SOCIO-ENVIROMENTAL ADAPTATIONS

IN A NEW

LOW-COST HOUSING ESTATE

LATIHAN ILMIAH

BAGI MEMENUHI SEBAHAGIAN

DARIPADA SYARAT-SYARAT UNTUK

IJAZAH SARJANA MUDA SASTERA

DALAM ANTROPOLOGI DAN SOSIOLOGI

Oleh

No. Matrik 033691

JABATAN ANTROPOLOGI DAN SOSIOLOGI

UNIVERSITI MALAYA

KUALA LUMPUR

DECEMBER 1980

ACKNOWLEDGEMENT

CONTENTS

LIST OF TABLES AND FIGURES

SYNOPSIS

This academic exercise is a study of the residents' early stages
of socio-enviromental adaptation to the Rancangan Rumah Rakyat Dusun Nyior 2a
housing estate. A total of 30 households, 15 Malay and 15 Chinese, were
selected from 95 units for study.

The first chapter generally discusses the low-cost housing
situation in Malaysia and some socio-psychological aspects of housing.
Chapter two includes the presentation of the purpose of study and a review
of related literatures. In chapter three, the author explains the method
of sample selection, and the design adopted for the study. The findings of
the research are analysed and discussed in the following chapter. In the
final chapter, conclusions are drawn from the findings, and a few
suggestions are offered for the possible solution of certain problems.

CHAPTER I

INTRODUCTION

In Malaysia, the need for adequate housing was recognized as far back as 1940. Even then, it was realized that the government should direct its main effort to the class of people who had little or no capital to build or purchase houses on their own.

> "The emphasis on low-cost housing really began in 1961, when the government voted a provision of $45 million for the period of 1961-1965. With this amount the government announced the creation of a house-owning democracy...."
> (<u>Public Housing in Malaysia</u>, Ministry of Local Government and Housing, undated, K.L., p.3)

Low-cost housing in Malaysia, is generally accepted to be synonymous with public housing and is meant for families in the lower income group. The Malaysian government is placing more emphasis on housing for this low income group as private developers mainly cater for the middle and higher income groups. Such efforts may not solve the housing shortage in the low income group but they will succeed to the extent of rehousing the squatters and tenant dwellers.

A national housing programme is included in the implementation of the Third Malaysia Plan (TMP) in 1976. Under this plan, $720 million has been allocated for the construction of some 129,400 low-cost units in the country. The implementation of this programme is undertaken as an important strategy to eradicate poverty as well as to improve the living condition of the country.

The national housing programme emphasizes two important aspects in order to reflect the vital aim of promoting national unity. First and foremost, the programme is designed for an integrated multi-ethnic community. Secondly, housing planning also includes the provision of essential community facilities and amenities so that the new housing complexes can be as self-contained as possible.

In other words, the Malaysian government is aware of the potential of integrated multi-ethnic housing complexes in fostering harmonious interethnic relations. Such housing complexes play a significant role in promoting national unity because,

> "...it is postulated that greater proximity in racially
> integrated housing schemes leads to increased understanding
> of and reduced prejudices against other ethnic groups......"
> (Wegelin, 1975, p. 191)

The research described in this report is a small-scale study focussing mainly on the pattern of neighbourly relationships that exists in the selected public housing estate. For better or worse, it is felt that relocation and rehousing in public housing estates would surely result in changes in the living condition and physical enviroment. These in turn may be expected to have significant effects on the life styles and attitudes of the people involved.

For instance, the relocation of people from their old neighbourhood to the new housing estate would most certainly disrupt some of their long established social contacts and networks. This will then require their adjustment in the development of new social relationships and networks.

The disruption of social patterns and social networks has been

a major concern of sociologists studying the relocation process involved in the development of urban renewal and the public housing programme.

(i) <u>The Socio-Psychological Aspects of Housing</u>

Physical planning and sociology are two important disciplines that have much to contribute to each other. Unfortunately, their different emphases, orientation, and techniques prevent them from doing so easily and successfully. Ideally, the planners should be able to make use of established social information on topics like how people relate to one another, what needs exist in different groups, which needs have priority, and how social life may be influenced by physical design. The sociologists on their part should be more aware of what planners need.

The sociology of housing is concerned with the social structure and the relationship pattern of man in his physical and social enviroment. Its main interest lies in finding out what determines the development of interacting relationships within a certain residential setting, and the process by which social relationships are established.

Sociologists have put forward various theories in their analysis of the network of social interaction in housing estates. These theories attempt to explain the process by which social contacts develop and the determinants of interaction levels. The Phase Hypothesis is one such theory put forward by Morris and Mogey (1965) in their attempt to illustrate how the community-type relationships developed.

According to Morris and Mogey (1965), every neighbourhood passes through two or possibly three phases. The first phase, during the early period with no playground and proper roads, is characterised by "...friendliness, intense interaction in small groups, and the continous

sharing of equipment and news..." (Morris and Mogey, 1965, p.42).

In the second phase, a withdrawal occurs from the relationships based on common problems, and "...contact tends to become restricted to the immediate neighbours," (Morris and Mogey, 1965, p.43). Possibly, a third phase exists in which "...equilibrium is reached between these two extremes," (Morris and Mogey, 1965, p. 43).

This hypothesis was put to test by Morris and Mogey (1965) in their study on public housing estates in Berinsfield, Oxford, through the analysis of some common bonds among the Berinsfield population who are all new neighbours.

The authors concluded that the phase hypothesis found some support from their data. However, "...prior acquaintance among the neighbours at Berinsfield may be crucial in explaining why the relationships there did not altogether confirm the predicted sequence..." (Morris and Mogey, 1965, p.57) that is, the usual initial dependence on the immediate neighbours for primary social contacts.

More recently, Carey and Mapes (1972) conducted a study on the social activities of nine selected new housing estates situated in the North Midlands, England. The study focussed its attention on the various factors that determine the level and pattern of social intercourse that developed among housewives on the new housing estates. These factors include the physical distance between dwellings of the residents and the orientation of the dwellings to each other; the characteristics of the participating individuals themselves; features of the physical enviroment; social class; and expectation of future geographical mobility.

In the study, it was discovered that certain individual

characteristics such as age, social class, working situation, and the length of residence on the estate seem to influence the individual's visiting frequency and pattern. Mothers of the same age group or those with children of the same age are more likely to develop a social relationship among themselves. On the basis of this, Carey and Mapes (1972, p. 98) concluded that the ".... judicious planning of an estate can indeed influence the social lives of the people who live there."

Psychologists have also played a role in housing by studying the relationship between housing and psychological factors such as attitudes, morale and personality adjustment.

Various studies have been carried out in the United States and England on the level of housing satisfaction through the analysis of social and psychological variables. These studies try to determine what aspect of human settlements should receive greater emphasis. For example, the forms of housing or the general residential enviroment, The psychological well-being of man today is given due attention and consideration even in the housing industry.

Festinger, Schachter and Back (1963) carried out a study which stressed the significance of the psychology of housing. Festinger et al (1963) focussed on the relationship between the structure of the physical enviroment and the development of social contacts. In their study of a postwar veterans' housing project in Massachusetts, U.S.A., they found that physical distance is directly related to friendships among the residents. They claim that a reduction in physical distance, for instance, by increasing densities or by improving accessibility through better means of transportation, may lead to increased sociable contacts among the

residents.

However, older studies such as the one carried out by Kuper (1953) in England have increasingly challenged these claims. Physical distance as such is no longer considered sufficient to account for the formation and perpetuation of social contacts, especially of a more enduring sort. Something more is clearly involved when they do form such relations.

Festinger et al (1963) further postulated that other ecological factors also play a part in establishing social relationships. 'Functional distance' is the term used to denote these ecological factors. They are for example, the siting of houses, their ecological location — at a corner or in a central place, and shared uses of facilities like stairways, footpaths or lobbies. The hypothesis is that the smaller the functional distance between residents, the greater the number of friendships will be formed. Functional distance can be reduced by a number of architectural and siting devices such as the facing of dwellings, the siting of stairways and front and back doors, and the location of bus stops, footpaths, and roads.

It must be noted that these studies were conducted in the U.S. and England. All findings from these studies should be carefully considered when applied in the Malaysian context where most of the housing estates are multi-ethnically integrated. Different cultural and ethnic backgrounds may also play an influential role in the development of social ties.

CHAPTER II

PURPOSE OF STUDY

AND

A REVIEW OF LITERATURE

The research was conducted in Rancangan Rumah Rakyat Dusun
Nyior 2a, a new low-cost public housing scheme situated in Seremban,
Negeri Sembilan. In this Chapter, the main objectives of the study are
presented and a section reviewing some related literatures is also included.

(i) Purpose of Study

Since the selected housing estate has a segregated pattern of
allocation where the different ethnic groups are separated from each other
in rows of houses, the study attempts to find out the residents' attitudes
and reactions toward this type of pattern. It is of interest to find out
whether such a form of allocation is influential to the residents' pattern
of neighbourly relationships.

The research aims to study also the attitudes and views of the
different ethnic groups regarding neighbours, the whole neighbourhood, and
interethnic mixing within the housing estate. From the findings concerning
these aspects, it is hoped that some general ideas about the social pattern
and network existing in the housing estate can be gained.

(ii) Review of Literature

From the Third Malaysia Plan (1976-1980), an overall picture of
the housing situation in Malaysia is provided. It discusses the housing needs

and supply of the country, and future housing programmes aimed at housing particularly the low-income group.

In Malaysia, several studies on the social and economic conditions of low-cost housing have been conducted. Wegelin (1975) for example, carried out a cost-benefit analysis of rehousing squatters in the Klang Valley area, including Kuala Lumpur. For this purpose, Wegelin selected six typical types of housing found in Malaysia. They are the Sungai Way Phase II low-rise terrace housing, the Padamara Jaya Phase I and II low-rise terrace housing, the Kampung Kerinchi Phase I four storey walk-ups, the Jalan Cheras Phase IIA four storey municipal walk-ups and the Jalan Loke Yew Phase IV high-rise flats.

According to Wegelin, in these low-cost public housing schemes, substantial improvement was found in the areas of water supply, sanitary facilities, drainage, waste disposal and general cleanliness. Concerning the impact of ethnically integrated housing on ethnic attitudes, the author found that there was less interethnic tolerance in the high-rise Loke Yew flats as compared to the Jalan Cheras four storey walk-ups. Also, there was no evidence of any increase in the degree of interethnic mixing in the Kampung Kerinchi flats, a Malay housing complex.

On the whole, Wegelin concluded that rehousing did improve the lives of the residence because rehousing was also accompanied by the provision of modern facilities.

Another interesting study on the social implications of low-cost rehousing schemes was conducted by Wong (1976). The Jalan Loke Yew Phase IV high-rise flats and the Jalan Cheras Phase IIA four storey walk-ups were selected for research.

Generally, Wong found that rehousing has brought improvement in the living conditions with the provision of better facilities such as modern sanitary system and electricity. More advantages than disadvantages were perceived by the tenants residing in the low-cost flats.For example, the low-cost flats have provided more opportunities for interethnic mixing.

Regarding the degree of neighbourliness, Wong's findings show that the Malays were on the whole, more sociable than the Chinese. The Malays tended to show a higher frequency in social visits than their Chinese counterparts. Wong in her study also examined the role of children in friendship formation. She found that children in the low-cost flats seemed to provide an important link between parents increasing therefore, the chance for more interethnic mixing among the adults in the housing complexes.

In her conclusion, Wong attributed the ethnic differences in the degree of neighbourliness to the possible situational differences of the respondents' former dwelling places and the overall greater sociability among the Malays.

More recently, Chong (1977) studied the initial socio-enviromental perceptions and adaptations of tenants to a new type of low-cost cluster-link housing complex in Kuala Lumpur.

Findings from the study indicated that some of the major socio-enviromental problems such as lift failures and noise which are commonly associated with high-rise flats can and have to a certain extent been overcome by this new low-rise high-density type of housing. The research was also interested in finding out the impact of this new type of cluster-link on the pattern of neighbourliness and friendship formation. As a result, Chong found that more Malays reported spending most of their free

time with neighbours than the Chinese in the housing complex. Also, both
the Malay and Chinese groups indicated their best known neighbours to be of
the same ethnic group as themselves. According to Chong, this finding could
be attributed to the allocation pattern where households belonging to the
same ethnic group were housed together into a cluster of four units.
In general, Chong's study show that the Malays were more sociable than the
Chinese and Indians in the housing complex.

Many significant studies concerning social activities in housing
estates have also been conducted in other countries like the U.S. and
England. For instance, Carey and Mapes of England (1972) carried out a study
on the process by which social relationships were established. The
researchers aimed to find out how the 'new' housewife builds up her relation-
ship with others in the estate over time.

It was the intention of this study to discover and examine the
influence of planning factors on the social activities in owner-occupied
housing estates. The conclusions of the research suggest two respects in
which they might promote social intercourse.

Firstly, houses of a type which will be particularly attractive
and well suited to families at a given life-stage, might be situated
together on the estate, rather than scattered arbitrarily over that estate.
Secondly, the grouping of standard houses might be planned in such a way as
to facilitate contact between the residents. For this purpose, the houses
need not necessarily be built close together but easy visual contact, which
could lead to social contacts, should be possible. It has been shown in this
research that the judicious planning of an estate is influential to the
social lives of its residents.

In addition to all the studies on the social aspect of housing, many researches studying the relationship between housing and psychological factors (such as attitudes) have also been conducted. The classic study of Deutsch and Collins (1951) is an example of such studies.

Deutsch and Collins (1951) studied the effect of integrated public housing projects upon the interethnic attitudes in America. The authors discovered that the likelihood of White tenants getting to know and associate with Negro tenants was considerably greater in the integrated projects than in the segregated projects. Interestingly, most of the White tenants in the integrated projects did not originally like the idea of living in the same building with Negroes. Interviews with tenants in the integrated projects revealed that their attitudes toward Negroes were distinctly more favorable than those of the tenants in the segregated projects.

To summarize, high-rise housing has generally been found to be less conducive in the promotion of interethnic relations in the Malaysian context, (Wegelin, 1975 and Wong, 1976). Under the TMP, the Ministry of Housing and Village Development strongly stressed on building more of low-rise and walk-ups of four or five storeys instead of high-rise.

From the many studies reviewed, the net gain resulting from integrated low-cost public housing schemes is considerable in terms of reducing and of creating harmonious intergroup relations.

CHAPTER III

METHOD AND SAMPLE SELECTION

This chapter presents the method of study — the selection of housing estate, sample, and the interview. Also included is a section describing the research design. Since the study was conducted in Seremban, a brief overview of the public housing situation would be appropriate here.

Under the TMP, a total of 2,464 units of low-cost houses were expected to be constructed in the Seremban district. A large proportion of these would take the form of single-storey terrace houses which would be sold on a hire-purchase basis for an average of $55.00 per month for a period of about 20 years. Only low-cost flats are for rent.

The launching of all low-cost public housing programmes in Negeri Sembilan are financed solely by the state government through the administrative body of the State Development Corporation, Negeri Sembilan. In keeping with the main purpose of the TMP, these programmes are strategies to at least reduce, if not totally eradicate, the housing and squatter problems in the state of Negeri Sembilan.

(i) Selection of Housing Estate

Rancangan Rumah Rakyat Dusun Nyior 2a was selected for study for various reasons. First of all, it is a scheme of low-cost single-storey terrace houses. Most of the studies on low-cost public housing in Malaysia have been conducted on high-rise types. Therefore, it would be useful to study another type of low-cost housing estate.

Secondly, it is a fairly new scheme. It would be interesting to examine the problems, if any, encountered by the residents in their early stages of adaptation to a new housing estate, and friendship patterns that may be found among them.

Lastly, the estate is not entirely integrated. This means that a row of houses in the estate was allocated to people belonging to the same ethnic group or religion. Furthermore, the Chinese families of the housing estate occupy two rows of houses which are separated from the other rows of Malay households by a field. This type of allocation may contribute to our understanding of whatever pattern of neighbourly relationships that exists in the estate.

The selected low-cost public housing estate comprises 100 units of single-storey terrace houses. Construction was completed in mid 1979.[1] Out of the 100 units, 75 are occupied by Malays, 20 by Chinese and 5 units by Indians. These houses were sold on hire-purchase of $55.53 per month for central houses and $58.30 per month for end houses for a period of 20 years.

All applicants had to meet the following criteria: must be earning an income of $600 and below, be above 21 years of age, and married with children. Land owners were not eligible to apply. Squatters occupying the piece of government land reclaimed for housing projects were promised a house on the new proposed estate provided they have squattered there for more than five years. Short-listed applicants were interviewed by a committee composing the District Officer, Public Representative, and the Pembantu Pertanian.

1 Refer to the Appendix for the architectural design of the houses in different perspectives.

(ii) Research Design

Only the Malays and the Chinese were selected as respondents for the study. From the 75 units of Malay households and 20 units of Chinese households, a total of 30 households, 15 from each ethnic group, formed the sample of study. The Indians were excluded from the study because only five units of Indian households are insufficient to form an adequate sample to represent the Indian community on the estate.

Table III.1: Total Number of Households Selected for Study by Ethnicity

Subjects	Malays	Chinese	Total
No. of Households	15	15	30
Percentage	50	50	100

It was initially decided to exclude households at both ends of each row of houses from the sample selection. It is because interview questions regarding immediate next-door neighbours would have different meanings for these households as they have neighbours only on either the right or left hand side. However, due to problems arising from the limited number of Chinese households, it was necessary to include the corner houses in the sample selection as well.

Provided in this section is a rough plan of the housing estate showing the lay-out pattern of the houses, where the different ethnic groups are situated and the location of the actual households selected, (see Figure III.i).

(iii) Sample Selection

The sample of households was selected basing on the following criteria: a minimum of six months to control for the length of residence,

Fig. III.i; ROUGH PLAN OF RANCANGAN RUMAH RAKYAT DUSUN NYIOR 2a
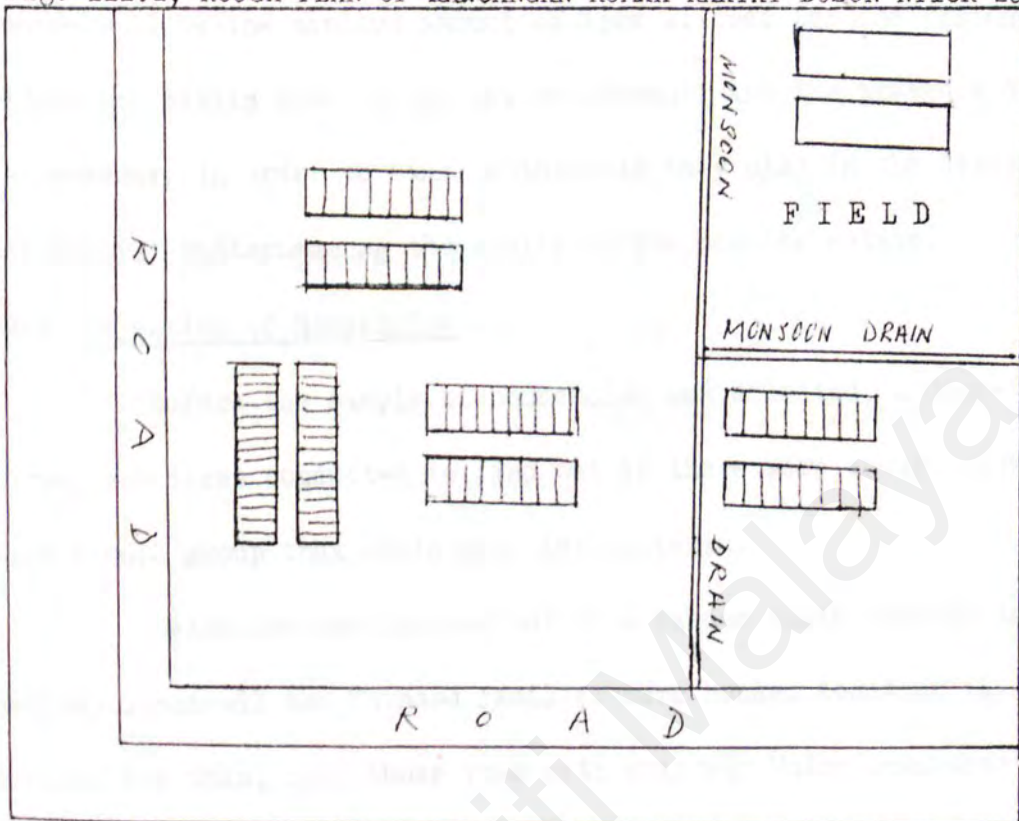
KEY

▨ Malay households only.

▥ Malay households mixed with Indian households.
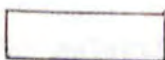
▭ Chinese households only.

and should have children of primary or lower secondary school age. Six
months will be the minimum amount of time allowed for the residents to
adjust and settle down to the new enviroment. And the presence of children
is necessary in order to examine the role they play in the development of
neighbourly patterns among the adults on the housing estate.

(iiia) Selection of Households

Before the sample of households was selected, a door-to-door
survey was first conducted to find out if there were enough households of
each ethnic group that could meet the criteria.

Selection was carried out on a random basis through the lottery
method. Since all the Chinese families were housed together in two rows, to
control for this, only those rows with entirely Malay occupants were
subjected to sample selection. As a result, the sample of 15 Malay house-
holds was selected from only six rows of houses out of a total of eight rows.
The other two rows being mixed with Indian households were excluded from the
selection.

The Chinese sample was selected from a total of 18 households
instead of the actual total of 20 because two households were unavailable
for selection. These houses were unoccupied at the time of the door-to-door
survey.

(iiib) Selection of Interviewees

For the purpose of this study, it would have been ideal to
interview both the husband and wife of each household. However, it was
possible to interview only one member of the household because of time
constraint. The wife was chosen for several reasons.

A wife tends to spend more time than her husband on the housing

estate and this allows her more opportunity for making friends there. As a
mother of young children, she is more involved in the socialization process
within the immediate locality. Besides a few who are working, most of them
will be available for interviews during the day.

(iv) <u>The Interview Questionaire</u>

A structured questionaire was formulated which included both open-
ended and close-ended questions. The questionaire was designed to obtain
information on the following general topics:

1) biographical data example, age, level of education achieved, and
   occupational background;

2) family structure which include the number of residents in the house, the
   number of children, schooling and not schooling;

3) residents' attitudes and views toward the present living condition in
   terms of such items as house structure, water and electricity supply,
   sanitary facilities, etc., and neighbouring patterns;

4) past living conditions and level of social interaction including the
   location of former home and relationship with former neighbours.

   (Refer to Appendix for a full text of the interview questionaire.)

The questionaire consisted of questions that were short, precise
and phrased as simply as possible. This reduced the possibility of
misunderstanding on the part of the respondents. According to Moses and
Kalton (1971), " at the start of the interview, the respondents is unsure
of himself so the opening questions should be ones to put him at ease and
build up rapport between the interviewer and the respondent."

Therefore, in the questionaire, questions considered to be less
sensitive or personal for example, length of stay in the estate were asked

at the beginning of the interview while questions which were more personal such as monthly income, were asked later.

The original questionaire was formulated in English. Since interviews had to be conducted in Bahasa Malaysia and Cantonese, the original English version was translated into these two language versions using the 'back-translation' technique as suggested by Werner and Campbell (1970). This method was used to ensure equivalance in meaning of the three versions.

Firstly, the English version was translated into Bahasa Malaysia and Cantonese by two independent bilinguals. Then, two other independent bilinguals "back-translated" these versions blind into English. All ambiguous words or phrases were corrected until the original and the back-translated versions were as compatible in meaning as possible,

(v) The Interview

The author conducted the interviews personally. She introduced herself as a University student doing research on the housing estate for academic purposes. Respondents were assured that their responses would be treated in the strictest confidence.

All interviews were carried out during the day. The place of interview was the respondent's home and the interviews were conducted in an informal atmosphere. On average, each interview lasted between 30 and 40 minutes. Working wives were interviewed on Sundays only. Malay respondents were interviewed in Bahasa Malaysia and Chinese respondents were interviewed in Cantonese, the most common spoken dialect in Seremban.

On the whole, rapport between the author and the respondents was achieved. None of the selected respondents refused to be interviewed.

CHAPTER IV

RESULTS AND DISCUSSION

In this chapter, the findings of the research are presented and
discussed under four major sections. The biographical data of respondents
and their husbands (eg. age, occupation, and level of education achieved)
are compared and discussed in section one.

Findings regarding the social structure and economic position
of the households are considered under section two. The third section
presents comparative data on present and former dwelling place. In the
last section, data concerning neighbours and the whole neighbourhood are
presented and discussed. Together, these data will provide a general
picture of the pattern of social contacts and the types of social
attitudes held by the residents of the public housing estate.

(i) Biographical Data of Respondents and Husbands

This section comprises of respondents' and their husbands'
age structures, types of occupation, and level of education achieved. The
main purpose of presenting these data is to find out the extent to which
the Malay and Chinese households are comparable in terms of these factors.

(ia) Age Structures

From Table IV.2, the general picture shows that the Chinese
respondents are older than their Malay counterparts. Chinese respondents
make up 67% of those in the above 40 years age group in contrast to only
32% of the Malay respondents.

Table IV.2: Age Structures of Respondents by Ethnicity (%)

AGE (years)	Malay	Chinese	Total
Under 21	-	-	-
21 - 25	7	-	3.5
26 - 30	-	7	3.5
31 - 40	61	26	43.5
41 - 50	32	47	39.5
Above 50	-	20	10
Total	100	100	100

Table IV.3 shows a constant trend although to a lesser degree of the Chinese husbands being slightly older than the Malay husbands. Fifty percent of all respondents' husbands were between 40 and 50 years of age. Forty-six percent were Malays and 53% Chinese. This means that they are quite comparable in age. In comparison with respondents' age (Table IV.2), the Chinese respondents and their husbands are more comparable (67% and 86% above 40 years) than the Malay respondents and their husbands (32% and 73% above 40 years).

Table IV.3: Age Structures of Respondents' Husbands by Ethnicity (%)

AGE (years)	Malay	Chinese	Total
21 - 25	7	-	3.5
26 - 30	-	7	3.5
31 - 40	20	7	13.5
41 - 50	46	53	49.5
Above 50	27	33	30
Total	100	100	100

(ib) <u>Occupation</u>

As shown in Table IV.4, the vast majority (76.5%) of the
respondents were housewives and only 23.5% were working. Therefore, it can
be said that there is no ethnic difference in general regarding respondents'
occupation. From the Malay respondents who were working, there was a
factory worker, a clerk, and a stall owner. Among the four working
Chinese wives, one was a washerwoman, another as a domestic servant, and
two were stall owners.

Table IV.4: Occupation of Respondents by Ethnicity (%)

OCCUPATION	Malay	Chinese	Total
Housewives	80	73	76.5
Working Wives	20	27	23.5
Total	100	100	100

Concerning the types of occupation of respondents' husbands,
there were on the whole, more skilled Chinese workers than the Malays.
The majority of the Chinese husbands were employed as factory workers,
electricians, and mechanics while more Malay husbands were either self-
employed or unskilled workers.

Table IV.5 shows that all the respondents' husbands had monthly
earnings of less than $600. This is understandable in view of the
requirement of a low-income earner meaning below $600 to be eligible in
purchasing these low-cost houses. However, the Chinese are shown to be
slightly better off than the Malays (Table IV.5). This could be related to
the fact that they also belong to an older age group and thus, have worked
for a longer time than their Malay counterparts. In general, they are

comparable in terms of occupation and income.

Table IV.5: Monthly Income Levels of Husbands by Ethnicity (%)

MONTHLY INCOME ($)	Malay	Chinese	Total
Below 300	33	20	26,5
301 - 400	47	40	43.5
401 - 500	13	20	16.5
501 - 600	7	20	13.5
Total	100	100	100

(ic) Education

Table IV.6 generally shows that the Malay respondents were better educated (80% educated) than the Chinese respondents (53.5% educated). Furthermore, a vast majority of the educated received only primary education (57% of the total). Only 13% of the Malay respondents and 7% Chinese had had secondary education. The educated respondents were also mostly vernacular educated (80.25%) with only a small minority having had some English education, (Table IV.7).

Table IV.6: Education Levels of Respondents by Ethnicity (%)

HIGHEST EDUCATION LEVEL ACHIEVED	Malay	Chinese	Total
No Formal Education	20	46.5	33.25
Primary School	67	46.5	56.75
Lower Secondary	6.5	7	6.75
Upper Secondary	6.5	-	3.25
Total	100	100	100

Table IV.7: Medium of Education of Respondents by Ethnicity (%)

MEDIUM OF EDUCATION	Malay	Chinese	Total
Vernacular	73	87.5	80.25
English	7	-	3.5
Vernacular and English	20	12.5	16.25
Total	100	100	100

Regarding medium of education, the Malay respondents were more likely to have had English education (27%) than the Chinese respondents (12.5%). The Malay respondents being better educated than the Chinese respondents could be related to their greater youthfulness as in Malaysia, there is a tendency for younger groups to be better educated than their older counterparts, (Table IV.6).

As shown in Table IV.8, respondents' husbands' level of education is comparable. Eighty-seven percent of Malay husbands were educated and 80% of Chinese husbands were educated. This could be related to the very small difference in age (Table IV.3) as most of them belonged to the age group of above 40 years.

Table IV.8: Level and Medium of Education of Husbands by Ethnicity (%)

HIGHEST EDUCATION ACHIEVED	Malay	Chinese	Total	MEDIUM OF EDUCATION	Malay	Chinese	Total
No Formal Education	13	20	16.5	English	7	8	7.5
Primary School	60	73	66.5	Vernacular	70	84	77
Lower Secondary	20	-	10	Vernacular and Eng.	23	8	15.5
Upper Secondary	7	7	7	Total	100	100	100
Total	100	100	100				

Overall, husbands' level of education was in keeping with the wives as the majority of them have had only primary vernacular education.

In brief, the biographical data of both ethnic groups can be said to be comparable. Generally, the Malay and Chinese respondents were mostly housewives and their husbands, 'blue collar' job workers earning less than $600 per month. In terms of education, vernacular primary education was the level achieved by the majority of the respondents and their husbands. The small differences in these data, if any, are most probably related to the age differences between the two ethnic groups.

(ii) Family Structure

With reference to Table IV.9, the proportion of respondents with large households was overwhelming for both ethnic groups. One Malay household had 12 members living in the house while two Chinese households had 11 family members staying together. On the whole, the Malay and Chinese groups are comparable in household size with a majority of them having more than five people living in the house (86.5%)

Table IV.9: Family Structure by Ethnicity (%)

NO. OF PEOPLE IN HOUSEHOLD	Malay	Chinese	Total
3	7	7	7
4	-	6.5	3.25
5	-	6.5	3.25
More than 5	93	80	86.5
Total	100	100	100

(iii) Dwelling Place

Since attitude towards present dwelling place may be expected to be related to previous one, it would seem appropriate to obtain data on their past.

(iiia) Former Dwelling Place

As shown in Table IV.10, the majority of the Malay respondents (60%) were former kampung dwellers. In comparison, a relatively large proportion of the Chinese respondents were formerly squatters while there were no squatters among the Malay households. On the other hand, more Malay respondents (27%) than Chinese respondents (7%) had previously resided in government quarters.

Table IV.10: Types of Former Dwelling Place of Respondents by Ethnicity(%)

TYPES OF FORMER DWELLING PLACE	Malay	Chinese	Total
Kampung or Village	60	20	40
Squatter Area	-	53	26.5
Housing Estate	6.5	-	3.25
Town	6.5	20	13.25
Government Quarters	27	7	17
Total	100	100	100

Table IV.11 shows that the majority of the respondents had stayed at their former dwelling places for more than 10 years. All of them came from places which were dominated by a single ethnic group usually their own ethnic group. Only one Chinese respondent came from a predominantly Malay neighbourhood and only two Malay respondents lived in predominantly Indian neighbourhood.

Table IV.11: Respondents' Length of Stay in Former Dwelling Place by Ethnicity (%)

LENGTH OF STAY (years)	Malay	Chinese	Total
Less than 10	33	20	26.5
10 - 20	40	53	46.5
21 - 30	14	14	14
31 - 40	6.5	6.5	6.5
41 - 50	6.5	6.5	6.5
Total	100	100	100

Nearly all of the respondents interviewed said that they moved away from their former dwelling places because they wanted a house of their own and only 13% were resettled by the Government.

(iiib) Present and Former Living Conditions

Respondents were also asked to compare former with present dwelling place in terms of such items as house structure, sanitary facilities, water supply, etc. (Refer to Table IV.12).

1) House Structure

It can be seen in Table IV.12 that while 100% of Chinese respondents reported improvement in the present house structure, the corresponding figure for the Malays is only 46%. This marked ethnic difference is no doubt attributable to the fact that vast majority of the Chinese respondents (53%) were former squatters and had lived in wooden houses with zinc roofs. They voluntarily commented that the present brick structure is less vulnerable from such dangers as fire when compared with wooden houses.

Table IV.12: Comparison of Facilities in Present and Former Dwelling Places of Respondents by Ethnicity (%)

PRESENT FACILITIES		RESPONSES			
		Better	Worse	Same	Total
House Structure — building materials, etc.	Malay	46	27	47	100
	Chinese	100	-	-	100
Total		73	13.5	23.5	100
No. of Bedrooms	Malay	60	33	33	100
	Chinese	60	7	7	100
Total		60	20	20	100
Sanitation	Malay	73	7	20	100
	Chinese	93	-	7	100
Total		83	3.5	13.5	100
Ventilation	Malay	40	27	33	100
	Chinese	60	20	20	100
Total		50	23.5	26.5	100
Water Supply	Malay	60	7	33	100
	Chinese	80	-	20	100
Total		70	3.5	26.5	100
Lighting	Malay	20	-	80	100
	Chinese	67	-	33	100
Total		43.5	-	56.5	100
Access to Public Transport	Malay	7	46.5	46.5	100
	Chinese	-	67	33	100
Total		3.5	56.75	39.75	100
Noise	Malay	20	33	47	100
	Chinese	53	20	27	100

(To be continued on next page.)

(Continuation of Table IV.12)

PRESENT FACILITIES		RESPONSES			
		Better	Worse	Same	Total
Total		36.5	26.5	37	100
Distance to Place of Work	Malay	33.	40	27	100
	Chinese	14	53	33	100
Total		23.5	46.5	30	100

2) No. of Bedrooms

Most of respondents who found improvement with bedrooms
attributed improvement to the increased number of bedrooms. Satisfaction
with the number as bedrooms was related to the perception of crowding.
Hence, those who found that the situation was worse now (20%) were those
who had more than the present number of bedrooms in their former homes.
In contrast, more Malay respondents (33%) than Chinese respondents
(7%) found the present number of bedrooms to be worse. This is not
surprising in view of the fact that many of the Chinese respondents had
formerly stayed in rented single room for a long time. The change to
two bedrooms was most welcome as indicated by the 60% who reported the
situation to be better.

3) Sanitation and Ventilation

As shown in Table IV.12, the majority of respondents (83%) found
that the present sanitation facilities were better. This is not
unexpected as most of them had formerly used the traditional bucket
or pit system. The modern flush system was felt to be much cleaner
and more hygienic. Only one respondent rated the present sanitation
condition as worse than that in her former dwelling place. She

pointed to some soggy areas near her house as potential mosquito breeding grounds because of poor drainage on the housing estate.

Half the total sample found improvement in the area of ventilation. However, a higher proportion of Chinese respondents (60%) reported the condition to be better as compared to 40% Malay respondents. The lower level of satisfaction among the Malay respondents is understandable considering the vast majority who had previously lived in kampungs where the houses were not terraced and thus possibly with more windows as compared to the present terrace houses.

4) Water Supply and Lighting

Regarding the present water facility, an overwhelming majority reported it to be better. In contrast between the ethnic groups however, slightly more Chinese respondents (80%) than Malay respondents (60%) perceived improvement. This could be related to the fact that most of the Chinese respondents were former squatters and had lived in areas without water and electricity supply. For the fairly high percentage of Malay respondents who felt likewise found improvement in the present modern pipe system when compared with the well system in their former kampungs. Similarly, the marked ethnic difference in viewing the present lighting facility is not unexpected. The change from gasoline lamps to modern lighting facility was most favorable for the former Chinese squatters.

5) Noise and the Problem of Vandalism or Crime

On the whole, noise was not much of a problem to the respondents on the estate. Considerably, more Chinese respondents (53%) than Malay respondents (20%) found noise to be less of a problem. The 27% respondents who perceived the problem to be worse complained that it was

mostly noise made by children in the neighbourhood.

Concerning the problem of vandalism and crime, the majority of respondents (83%) reported that there were no problems in both their present and former neighbourhood. This indicate a general sense of public security for the residents on this particular housing estate.

6) Distance to Place of Work and Access to Public Transport

From Table IV.12, somewhat more of the Chinese respondents (53%) than the Malay respondents (40%) found the distance to their places of work to be worse now as compared to previously. However, most of them admitted that the increase in distance was slight and , thus, did not pose too much of a real problem to them.

Fifty-seven percent of the respondents (Table IV.12) reported that access to public transport was worse now when compared to formerly. While 67% of the Chinese respondents felt the condition to be worse, only 46.5% Malay respondents felt likewise. The ethnic difference observed here could be attributable to the fact that most of the Chinese respondents were formerly either town dwellers or urban squatters. On the other hand, the Malay respondents did not perceive the distance as far probably because the majority of them were former kampung dwellers where walking was usually the chief mode of getting to places around the kampung.

In view of the facilities enjoyed at present, all of the respondents were satisfied with the instalment rate they were paying for their present houses ($55.53 per month for central houses and $58.30 per month for end houses). The rate was said to be reasonable because it was within the range of their financial positions.

The respondents were also asked to name three advantages and three disadvantages of living in the present housing estate as compared to their former dwelling places. Among these, the major advantages and disadvantages include:

Main advantages

1) More space for their children to play in (73%);

2) The large population on the estate helps to enhance social life and, in case of emergencies, help from the many people around is easier to obtain (66%);

3) The location is appropriate because major activity centres can be easily reached (90%);

4) There is no security problem (88%); and

5) Brick houses are easier to keep clean and neat (59%).

The main disadvantages are: the problem of noise (54%), and they were not allowed to rear chickens (62%).

As shown here, the advantages far exceeded the disadvantages of living in this low-cost housing estate. Overall this suggest a high level of satisfaction with present homes and physical surroundings.

The respondents were also asked to suggest ways to improve or change the housing estate. Some major suggestions include:

1) A children's playground for the estate (98%);

2) Public bus routes into the estate (94%);

3) A 'Surau' for the Muslim community (52%); and

4) A Community Centre or 'Balai Raya' for the whole community of the estate (87%).

On the whole, the vast majority (87%) of the respondents

indicated satisfaction with their present homes. Rehousing together with the provision of modern facilities have brought improvement to the living conditions and general life styles. Residence in the low-cost housing estate seems to offer more advantages than disadvantages. These findings are comparable to those from Wong's research (1976).

Many of the respondents frankly assured the author that they were very thankful to be selected as owners of these low-cost houses considering the thousands who applied and did not succeed.

(iv) Attitudes and Neighbourly Relationships

Since the major concern of this research is to examine the impact of rehousing in a multi-ethnic low-cost housing estate on friendship and neighbourly patterns, and the amount of interethnic mixing in the estate, the respondents were asked to rate their attitudes toward their present neighbours and the whole neighbourhood.

Almost all the respondents interviewed, perceived the people on the estate to be friendly. However, when asked to compare the present neighbours with their former ones, 80% of the total sample perceived the present community to be no more or less friendly than the people in their former neighbourhoods.

Some researchers for example, Festinger et al (1963), have noted that friendship pattern of residents in housing estates is directly related to physical distance. To test this hypothesis in the study of Rancangan Rumah Rakyat Dusun Nyior 2a, respondents were asked questions relating to how well they know their present neighbours in different locations (ie. immediate next-door neighbours, those in the same row of houses, and those in other rows of houses). The findings to a certain

extent do lend support to the hypothesis .

It was found that generally, the degree of how well the respondents know their neighbours decreased as the physical distance of the neighbours increased. In contrast between the ethnic groups, more Malay respondents reported knowing neighbours situated further away "quite well"(ie. in other rows of houses), than their Chinese counterparts. On the other hand, the Chinese respondents were more likely to report knowing their immediate next-door neighbours better than those located in other rows of houses, (refer to Table IV.13). These findings are consistent with those of other studies (eg. Wong, 1976).

Table IV.13: Respondents' Rating of How Well They Know Their Neighbours by Ethnicity (%)

LOCATION OF NEIGHBOURS		RESPONSES				
		Very Well	Quite Well	Not Very Well	Not At All	Total
Immediate Next-Door Neighbours	Malay	7	80	13	-	100
	Chinese	60	33	7	-	100
Total		33.5	56.5	10		100
Neighbours Within the Same Row	Malay	-	80	20	-	100
	Chinese	20	67	13	-	100
Total		10	73.5	16.5		100
Neighbours of Opposite Row	Malay	-	73	27	-	100
	Chinese	14	53	20	13	100
Total		7	63	23.5	6.5	100
Neighbours of Other Rows and Different Ethnic Group	Malay	-	27	33	40	100
	Chinese	-	-	27	73	100

(To be continued on next page.)

(Continuation of Table IV.13)

LOCATION OF NEIGHBOURS	RESPONSES				
	Very Well	Quite Well	Not Very Well	Not At All	Total
Total	-	13.5	30	56.5	100

When the Malay respondents were asked how well they know their Chinese neighbours on the estate, only 40% reported not knowing them as compared to 73% of the Chinese respondents who reported not knowing their Malay neighbours at all, (Table IV.13).

In order to obtain a clearer picture of the neighbourly pattern that existed in the housing estate, it was necessary to ask the respondents questions pertaining to neighbourly activities such as social visits, borrowing or exchanging of things, etc.

Overall, the Malay respondents showed themselves to be more sociable in terms of the neighbourly activities asked, than their Chinese counterparts. This finding is consistent with Wong's (1976) and Chong's (1977) findings.

As indicated in Table IV.14, the Malay respondents generally pay more visits to their neighbours than the Chinese respondents. The Chinese respondents however, seemed to limit their social visits to only immediate next-door neighbours (60%) and those within the same row of houses (60%). The majority of the Chinese respondents had either never or seldom visited neighbours of other ethnic groups.

Regarding another type of neighbourly activities such as borrowing or exchanging of things like magazines, tools, dishes, food, etc.,

it was found that more Chinese respondents do it than their Malay counterparts. Eighty-seven percent of the Chinese respondents reported that they occasionally borrow or exchange things with their neighbours as compared to 53% of the Malay respondents.

Table IV.14: Frequency and Pattern of Exchange of Social Visits Among Respondents by Ethnicity (%)

LOCATION OF NEIGHBOURS		FREQUENCY				
		Very Often	Occasionally	Seldom	Never	Total
Immediate Next-Door Neighbours	Malay	27	66	7	-	100
	Chinese	20	60	13	7	100
Total		23.5	63	10	3.5	100
Neighbours Within the Same Row	Malay	27	66	7	-	100
	Chinese	27	60	6.5	6.5	100
Total		27	63	6.75	3.25	100
Neighbours of Opposite Row	Malay	13	67	13	7	100
	Chinese	7	40	43	10	100
Total		10	53.5	28	8.5	100
Neighbours of Other Rows and Different Ethnic Group	Malay	-	-	34	66	100
	Chinese	-	7	20	73	100
Total		-	3.5	27	69.5	100

Most of the respondents reported not having any close friends in the housing estate (60% Chinese and 53% Malay). This is not surprising in view of the fact that the respondents were all new neighbours at the time of interview. The length of residence was hardly more than six months for most of them, then. This may also explain why only 20% of the total

sample reported that they have neighbours in the estate with whom they could discuss their personal problems.

Apart from gaining some general ideas concerning the type of neighbourly relationships that existed among the residents in the housing estate, it is of interest also to find out how children can aid in promoting neighbourly relations particularly, interethnic mixing. Therefore, questions concerning respondents' children of primary or lower secondary school going age were asked during the interview.

On the whole, the data show that the majority of the respondents' children occasionally play with one another irrespective of ethnic differences. The most common place of play was a field situated almost in the center of the estate. According to the respondents, this field has become a multi-ethnic meeting ground of all the children on the estate.(Refer to Table IV.15)

Table IV.15: Frequency of Respondents' Children Playing Together by Ethnicity (%)

LOCATION OF NEIGHBOURS		FREQUENCY				
		Very Often	Occasionally	Seldom	Never	Total
Immediate Next-Door Neighbours	Malay	87	13	-	-	100
	Chinese	40	47	13	-	100
Total		63.5	30	6.5	-	100
Neighbours Within the Same Row	Malay	73	20	7		100
	Chinese	27	66	7	-	100
Total		50	43	7	-	100
Neighbours of Opposite Row	Malay	80	13	7	-	100
	Chinese	27	47	13	13	100
Total		53.5	30	10	6.5	100
Neighbours of Other Rows	Malay	7	60	13	20	100
	Chinese	20	-	20	60	100
Total		13.5	30	16.5	40	100

When the respondents were asked their views on the subject of
their children mixing with children of other ethnic groups, an overwhelming
majority showed to have positive attitudes toward it, and reported that
they would encourage such mixing. As indicated in Table IV.16, more
Malay respondents (93%) reported a liking for interethnic mixing among
their children as compared to 53% of the Chinese respondents. However, more
Chinese respondents (47%) were less specific with their attitudes toward
interethnic mixing for their children by reporting that they "don't mind",
instead of a direct positive or negative response.

Table IV.16: Mothers' Attitides Toward Interethnic Mixing Among Children
by Ethnicity (%)

MOTHERS' RESPONSE TOWARD INTERETHNIC MIXING	Malay	Chinese	Total
You like it and would encourage it.	93	53	73
You don't mind.	7	47	27
You don't like it and would discourage it.	-	-	-
Total	100	100	100

Wong (1976) in her study on the social implications of low-cost
rehousing schemes in Kuala Lumpur, also found that the vast majority of
her respondents reported having positive attitudes toward interethnic
mixing among their children on the housing complex.Thus, the finding as
indicated in the table above (Table IV.16) can generally be said to be
comparable with Wong's result.

Rehousing people from their old neighbourhoods into new housing estates will at least to a certain extent, disrupt old established friendship ties and social networks. In this study, respondents were asked to rate how frequently they visited their former neighbours in order to gain some ideas about the extent to which old established friendships with former neighbours are still maintained.

In general, the data show that old established friendships were still maintained through social visits. This is really not unexpected because at the time of interview, the respondents have been rehoused into the housing estate for hardly more than six months. The trend may not be maintained with time. However, 40% of the Malay respondents visit their ex-neighbours very often while 47% reported that they do it only occasionally. In contrast, only one Chinese reported that she visited her former neighbours very often and 60% of the Chinese respondents had occasional visits.

The respondents were also asked if they were mixing more or less with people of other ethnic groups since moving into the new housing estate. The majority of them felt that there was no difference in the amount of interethnic mixing since moving into the new multi-ethnic housing estate. Wong (1976) however, found that a high percentage of her respondents said that they were mixing more with people of other ethnic groups at their present dwelling place as compared to the former dwelling place. But, she also noted that most of the respondents considered mixing as merely "getting acquainted".

For this study, it is important to bear in mind the respondents' short length of residence in the new multi-ethnic housing estate. Further-

more, most of the respondents were from dwelling places that were dominated
by one ethnic group usually of their own origin. Hence, more time than
expected may be required for the people to adapt to a multi-ethnic housing
estate before any meaningful interethnic mixing may develop.

Since it is one of the objectives of this study to find out how
appropriate it is to have segregated pattern of allocation in public housing
estates, the 30 respondents were asked to give from their experiences,
advantages and disadvantages of staying separately from the other ethnic
groups within a common neighbourhood. Some of the main advantages perceived
include:

1) For religious reasons, it is more convenient to stay among people sharing
   the same faith, Islam for example (98%);

2) Less risks of misunderstanding and quarrels which may arise from differ-
   ences in cultural heritage, values and life styles (87%); and

3) The proplem of communication does not arise when living together with
   people who share a common language.

The main disadvantage is: fewer opportunities for gaining
experience and knowledge of other cultures and ethnic groups (76%).

From the data collected, it can be seen that the majority of the
respondents perceived more advantages than disadvantages from segregated
pattern of allocation in multi-ethnic housing estate. It is interesting to
note that almost all the respondents from both ethnic groups subscribe to
similar views regarding the advantages and disadvantage perceived. These
views are really not surprising because problems arising from differences in
religion, culture, and language are definitely not unknown by everybody

whenever the subject of interethnic relations is discussed. Nevertheless, eventhough such problems are likely to occur in interethnic relations, it does not mean that segregation in housing estate is the absolute solution. The people must still learn to understand and tolerate one another's religion, cultural practices and life styles through other ways and means.

(v) Interpersonal Relationships

The data provided in this section attempt to explore such subjective dimensions of social relations as sense of community, and interpersonal trust among the respondents. Respondents were read out three statements which are commonly heard in our daily lives concerning neighbours and friendships. They were asked if they agreed or disagreed with each of them.

Agreement with these statements would possibly indicate that the respondent was alienated in his interpersonal relationships which would be reflected in his development of social contacts with neighbours in this context (see Table IV.17).

Table IV.17: Respondents by Socio-Psychological Indicators (%)

STATEMENTS		RESPONSES				
		Strongly Agree	Agree	Disagree	Strongly Disagree	Total
"These days, a person doesn't really know who he can trust."	Malay	-	47	53	-	100
	Chinese	-	87	13	-	100
Total		-	67	33	-	100
"Nowadays, neighbours are merely people who happen to live nearby, most of them do not really care what happen to each other."	Malay	-	-	87	13	100
	Chinese	-	27	73	-	100
Total		-	13.5	80	6.5	100

(To be continued on next page.)

(Continuation of Table IV.17)

STATEMENTS		RESPONSES				
		Strongly Agree	Agree	Disagree	Strongly Disagree	Total
"What is lacking in the world today is the old type of friendship that lasts for a lifetime."	Malay	-	47	53	-	100
	Chinese	-	87	13	-	100
Total		-	67	33	-	100

The available data show that a high proportion of the Chinese respondents agreed with the first statement (87%) as compared to only 47% of the Malay respondents. Regarding the second statement, both the Malay(87%) and Chinese (73%) respondents showed almost similar high percentage of disagreement.

Agreement with the first statement could possibly imply a lack of interpersonal trust and also reflect greater cynicism. The Chinese respondents were shown to be relatively more lacking in interpersonal trust (87% agreed) than the Malay respondents (47% agreed).

The proportion disagreeing with the second statement was high for both the Malay (87%) and Chinese (73%) respondents. This suggests a common strong belief in dependable neighbours among the Malay and Chinese respondents. For the third statement, the table show that a higher percentage of Chinese respondents (87%) agreed than the Malay respondents (47%). Agreement with this statement suggests a lack of confidence in developing enduring friendships and this applied more to the Chinese respondents than the Malays.

Summary

Rehousing into low-cost houses has generally brought some favorable changes in such items as structural materials, basic facilities

like lighting and piped water. On the whole, there is a high level of
satisfaction among the residents towards the living condition of the
housing estate. The public housing estate seems to offer more advantages
than disadvantages thus, enhancing the lives of its residents.

CHAPTER V

CONCLUSIONS

This final chapter discusses some of the more important findings and their implications. At the same time, the findings are also compared with those of other studies. A few suggestions are also included for improvements in the various major problem areas.

A total of 30 households (15 Malay and 15 Chinese households) made up the sample of study. The research was conducted mainly to study the general pattern of neighbourly relationships and friendship ties found existing among the residents of the low-cost housing estate, Rancangan Rumah Rakyat Dusun Nyior 2a; interethnic attitudes toward segregation in allocation and interethnic mixing; and the general advantages and disadvantages of rehousing into multi-ethnic low-cost housing estate.

Overall, rehousing together with its provision of modern facilities have brought substantial improvements in the living conditions and life styles of the people. Changes in the physical as well as the social aspect of the enviroment were perceived to be favorable as compared to previous residential areas. Residence in the public housing estate was perceived to offer more advantages than disadvantages, overall suggesting a high level of satisfaction with present homes and physical surroundings. These fisdings are comparable with Wong's findings (1976).

The data also indicate a good proportion of the respondents'

children playing together very often in the field of the estate. Hence, children in this housing estate seemed to be a likely channel through which friendships can be formed among the adults of different ethnic groups.

Regarding neighbourliness and social ties, it was found that the Malay group was more sociable than their Chinese counterparts. The Malay respondents had a more extensive pattern of social visits as compared to the Chinese respondents who were more likely instead to limit their social visits to immediate next-door neighbours and those within the same row of houses. This result is consistent with Chong's (1977) findings. Chong also conducted his research in a new housing estate studying the problems of initial adaptation . For this study, the finding could be attributed to the presence of more Malay households in the estate, situated in rows close to each other as compared to only two rows of Chinese households.

Generally, there was not much interethnic mixing in the estate. This could be attributable to the short period of residence of the respondents in the housing estate at the time of research, or at least to a certain extent, be attributable to the segregated pattern of allocation. The degree of interethnic mixing may possibly be influenced by the respondents' former types of dwelling places. Most of the respondents were from neighbourhoods which were dominated by people of the same ethnic origin as themselves.

To the respondents, segregation however, seemed to offer more advantages than disadvantages. For the Malays especially, the main advantage is religious convenience. By living together, they could practise

Islam without having often to encounter such items as dogs and pork which were considered sinful by their religion. These problems would be difficult to avoid should other non-Muslims be integrated with them in the same row of houses.

Since harmony between the different ethnic groups in Malaysia is vital for the peace and prosperity of the country, cultural and religious factors play an important role in influencing the planning of low-cost housing estates. Housing developers are aware of the great potential of ethnically integrated public housing in promoting interethnic relationships. However, because of certain religious taboos which may not be overcome so easily, some degree of segregation has to be enforced. It has been the practice now to allocate blocks of flats or rows of houses in a housing estate to people belonging to the same community group or religion.

While it is true that segregation of this sort seems to be a practical way to avoid friction and misunderstanding between neighbours of different ethnic groups, other means and ways should be adopted by the community itself in multi-ethnic public housing estate to encourage more social contacts and interactions.

For instance, the field in the estate can be used for organised games such as badminton and football. The committee already formed to represent the community of this housing estate should be responsible for organization of these games.

Other changes and improvements should be undertaken by the authorities for example, the provision of more physical amenities that may help to foster greater interethnic mixing. The functional distance

between the residents can be reduced by siting bus stops, children's playground, and a kindergarten. When the residents use these common facilities, it may at first lead to mere visual recognition, then perhaps to some polite greetings or formal exchanges about the weather, and eventually to more personal and meaningful relationships.

Perhaps too, a recreation hall can also be constructed so that parties during the festive season can be organized for the whole community. The capital cost of constructing these amenities is small when compared to the returns in terms of the opportunity for contacts and interaction between the different ethnic groups which are so important for the creation of an integrated multi-ethnic society.

Although the study reveals some interesting trends, it is not possible to make any valid generalizations . The Indians were excluded from the study and the actual sample of study is small. Therefore, even generalization of trends to the whole housing estate is difficult not to mention the overall situation of the country.

The essential purpose of the housing programmes in Malaysia is, of course to satisfy an acute social need. Since housing is an integral component of the standard of living, its improvement is expected to have tremendous effects on the people's life style. So far, much effort has been directed into low-cost housing mainly increasing the quantity of low-cost housing available in the country. Future efforts however, should pay more attention to the qualitative aspects of the enviroment. Low-cost housing projects should be planned not only to provide shelter for the poor but equal emphasis should be placed also in providing for the people's social and cultural needs. For instance, planners should incorporate into the project spaces set aside for organized games.

BIBLIOGRAPHY

1. Brislin, R.W., Lonner, W.J. and Thorndike, R.M.
   'Cross-Cultural Research Methods,'
   Comparative Studies in Behavioural Science,
   John Wiley and Sons, Inc., Canada   1973.

2. Carey, L., and Mapes,R., ' The Sociology of Planning'-
   A Study of Social Activity on New Housing Estates '
   C. Tinling and Co., Ltd., London and Prescot 1972.

3. Chong Yoke Choy, ' Low-Cost Cluster-Link- A Study of
   Tenant's Initial Social Environmental Adaptations'
   Grad. Ex., Dept. of Anthropology and Sociology,
   University Malaya 1976

4. Festinger, L., ' Social Pressures in Informal Group:
   A Study of Human Factors in Housing'
   Tavistock Publications, London,   1950

5. Keller, Suzanne, ' The Urban Neighbourhood: A Socio-
   logical Perspective'
   Random House, Inc., New York 1968

6. Third Malaysia Plan 1976-1980,
   Govt. Press, Kuala Lumpur 1976.

7. Morris, R.N. and Morgan, J., ' The Sociology of Housing- Studies at Beringsfield.'
Routledge and Kegan Paul Ltd., London 1965

8. Moser, C.A. ' Research Methods in Social Investigation'
Heinemann Educational Books Ltd., London 1977

9. Tan Soo Hai and Hamzah Sendut (eds) ' Public and Private Housing in Malaysia'
Heienmann Educational Books (Asia) K.L. 1979

10. Wegelin, E.A. 'Cost-Benefit Analysis of Rehousing Squatters in the Kelang Valley Area, Peninsular Malaysia'
unpublished Ph. D. Dissertation.

11. Wong Yoke Yin, 'Social Implications of Low Cost Rehousing in Kuala Lumpur,' (GRAD. EX.).

12. Yeh, Stephen H.K. ' Homes for the People: A Study of Tenant's Views on Public Housing in Singapore'
Housing and Development Board, Economic Research Centre University of Singapore 1972.