). The prior probabilities were set to the relative frequencies of the sample group.

Religion was dropped from the analysis, as scores for this variable for one criterion group, the Pacific Islanders, were constant.

After the variable religion was dropped the covariance matrices (for each criterion group) were checked for equality. They were significantly different as indicated by an F test on Box's M statistic ($F=3.79$ df $= 272, 82073.9 \ p<.0000$). The differences were found to be caused by skewed distributions in some of the variables, such as the differences in income, total number of relations in New Zealand or the number of people from the same ethnic group living in the neighbourhood. The British immigrants, group 3, had on average, high incomes, but a low number of relations in New Zealand and few fellow British living in the neighbourhood in comparison with the refugees and Pacific Island immigrants. As it is known that discriminant analysis is robust when failures of normality are due to skewness (Tabachnik & Fidell, 1983) the variables affected were retained in the analysis.

Thirteen of the 22 variables were dichotomous. Under these circumstances linear discriminant function is not optimal and might not maximize the distance between the groups. However, Moore (1973) stated that most evidence suggests that linear discriminant function performs reasonably well with dichotomous variables.

The stepwise discriminant analysis resulted in six variables being discarded (anxiety, depression, total number of years of education, job satisfaction, housing and close friends). Only the first seven
variables of the total number of 16 which went into the analysis produced big drops in Wilks' lambda. Knowledge of the English language nearly halved Wilks' lambda, followed by assistance of the New Zealand government, by an employer or a church, leisure time spent with the same ethnic group, the total number of relations living in New Zealand, income, the experience of discrimination and finally sex.

The present results suggested that these seven variables were the most important variables predicting group membership. Refugees were more likely to have little knowledge of English, most of them received New Zealand government, employer or church assistance and they tended to spend their leisure time with members of their own ethnic group. They had some relations in New Zealand, had low incomes, felt the most discriminated against and were predominantly male.

British immigrants on the other hand had a very good knowledge of English, received moderate amount of government, employer or church assistance, tended not to spend their leisure time with people from their own country, had very few relatives living in New Zealand, had very high incomes and did not feel discriminated against.

Pacific Island immigrants tended to have reasonable knowledge of English, received very little assistance either from the New Zealand government, employers or a church, they spent some of their leisure time with fellow Pacific Islanders and they tended to have very large number of relatives in New Zealand. They generally had very low incomes and they felt moderately discriminated against.
The results indicated that two functions were needed. The first function accounted for 69% of between group variance and was correlated .83 with group membership (Wilks' lambda = 0.151; p<.0000). The second function accounted for 31% of between group variance and was correlated .71 with group membership (Wilks' lambda = 0.491; p<.0000).

Table 8 lists the standardized canonical discriminant function coefficients. English language ability made the highest contribution to function1, followed by discrimination, and finally sex. New Zealand government, employer or church assistance to settle in New Zealand is the greatest contributor to function2, followed by income and number of relations.

<table>
<thead>
<tr>
<th>Function</th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>English level now</td>
<td>.60291</td>
<td>government employer, church assistance</td>
</tr>
<tr>
<td>discrimination</td>
<td>-.33870</td>
<td>income</td>
</tr>
<tr>
<td>sex</td>
<td>.28750</td>
<td>number of relations</td>
</tr>
</tbody>
</table>
The overall classification of cases into criterion groups was accurate in 88.35% of the cases. Group 1 and group 3 had very good classification results, with a correct classification rate of 89.1% and 93.7% respectively (see Table 9).

### Table 9
**Discriminant Analysis: Classification Results.**

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of cases</th>
<th>PredictedGroup Membership</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 refugees</td>
<td>129</td>
<td></td>
<td>115</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>89.1%</td>
<td>7.8%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Group 2 Pacific Islanders</td>
<td>57</td>
<td></td>
<td>7</td>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.3%</td>
<td>80.7%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Group 3 British immigrants</td>
<td>63</td>
<td></td>
<td>1</td>
<td>3</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.6%</td>
<td>4.8%</td>
<td>93.7%</td>
</tr>
</tbody>
</table>

Percent of cases correctly classified: 88.35%

**Summary**
The results have indicated that at the univariate level (ANOVA) anxiety and depression scores are significantly related to migrant status (being a refugee or an immigrant). At the multivariate level (REGRESSION ANALYSIS) anxiety is significantly correlated to being unemployed, the experience of discrimination, leisure time spent with the same ethnic group and not having close friends. However, anxiety is not significantly related to being a refugee or an
immigrant. Depression is significantly related to discrimination and not having close friends, but not to being a refugee or immigrant.

The DISCRIMINANT ANALYSIS suggested that at the multivariate level English language ability, the financial assistance of the New Zealand government, being sponsored by employers or by a church, the number of relatives living in New Zealand, income, discrimination and sex are all significantly correlated with group membership.

Figure 6 represents, in diagramatic form, how each of the statistical analysis performed (both univariate and multivariate) reveal relationships between the four sets of variables, namely migrant status, anxiety and depression, pre- and post-migratory factors.

Figure 6. Schematic representation of the method of analysis
The purpose of the present study has been to compare the mental health of three groups of migrants to New Zealand: the Indochinese refugees, the Pacific Island immigrants and the British immigrants. Differences between these groups have been investigated and the relationship between psychological functioning, the circumstances of migration, pre-migratory and post-migratory factors, have been explored. Four specific hypotheses have been tested.

1. Length of residence in New Zealand makes a difference to psychological functioning

The findings of this research only partially supported Hypothesis one, that is, that refugees and immigrants would differ in psychological functioning as a function of their length of residence in New Zealand. The results indicated significant differences in depression scores between the various time periods, but not in anxiety levels. Furthermore, a different trend is evident, as compared with Sluzki's (1986) model.

The expected trend according to Sluzki's model, would have found low mean scores for anxiety and depression in time period one, indicating a symptom free period. However, in the second time period, a high mean score would reflect the possible experience of
crisis and a rise in symptom intensity, which is followed by medium scores in the third period.

In the present study a different trend is evident. The medium depression scores of refugees and immigrants who have been in New Zealand for less than six months were followed by high scores between six months and up to six years. Between six years and 15 years the mean dropped below the mean of the first time period. The results for the anxiety score are even more distinctly different from the expected trend. A high score is followed by a medium and then by a relatively low score.

The present data would suggest that, firstly, there is no symptom free period. Secondly, refugees and immigrants tend to be more anxious in the first months of their settlement in New Zealand. Thirdly, after the initial settling in period, they tend to be more depressed and less anxious and fourthly after approximately 6 years of residence in New Zealand, refugees and immigrants are experiencing fewer symptoms than when they arrived.

These findings do not support overseas literature (Tyhurst, 1977; Cohon, 1979; Sluzki, 1986) all of which report evidence of a symptom free period, however short or long it may be. This difference might be partly due to different samples and methodologies used (longitudinal research versus cross sectional). Moreover, all three researchers used clinical samples and post hoc research methods. Tyhurst investigated 27 years of his experience with mentally ill, predominantly European refugees to Canada. Cohon studied a small number of Southeast Asians, mainly Vietnamese refugees between 1977-1978, who had been treated in the Indochinese clinic in San Francisco and Sluzki worked for a
number of years with dysfunctional refugee and immigrant families in Massachusetts and generalized from his experience.

The present study was a community based and cross-sectional study. Thus, mean values on the depression and anxiety scale are within the normal range and reflect the characteristics of a non-clinical sample. The relative rise in mean values indicates emotional distress. The effects of a rather low sample size in time period 1, versus time periods 2 and 3 is difficult to evaluate. The contributors to the mean value in time period 1, are nine refugees, four Pacific Islanders and four British immigrants. The higher score values are found with the refugees and the Pacific Islanders. Therefore, it is likely that a larger sample size of immigrants and refugees who had been in New Zealand less than six months could possibly raise the means. This would make the trend of the present study even more definitive. The findings, however, should be treated with some caution at this point and the study would need to be continued longitudinally with this sample before more definitive conclusions could be drawn.

The present data, based on systematic sampling from the general refugee and immigrant population rather than on psychiatric patients emphasizes that these refugees and immigrants do not pass through a symptom free and euphoric period in New Zealand. This might be due to the fact that Indochinese, particularly Kampucheans and Lao refugees, have spent, on average, several years in Thai refugee camps. It seems possible that the relief of being safe has already been experienced while in the camps. However difficult and abhorrent camp life might have been, refugees had shelter, were alive and safe and were surrounded by
their countrymen. Many of them may have become institutionalised. On arrival in New Zealand, despite the help by sponsors, the Indochinese are faced with a renewed struggle to survive largely on their own, they have to find work, affordable accommodation and learn a foreign language. The circumstances of the refugees who have come to New Zealand may differ basically from the Vietnamese who were investigated by Cohon (1979). His sample consisted of 74.1% Vietnamese, mainly urban people who were reasonably familiar with western culture. Most of them were airlifted to the United States between 1977-1978 and had no prolonged refugee camp experience. For them the arrival in the United States might have had quite a different meaning.

Pacific Islanders face similar problems to refugees. The majority have relatives who may have lived in New Zealand for decades, to support them and accommodate during the initial period. The relations, however hospitable and helpful they may be, at times may be embarrassed and intolerant of the new migrants' ignorance of European life styles and slowness of adaptation. This may serve to increase pressures on the newcomer. Furthermore, many Islanders already have substantial debts before arrival in New Zealand, as relations may have paid their airfares. Pacific Islanders face cultural, racial and climatic differences for which they are ill prepared. Misa (1987) points out that thousands of Pacific Islanders had little idea of what lay ahead of them and they may have left their islands

'for what they thought was a benign land of milk and honey and opportunities unlimited.' (p.36).

Overcrowded conditions, lack of suitable accommodation and severe money worries have to be faced by many on arrival in New
Zealand. Once they have employment, many Pacific Islanders get into hire purchase borrowing far beyond their means. Not surprisingly settling in New Zealand can be anxiety provoking and stressful for many refugees and Pacific Island immigrants. Migration may be less problematic for British immigrants but the initial difficulties of finding a house and adjusting to a new work environment and job may cause some anxiety for them as well. The present study largely supports the literature that argues that after the initial settling in period, increased depression is evident (Tyhurst 1977, Cohon 1979, Sluzki, 1986). Once the difficulties of resettlement are coped with, the full response to living in New Zealand takes place. Refugees and Pacific Island immigrants have to accept that they live in a country whose culture and language is totally alien to them, which is predominantly white and European and they have to come to terms with living as a racial and ethnic minority. After approximately six years, improvement on the two psychological measures is evident.

2. The circumstances of migration, being a refugee or immigrant, make a difference to psychological functioning.

The present study did confirm hypothesis two, that refugees would tend to report more emotional distress than either the Pacific Island immigrants or the British immigrants. Murphy's (1977) findings that migratory circumstances affect symptom levels are supported. 33% of the refugees were distressed and suffered from anxiety or depression or both, whereas 26% of the Pacific Islanders experienced emotional distress and only 7% of the British immigrants. When measures were considered separately, Pacific
Islanders experienced more anxiety than the refugees, although the difference was not significant.

Overseas studies have concentrated on either refugees (Eitinger, 1959; 1960; Kinzie, 1981; Westermeyer et al., 1983a, 1983b; Nguyen, 1984) or immigrants (Appleyard, 1964; Yamamoto & Satele, 1979; Rack, 1980; London, 1986) and there is little empirical evidence of comparisons made between refugees' and immigrants' psychological functioning. Research literature on migration and mental health, however, has repeatedly suggested that refugees experience significantly greater psychological distress than other immigrants (Koranyi et al. 1963, Krupinski et al. 1973, Garza-Guerrero, 1974). This is supported by the present data. It is axiomatic that distress is a natural consequence of human misfortune and refugees by definition tend to experience a much greater share of such misfortune. Psychosocially refugees differ from other types of immigrants in the involuntary nature of their homelessness. They are unwilling migrants, 'pushed' out of their homelands (Kunz, 1973) and caught largely unprepared in circumstances over which they have little or no control. In the process of reconstructing a social world which they have lost, the refugees face the challenge of resolving the crisis of 'loss' and the crisis of 'load' (Rumbaut, 1985). The former requires coming to terms with the past, the latter requires coming to terms with the present and immediate future. The refugees have lost home and homeland, family and friends, work and social status, material possessions, and meaningful sources of identity and validation. The majority of the Indochinese refugees have lost significant others, they may have been in re-education camps, witnessed or experienced torture, fought in the wars, have suffered disablement
and had perilous flights or boat journeys. At the same time the Indochinese refugees in New Zealand have to cope with the 'load' imposed by the need to survive. They have to find work, to learn an unknown, very different language and to adjust to a drastically changed environment. It is a high-demand, low-control situation that fully tests the refugees' emotional resilience and coping resources and may produce severe psychological distress even under the most receptive of circumstances.

The Pacific Islanders face similar problems as refugees in New Zealand. But they are immigrants who have largely responded to 'pull' forces (Kunz, 1973), to better job opportunities, better living standards, and above all to better possibilities of education. Most Pacific Island immigrants have a strong sense of belonging. They know that only three hours away by plane they have an intact culture and language, and they always have the choice of returning home. Thus 'loss' is not such an issue for them, but 'load' problems may be overwhelming. Most Pacific Islanders have the support of a solid community on arrival in New Zealand. The community is organized around the various churches, predominantly the Samoan Congregational Church, the Tongan Methodists, the Seventh Day Adventists or the Catholic Church. The beneficial effects of these active communities are evident. But however helpful, the immigrants have to conform and respond to the expectations of the group. Migrants may be pressurised to reciprocate by giving money, food, services and hospitality. Misa (1987) comments that Samoan success is not considered personal, but as belonging to the church.
and the community.

'School C and UE results were read out in church in the same way that the amount of money each family donates is read out each Sunday.' (p. 40).

These pressures may be an explanation for the higher levels of anxiety many Pacific Islanders experience in New Zealand. It was expected that British immigrants would report substantially less emotional distress than refugees and Pacific Island immigrants. Although, as Green (1986) states, New Zealand has its unique culture and way of life, and it is simplistic to think of it as a younger England, British migrants tend to have considerable cultural affinity with New Zealand. They share much history, speak the same language and have similar customs. Most British immigrants enjoy the respect of New Zealand society and their status is often enhanced by having English qualifications and training. The majority of British migrants respond to 'pull' forces of New Zealand and have been attracted by job opportunities and a quality of life not available in Britain at the time of their migration. British immigrants also have the choice to return home and many do make that decision.

The fact that only 7% of the British immigrants showed higher symptom levels, may be due to sampling bias. The British were highly educated, wealthy and generally in high status positions. Therefore the findings have to be considered with caution.

The percentages of 33% (refugees), 26% (Pacific Island immigrants) and 7% (British immigrants) experiencing emotional
distress found in the three communities in New Zealand tend to be lower than similar data collected on the HSCL-25 in the United States. Hesbacher et al. (1980) surveyed 120 patients attending outpatient medical services with the HSCL-25 and found that 19.2% of the patients suffered from high levels of depression and anxiety. Similar findings were reported by Winokur et al. (1984) who affirmed the usefulness of the HSCL-25 in a family planning service, and found that 31% of the 542 patients had high ratings for depression and anxiety.

Thus, among American outpatients of medical services 19.2% to 31% experienced emotional distress. When the same scale was translated and developed for use with Indochinese refugees at the Indochinese Psychiatric Clinic in Boston, Massachusetts, Mollica et al. (1986) reported that 60% of their pilot study (25 primary care patients and 25 ESL students) were considered symptomatic individuals who should be referred for psychiatric evaluation.

The high percentage of distressed Indochinese (Mollica et al., 1987) and the relatively high figures among the American outpatients in comparison to the present findings is likely to be at least partly due to differences in samples (outpatients of medical services versus community sample). It might also be that there are some factors in New Zealand society which help refugees and immigrants to cope more effectively with the hardships encountered.
3. Pre-migratory and post-migratory factors are related to psychological functioning.

Hypothesis three, that is, that pre-migratory and post-migratory factors are associated to psychological functioning, was supported partially by the present findings.

The refugees' and immigrants' tendency to become anxious and depressed is related to difficulties they encounter in New Zealand society, that is, to post-migratory factors in the society of settlement. Pre-migratory factors, such as age, gender, marital status, religion and educational level did not seem to influence emotional distress.

The crucial factor, which is associated with high symptom levels (both anxiety and depression), is the discrimination refugees and immigrants experience in their daily life, whereas low symptom levels are related to having close friends. The unemployed refugees and immigrants, and those who spend most of their time with their own ethnic group tended to be more anxious.

Discrimination against refugees or immigrants in New Zealand society has not been investigated empirically. Kinzie (1981) reports from the United States, that in addition to obvious cultural differences between Indochinese and Americans, some refugees feel the prejudices of a society who may fear their diseases or resent their competition for jobs. Some refugees in the present study felt discriminated against particularly by their fellow workers. Indochinese have a reputation for working hard and long hours but they feel that this is resented and envied by the more easy going New Zealanders.
A rather different kind of discrimination is experienced by Pacific Islanders. Gluckman (1977), from his clinical experience with Samoans in Auckland, described the resentment felt by Samoans because of negative stereotyping. He reported that the Samoan male feels that he is seen as an uncouth, unskilled worker who accepts tasks that Europeans generally scorn. New Zealanders see him as one who tends to congregate in potentially antisocial gangs and who drinks large quantities of alcohol which he tolerates poorly. He is believed to be potentially dangerous and aggressive especially towards Europeans and other non-Samoan Polynesians. The negative stereotype of the Samoan female is of a domestic worker of limited education. Pacific Islanders feel that the media helps to reinforce this stereotype. They are ignored by advertising in New Zealand, they are barely acknowledged by television and most news reports are negative. Many law court reports highlight the image of Pacific Islanders as rapists and drunkards who brawl outside pubs (Misa, 1987). Under these circumstances it is hardly surprising that Pacific Islanders feel discriminated against.

Furthermore, New Zealand in the 1980s has slowed down its economic growth. Increasing unemployment has affected New Zealanders, refugees and immigrants. The latter, once considered an asset to economic growth, may be blamed now for glutting the job market. In an economic climate of recession with limited opportunities outbursts of xenophobia and racism may result, which is often expressed by petty discrimination.

The present findings suggest that unemployment is an important factor affecting anxiety levels. In fact 42.9% of refugees, 40% of Pacific Island immigrants and 80% of the British immigrants who
experience significant emotional distress are unemployed. It is likely that the stigma of unemployment is greater for British immigrants than refugees or Pacific island immigrants. Their expectations of employment may be higher than among groups of people who often experience higher unemployment levels. In contrast to the present findings Westermeyer et al. (1983b) found that among the Hmong refugees in Minnesota employment tended to be related to higher levels of depression, and unemployment to lower levels of anxiety. Considering that half of Westermeyer et al.'s sample was unemployed, it is likely that sharing the same predicament could be anxiety reducing.

Much research literature states that support networks lower mental health risks (Sanua, 1969; Yamamoto, & Satele, 1979). The present data, however, tend not to confirm this notion, but lend support to T. D. Graves and N. B. Graves and Westermeyer et al.'s (1983b) findings. T. D. Graves and N. B. Graves found that social support systems among Samoans in Auckland causes more stress, instead of protecting against it. Westermeyer et al. stated that greater distance from other Hmong refugees was associated with fewer emotional problems and lack of personal support with higher symptom levels.

In previous research (Westermeyer et al. 1983a), pre-migratory factors such as gender, marital status and educational level were not related to symptom level. This was consistent with the present findings. Westermeyer et al. found only age was associated with higher symptom levels and older Hmong tended to be more depressed than the younger age groups. This was not confirmed by the present data.
4. Migrant status, being a refugee or immigrant is related to pre-migratory and post-migratory factors
The findings of the present study confirmed hypothesis 4 that migrant status is associated with pre-migratory and post-migratory factors. It was expected that being a refugee or an immigrant would be associated with anxiety or depression levels because this relationship existed at the univariate level. However, this was not found to be so at the multivariate level.
The main characteristics, differentiating among the three groups were their English language status, whether or not they received New Zealand government, employer's or church assistance, the leisure time spent with their own ethnic group, the number of relations living in New Zealand, income, discrimination and finally sex.
It would appear that the effects of English language status and receiving assistance from the government, a church or employers dominated the outcome of this part of the data analysis.
Knowledge of English is a fundamental difference between the groups. The Indochinese generally have very little knowledge of English and many have great difficulties in learning it, as they have no familiarity with Western alphabetic languages and figures. The cultural and religious differences between Indochina and New Zealand are equally extreme. Indochinese can be animists, ancestor worshippers, buddhists and christians.
Pacific Islanders have been exposed to Western values for at least one century. British colonialism spread British institutions, the Christian religion and customs. Although cultural differences are evident between the Pacific Island nations and New Zealand, the immigrant is more familiar with these differences. Therefore
knowledge of English is associated with much deeper cultural divisions between these three groups. Similarly, the receiving of government or other sources of financial aid is an overriding a priori difference between refugees and immigrants. It may well be that the dominant effect of those two variables has masked other important differences between the three groups in this study, differences that are highly correlated with these very basic ones. In retrospect, it may have been useful to remove these two variables from the analysis along with the variable religion, as a means of exploring the data more fully. Certainly, further experimental designs could be used to tease out the intricate pattern of variables related to Hypothesis 4.

In considering the present findings it is important to be aware of the methodological limitations to the study.

Methodological limitations

(i) Sampling method:
Two different sampling methods were used to collect the present data: systematic sampling and convenience sampling. No records of immigrants' addresses are kept by the Labour Department, by the Immigration Department (S. Girvan, personal communication, March 16, 1987), or by any other government organization. Therefore convenience sampling was the only possible method to collect the Pacific Island and British immigrant data. Despite these difficulties a fairly representative Pacific Island sample was obtained with regard to age, sex and education (Department of
Statistics, 1983). The British sample, however, consisted of people of higher levels of education and thus the sample may not be representative of the British immigrant population in New Zealand.

(ii) The instruments:
The use of the same instruments across three different cultures and language groups presented some difficulties. While the questionnaire was translated into the three Indochinese languages, it was administered to the Samoans, Tongans and Fijians in English. However, the Pacific Islanders appeared to cope well with the English version of the questionnaire. The HSCL-25 was administered in English too and minor problems of understanding such terms as 'feeling tense or keyed up' or 'feeling blue' were overcome by face to face administration.

Apart from the use of the SCL-90 with a sample of Samoans living in California and with Samoans living in Samoa (Yamamoto, Satele, Fairbanks, & Samuelu, 1981), there have been no studies involving any depression and anxiety self-rating scales with Pacific Islanders. The use of a scale in English with Samoans, Fijians and Tongans, which has been developed and normed among an American population presents some difficulties. Therefore, the responses of the Pacific Islanders on the HSCL-25 have to be considered with some caution.

The HSCL-25 Indochinese edition was translated using an 'etic' approach only. This assumed that the symptoms found in an American population constitute universal or core indices of anxiety or depression, and it was also assumed that Southeast Asians suffering from these symptoms are probably anxious or depressed. Therefore, although the HSCL-25 may capture some of the
culturally relevant symptoms for anxiety and depression, it is possible that it does not capture all of them or even the most important of them (Mollica et al., 1986). This issue highlights the importance of incorporating an emic approach in cross-cultural instrument development. Important considerations include generating indigenous terms for anxiety and depressive symptoms and establishing similarities and differences between these indigenous terms and DSM III criteria.

Research in cross-cultural self-rating scales is in its infancy. As versions of the HSCL-25 have been used since the 1950s with an American population, and as the Indochinese version has been administered to Indochinese in Boston for the last few years, the HSCL-25 was considered suitable in the present research context to be used with Kampucheans, Vietnamese, Laotians, Pacific Islands immigrants as well as the British immigrants.
In the present study the Goldlust and Richmond (1974) multivariate model of the immigrant adaptation process provided the framework against which several pre- and post-migratory factors and their relationship to psychological functioning were investigated. The findings suggested that the few pre-migratory factors tested were not associated with psychological functioning and thus the Goldlust and Richmond model tended not to be supported in this respect. The emotional distress experienced by refugees and immigrants was related to circumstances and conditions present in New Zealand society. Discrimination and having no friends were associated with higher symptoms of depression and anxiety, whereas unemployment and spending leisure time with people from one’s own ethnic group were related to increased anxiety levels. It is probable that having friends and belonging to ethnic groups depends largely on personal characteristics of the individual and thus cannot be considered as post-migratory factors only.

Sluzki’s (1986) model of the migratory process was only partially supported. The present data suggested a different pattern of adjustment. Instead of a symptom free period during the first six months of residence, which Sluzki observed, refugees and immigrants were anxious during their first months in New Zealand. After six months, however, refugees and immigrants were more depressed than anxious, and after six years lower symptom levels of anxiety and depression were evident.
The present findings tended to confirm Murphy's (1977) notion that refugees experience more emotional distress than Pacific Islands immigrants and British immigrants. Thus, in the present study Goldlust and Richmond's (1974) model was generally supported, as both length of residence in New Zealand and circumstances of migration have had an effect on psychological functioning.

Future research recommendations
1. Length of residence and its relationship to mental health need to be explored further. Future research might test Tyhurst's (1977) Social Displacement Model with refugees only, or Sluzki's (1986) model with immigrants only. Furthermore, longitudinal research is needed to investigate patterns of adjustment and as they apply to the New Zealand situation.

2. The present study has found evidence of anxiety and depression among refugees. It seems likely that post-traumatic stress disorder will be present simultaneously with both anxiety and depression. Further research is needed to investigate the prevalence of post-traumatic stress disorder among the refugee population, in order to avoid long-term disabilities such as are evident in Nazi holocaust survivors.

3. Goldlust and Richmond's (1974) multivariate model of the immigrant adaptation process should be further investigated. Future mental health researchers should include in their studies, pre-migratory variables such as trauma and its relationship to mental health and post-migratory variables such as sponsors and
their occupation, marital status and frequency of contact with the refugee.

4. Future research needs to explore discrimination experienced by refugees and immigrants to establish differences in perception of discrimination between various immigrant groups. Issues such as negative stereo-typing of Pacific Islanders and positive stereo-typing of British immigrants need further investigation.

5. Needs assessment research in the area of health, mental health, education and particularly employment for all refugees and immigrants is necessary.

6. More research is called for to obtain much-needed information about the mental health problems of refugees. More knowledge about their attitudes towards help-seeking, the impact of mental illness on refugee families, coping and help-seeking strategies and what methods work most effectively and under what conditions, is needed.

Practical implications
Some practical suggestions are offered to deal with the difficulties identified in the present study.
1. To address the issue of discrimination in New Zealand society, programmes on the various ethnic communities could be encouraged. One day workshops presented by each cultural group in New Zealand, displaying their history, culture, religion, language and customs could be helpful to raise awareness of cultural
differences in the community. These work-shops could be filmed, broadcast and advertised in the media and distributed to schools, workers' educational associations, clubs and societies. Such programmes might foster awareness and encourage understanding of different behaviours, different religions, values and customs. They could be helpful in reducing discrimination and encouraging a deeper understanding of the rich cultural diversity in New Zealand and the dilemmas and predicaments of refugees and immigrants.

2. The arrival of refugees and immigrants during the last 15 years has coincided with a slowing down of economic growth and with slowly increasing unemployment. With limited opportunities available in society, it is not surprising that refugees and some immigrants have had difficulties and will have difficulties in finding satisfactory jobs in the future. Unemployment is particularly hard for migrants to cope with as the majority have not the financial or emotional support of the extended family in New Zealand. They depend on the welfare state and are poor, whereas fellow nationals are improving their conditions. To avoid the negative effects of unemployment, such as poverty, loss of self-esteem, marital conflict, alcohol abuse and possibly gambling, it is recommended that all refugees and immigrants should attend

(i) extensive English classes over several months, as literature has pointed to the relationship between language skills and employment (Weinberg, 1954).

(ii) it is necessary that the New Zealand Education Department, the Labour Department and employers recognize the qualifications, skills, training and work experiences of refugees and immigrants.
3. Most of the ethnic communities have developed some sort of community grouping. In the present study the ethnic communities, particularly the Pacific Island communities appear to be associated with higher anxiety levels. But on the other hand they seem to provide a strong sense of belonging, identity, self-respect and dignity to the individual (Misa, 1987). In these circumstances the formation of ethnic groups should be encouraged and supported.

4. Services active in assisting new migrants in New Zealand are varied but they are working largely independently of each other. If money, time and efforts are not to be wasted some unity of approach should be established to create a comprehensive programme of services to help refugees achieve real self-sufficiency. It seems most important that these services are implemented and available on arrival for the first six months to six years.

5. Strong links should be established with the refugee community's organisations and leaders. Their understanding and support are key factors in the success of programmes. Their involvement gives any programme value within the community and their knowledge of that community is vital in creating appropriate assistance.
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The Refugees

The Indochinese refugees to New Zealand are not an ethnically homogeneous population. The three countries Cambodia, Laos and Vietnam that were brought together to form French Indochina during the colonial period, all have long and independent histories. During their centuries of interaction, these three separate states have been frequent adversaries. The dominant population in each country is unique, each having a distinctively different language, largely different religious patterns, very different colonial experiences under the French and a variety of other cultural beliefs and patterns which are not shared. Further, within each of the national groups there are significant minority populations, such as the Hmong from highland Laos and the ethnic Chinese in Vietnam, who are quite distinct from the majority culture (Haines, 1982).

Despite the differences in cultures, the Indochinese refugees have a mutual core of Asian values (Kinzie, 1981). They are oriented towards the past, they have a traditional respect and sometimes deification of their ancestors and they have a strong sense of belonging to a family group and community (Haines, Rutherford, & Thomas, 1981) rather than being autonomous individuals. In interpersonal relationships the Indochinese maintain politeness and avoid confrontation. They may appear to the outside observer to be
nondynamic and generally accepting (Miller, Chambers, & Coleman, 1981).

The massive dislocation of the Indochinese in the aftermath of the Vietnam war created a refugee crisis of unprecedented proportions for the whole world. The consolidation of socialist regimes in Vietnam and Laos and the internal upheaval followed by the invasion of Kampuchea were the main causes of refugee movements. Since 1975, over one million people in Indochina have left their home countries in search of safety.

The Kampuchean Refugees

From 1975-1978 about 34,000 refugees left Kampuchea for Thailand, either illegally crossing the border or congregating at the border. This was the time of peak violence and repression in Kampuchea under the Pol Pot regime.

In 1978 the Vietnamese invaded the country and the number of refugees increased. Only after an International Meeting of Refugees and Displaced Persons, where 65 countries gave their support to resettle 260,000 people from Indochina (Vietnam, Kampuchea and Laos) did the Thai government open their border in October 1979. It was soon closed again, in early 1980, as refugees continued to pour into Thailand. The refugees who arrived before the border was closed were put under United Nations High Commissioner for Refugees administration (UNHCR), whilst the refugees who arrived after the border had been closed were not considered refugees by the Thai government. They were not allowed into the country and they were not officially able to enter the resettlement process (Anonymous, 1986).
Kampuchean refugees were found to have experienced as many as sixteen major trauma events either during the war, escaping from the war, or in refugee camps (Mollica & Lavelle, 1986). Many of them have had work-camp or 're-education'-camp experience during the Pol Pot regime from 1975-1979.

**The Lao refugees**

The Lao refugees represent two different ethnic groupings: the lowland Lao and the hilltribe Lao. As the stream of lowland Lao increased between 1975-1980, the Thai government adopted a number of measures designed to curb the influx. There were 'push-backs' occurring along the Thai-Lao border and would-be refugees were prevented from entering.

In 1980 an agreement was reached between the UNHCR and the Lao government providing for voluntary repatriation. In 1981 a 'humane deterrence' policy was implemented which meant that refugees entering after August 1981 were not eligible for resettlement and were considered illegal immigrants. This measure led to an immediate drop in the numbers of refugees. In 1985 the UNHCR instituted a screening procedure for Lao refugees, registering only people with genuine fears of persecution and rejecting those who left Laos for economic reasons. The Lao government committed itself to take the rejected refugees back, whilst the accepted ones were resettled all over the world (Anonymous, 1986). The hilltribe Lao, having fought for the CIA before the change of government and thus having close association with the US government, have been more leniently treated by their country of first asylum. Most of them have been resettled, mainly in the USA.
The Vietnamese refugees
In the final days before the fall of Saigon hundreds of thousands of Vietnamese tried to leave South Vietnam but only 130,000 were evacuated successfully.
A second wave of departures began in April 1978, provoked by the nationalization of businesses in the South and the increasing persecution of the ethnic Chinese. There were two distinct refugee groupings. One was urban, mercantile and Chinese. The other, including administrators, professionals and academics, was upper middle class, Roman Catholic and Vietnamese.
A third wave began at the time of the war with China in March 1979 and continued until 1981. Unlike earlier refugees, members of this group were mostly from the North and were more likely to have lower incomes and rural backgrounds. Furthermore, they faced journeys of great danger and hardship. They had to travel in small, overcrowded and unseaworthy boats with inadequate water, food and fuel supply. If they were lucky to escape tropical storms and Thai pirates, they were often prevented from landing in Asian ports (Haines, 1982). It is estimated that 150,000 people were lost during this ordeal. Young girls and women were the most seriously victimized by Thai pirates. Those surviving ended up in refugee camps in Thailand, Malaysia, Indonesia and the Philippines where they were interviewed by the UNHCR for resettlement.

The Pacific Island immigrants
During the early 1960s, the New Zealand economy flourished and many Pacific Islanders migrated mainly for economic reasons, as the job opportunities and wages were much greater in New Zealand than in their own countries. They often lacked education, adequate
training and skills. Parents frequently sought better educational possibilities in New Zealand in anticipation of a better life for their children. Most of the immigrants did not speak English sufficiently well to communicate in the new country (Misa, 1987). The oil crisis of 1973-74 caused a downward trend in the New Zealand economy and unemployment and housing problems in the urban areas increased. The Immigration Department, which until then had disregarded overstayers, started to launch measures against illegal immigrants. This led to a register for overstayers (mostly Samoans and Tongans) and the granting of provisional permanent residence to 3,712 out of 5,381 people (Macdonald, 1986). By the early 1980s the prosecution of Pacific Island overstayers started again. Many were deported and they and their relations were put on a 'banned list' of persons to be prohibited from entry in the future. Visitors' visas, which previously had been of three months' duration, were restricted to one month, only. In 1982 the difficulties came to a head when the Privy Council in London ruled that Falema'i Lesa, a Western Samoan overstayer who faced prosecution under the immigration act of 1964, was a natural-born British subject and, therefore, a New Zealand citizen. This decision led to the overturning of the Privy Council ruling by the Government and to the implementation of the Citizenship (Western Samoa) Act which granted rights of citizenship to all Western Samoans who were in New Zealand on the day before the date on which the Act took effect. This Act quashed the convictions for overstaying of more than 750 Western Samoans but it did not lift the restrictive thirty day visitor's permit and, in particular, it did nothing to deal with residual problems in other areas of Pacific
Island immigration, especially those affecting Fijians and Tongans (Macdonald, 1986).

Many of the Pacific Island nations are dependent on New Zealand, their economies are vulnerable, and they have suffered declining returns from commodity exports and from tourism. Some islands have had a series of devastating hurricanes. The remittances of Pacific Islanders in New Zealand for their people at home made an important contribution to the invisible earnings of the various countries. This support was crucial in maintaining living standards of many villagers and helped funding of village development projects.

The Samoans
Prior to Independence, in 1962, a Samoan had the right of unrestricted immigration to, and settlement in, New Zealand. A Samoan was in fact a New Zealand citizen. After independence Samoans required permits to enter New Zealand whether for education, holiday, employment or medical treatment. Most Samoans join kinsfolk or they have other contacts to help them settle. The majority of them stay in the main cities and find labouring or semi-skilled jobs in industry. Education for their children is one of the main motives for emigration.

The Fijians and Fiji Indians
Since 1970 (and until 1986) Fiji has been an independent dominion within the Commonwealth. It has been the wealthiest and most modern nation in the South Pacific. The University of the South Pacific in Suva provides degree courses for the people of the South Pacific region and a Teachers Training College, the Fiji National
Institute of Technology and a School of Medicine train the professional elite.

The Indians who came to Fiji as indentured labourers at the end of the 19th century, helped build up the sugar industry, sugar being Fiji's primary produce. Other export earning industries are fish, gold and copra. Tourism provides many jobs to Fijians.

Fiji is a multiracial society, less than half of the population being Melanesians while the majority are Indians (Inder, 1978). English is the official language in Fiji and is the medium of education though people from the villages might encounter some difficulties in understanding and speaking English.

Canada has been the main destination for migrating Fiji Islanders, particularly for Indians and Chinese. New Zealand's restrictive immigration policies have hindered the flow of Fijians to New Zealand but many people have successfully migrated providing skills on the occupational priority list, or have joined families and relations. Because of the political developments in 1986, which established the Republic of Fiji through the coup of colonel Rabuka, an increase of Fiji Indian refugees/immigrants to New Zealand is expected.

The Tongans

Tonga is an independent Kingdom, whose King, although a constitutional monarch, exercises wide influence. All Tongan land is the property of the Crown and every male Tongan, when he has reached the age of 16, thereby becoming a taxpayer, is entitled to a bush allotment. By law every holder of an allotment is required to plant 200 coconuts within 12 months of acquisition and maintain it in a weed-free condition. Shortage of land is a major problem and
many male taxpayers are without tax allotments. Although it is not always possible to provide them with land, the theory is that the Tongans should take part in agriculture which is the basis of their economy.

Many Tongans wish to migrate to New Zealand because of land shortage and because of insufficient employment and lack of educational opportunities in Tonga. Only a small number can migrate and their earnings help the relatives at home (Inder, 1978).

The British immigrants

British people have formed the largest single group of migrants to New Zealand. Systematic colonisation by the British government began after the Treaty of Waitangi in 1840.

After the second World War in order to increase the population, the New Zealand government advocated immigration preferably from the British Isles. A system of assisted passages to New Zealand was introduced to encourage migrants.

However, by the mid 1970s immigration contracts were introduced in order to reduce the number of British migrants. Assisted passages were terminated and entry permits required. By the late 1970s the number of migrants had declined.

The very early waves of British immigrants consisted mainly of labourers and later of craftsmen such as weavers and carpenters. Since the 1890s, the average occupational level of British migrants has been high (Musgrove, 1963). During the last ten years mainly middle-class immigrants were encouraged to apply for entry into New Zealand in view of the current Occupational Priority List (Department of Labour, 1986a).
Dear Participant,

included in this pack is a questionnaire and a scale which are designed to explore problems which all immigrants to New Zealand face. The information you provide will give us a better understanding of these difficulties and could help to provide better community and support services for immigrants. Because you are the only one who can give an accurate picture of how you experience life in New Zealand, I ask you to answer frankly and honestly.

Your response will be totally anonymous. Please try to fill in the questionnaire and the scale on your own and in order to ensure the utmost privacy seal the completed forms in the blank envelope provided and return to me.

Thank you very much for your time and cooperation. I greatly appreciate your help.

Yours sincerely,

Regina Pernice
1. Nationality

2. Country of origin

3. Religion

4. Date of Arrival in New Zealand

5. Sex (Tick the box which applies to you)

   Female □
   Male □

6. Age (Tick the box which applies to you)

   16 - 20 □
   21 - 25 □
   26 - 30 □
   31 - 40 □
   41 - 50 □
   51 - 60 □
   above 60 □

7. Are you (Tick the box which applies to you)

   married □
   single □
   separated □
   divorced □
EDUCATION

8. How many years in total did you spend in school (primary and/or secondary)?
   a) before coming to New Zealand?
   b) after coming to New Zealand?

9. How many years did you spend in tertiary education (eg. at University, Teachers College)?
   a) before coming to New Zealand?
   b) after coming to New Zealand?

10. How many years did you spend in vocational training (eg. apprenticeship, evening classes, craft training)?
    a) before coming to New Zealand?
    b) after coming to New Zealand?
    (eg. Polytechnic, Community College)

11. What was your level of English before coming to New Zealand? (Tick box which applies to you)
    no English
    poor
    medium
    good
    very good
12. What is your level of English now? (Tick box which applies to you)

- no English
- poor
- medium
- good
- very good

13. What was your occupation before coming to New Zealand? (Tick box which applies to you)

- professional
- salaried worker
- merchant/business
- farmer/fisherman
- labourer
- unemployed
- housewife
- student
- other

14. Name your occupation before coming to New Zealand: .................................................................
15. Were you able to find a similar job in New Zealand? (Tick box which applies to you)
   yes
   no
   moderately similar

16. How long did you stay in your first job in New Zealand?
   ................months
   ............years

17. What is your occupation now in New Zealand? (Tick box which applies to you)
   professional
   salaried worker
   merchant/business
   farmer and fishermen
   labourer
   unemployed
   housewife
   student
   other

18. Are you satisfied with your job now in New Zealand? (Tick box which applies to you)
   yes
   no
   moderately
19. Name your occupation **now** in New Zealand

20. What is your gross annual income?

   *(Tick box which applies to you)*

<table>
<thead>
<tr>
<th>Income Range</th>
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<tbody>
<tr>
<td>under $10,001</td>
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<td>$10,001 - $15,000</td>
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<td>$50,001 - $60,000</td>
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<tr>
<td>above $60,000</td>
<td>☐</td>
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</tbody>
</table>

21. Do you live in *(Tick box which applies to you)*

   - a house/flat that you own ☐
   - a house provided by your employer ☐
   - rented accommodation ☐

22. Before coming to New Zealand did you live in the *(tick box which applies to you)*

   - city/town ☐
   - village/country ☐
23. Do you live now in the (tick box which applies to you)
   city/town □
   small settlement/country □

SETTLING IN NEW ZEALAND

24. How long have you been
   in New Zealand?
   _______ _______ months
   _______ _______ years

25. When entering New Zealand
   were you a (tick box which applies to you)
   refugee □
   voluntary immigrant □
   other, please specify __________________________ □

26. When you first arrived in New Zealand, did
   you get assistance (material or financial)
   from one or more of the following New
   Zealand Government, church agency,
   employer? (tick box which applies to you)
   yes □
   no □
27. When you first arrived in New Zealand, did you get assistance (material or financial) from relatives or friends in New Zealand? (Tick box which applies to you) yes [ ] no [ ]

28. Which family members are living in New Zealand? (Tick boxes which apply to you. On the dotted line beside the boxes state how many e.g. brothers etc. you have living in New Zealand)

- [ ] wife/husband
- [ ] children
- [ ] mother/mother-in-law
- [ ] father/father-in-law
- [ ] brother(s)
- [ ] sister(s)
- [ ] grandmother(s)
- [ ] grandfather(s)
- [ ] cousin(s)
- [ ] aunt(s)
- [ ] uncle(s)
- [ ] brother(s) in law
- [ ] sister(s) in law
- [ ] others, please specify

29. How many people live in your household? ___________________________
30. Are your spiritual and/or religious needs being met in New Zealand? (Tick box which applies to you)  
yes ☐  
no ☐  
not applicable ☐

31. Have you made close friends since you arrived in New Zealand? (Tick box which applies to you)  
yes ☐  
no ☐

32. If yes, are they people from (Tick box which applies to you) your own country ☐  
from New Zealand ☐  
from other countries ☐

33. Do you spend most of your leisure time with people of your own country? (Tick box which applies to you)  
yes ☐  
no ☐

34. How many people from your own country live in your neighbourhood (a block away, walking distance)? (Tick box which applies to you)  
under 10 ☐  
appr. 11 - 20 ☐  
appr. 21 - 30 ☐  
above 30 ☐  
none ☐
35. Have you had to change the type of food you eat, since you arrived in New Zealand?

(Tick box which applies to you)

- not at all
- a little
- quite a bit
- extremely

36. Do you feel discriminated against in New Zealand? (Tick box which applies to you)

- yes
- no

37. If yes, is it because of (Tick box which applies to you)

- language difficulties
- different accent
- race
- cultural background/habits

Please turn over:
Listed below are some symptoms or problems that people sometimes have. Please read each one carefully and decide how much the symptoms bothered or distressed you in the last week, including today. (Tick the box in the appropriate column.

<table>
<thead>
<tr>
<th>Part I</th>
<th>not at all</th>
<th>a little</th>
<th>quite a bit</th>
<th>extremely</th>
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</thead>
<tbody>
<tr>
<td>1. Suddenly scared for no reason</td>
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<tr>
<td>2. Feeling fearful</td>
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<tr>
<td>3. Faintness, dizziness or weakness</td>
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<td>4. Nervousness or shakiness inside</td>
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<tr>
<td>5. Heart pounding or racing</td>
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<tr>
<td>6. Trembling</td>
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<tr>
<td>7. Feeling tense or keyed up</td>
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<tr>
<td>8. Headaches</td>
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<td>9. Spells or terror or panic</td>
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<td>10. Feeling restless, can't sit still</td>
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<td></td>
<td></td>
<td>not at all</td>
<td>a little</td>
<td>quite a bit</td>
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<tr>
<td>11</td>
<td>Feeling low in energy, slowed down</td>
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<tr>
<td>12</td>
<td>Blaming yourself for things</td>
<td></td>
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<tr>
<td>13</td>
<td>Crying easily</td>
<td></td>
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<tr>
<td>14</td>
<td>Loss of sexual interest or pleasure</td>
<td></td>
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<tr>
<td>15</td>
<td>Poor appetite</td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td>Difficulty falling asleep, staying asleep</td>
<td></td>
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<tr>
<td>17</td>
<td>Feeling hopeless about the future</td>
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<td>21</td>
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<td>22</td>
<td>Worrying too much about things</td>
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<td>23</td>
<td>Feeling no interest in things</td>
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<td>24</td>
<td>Feeling everything is an effort</td>
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Thank you very much for your help.
APPENDIX C
Table C-1
Characteristics of 129 Refugees

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### Table C-2
Characteristics of 57 Pacific Island Immigrants

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Table C-3
Characteristics of 63 British Immigrants

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