Pertanika J. Soc. Sci. & Hum. 11(1): 1-10 (2003)
ISSN: 0128-7702
© Universiti Putra Malaysia Press

Residential Satisfaction and Social Integration in Public Low Cost Housing in Malaysia

AHMAD HARIZA HASHIM
Department of Resource Management and Consumer Studies
Faculty of Human Ecology, Universiti Putra Malaysia
43400 UPM Serdang, Selangor, Malaysia

Keywords: Public low cost housing, residential satisfaction, residential attachments, community involvement, social integration

ABSTRAK

Kajian ini menilai perkaitan di antara integrasi sosial dan kepuasan perumahan di kalangan penghuni rumah kos rendah di Malaysia. Dua kawasan bandar dan luar bandar di Selangor telah dipilih dalam kajian ini dan melibatkan seramai 472 responden. Responden ini terdiri daripada 58% Melayu, 22% China dan 20% India. Hasil kajian mendapati bahawa penghuni yang mempunyai kejelekitan tempat tinggal yang kuat serta tahap kepuasan yang tinggi adalah lebih aktif terlibat dengan aktiviti komuniti di kawasan tempat tinggal mereka. Kajian juga menunjukkan bahawa faktor seperti keadaan struktur rumah yang rosak, persekitaran sosial dan fizikal yang tidak baik memberi kesan kepada integrasi sosial di kawasan kejiranan. Oleh itu satu projek perumahan yang dirancang dengan mengambil kira aspek kepuasan perumahan adalah penting untuk dipertimbangkan kerana dapat membantu proses sosialisasi penghuninya ke dalam komuniti.

ABSTRACT

The research examined the relationship between social integration and residential satisfaction of residents in low cost housing in Malaysia. Two urban and non-urban areas in Selangor were chosen for this study involving 472 respondents. 58% of the respondents are Malay, 22% Chinese and 20% Indians. It was shown that residents with strong residential attachments and high levels of satisfaction are actively involved in the community activities held in their neighbourhood. It was also found that factors such as default in the physical structures of the house and poor social and physical environments could affect the social integration in the neighbourhood. Therefore properly planned residential projects with attention given towards residential satisfaction need to be considered because they can help foster the process of socializing people into communities.

INTRODUCTION

One of the important factors that will affect social integration is the resident's feeling of satisfaction with his residence. Satsangi and Kearns (1992) stated that the satisfaction score in housing studies has been deemed as an indicator of service quality or organisational success and effectiveness. Satisfaction has also been heralded as an important means of listening to consumers, and thus a necessary component of organisations becoming more demand-responsive. Pacione (1990:18) points out that residents who cannot attain the desired level of satisfaction through modification of their current setting, will suffer 'residential stress', and this may eventually lead to migration. Basset and Short (1980:188), said that the provision of housing is not only a quantitative problem, but also a qualitative problem in the sense that: a) housing contributed to the reproduction of different components of labour power with different incomes and housing needs, and b) housing also contributed to the reproduction of social relations through correspondence between signs of residential status and position within a social hierarchy, based on class divisions.

Drakakis-Smith (1980:305) also agrees with the above ideas of using housing to build up or

to control the community, either by helping to encourage social interaction between different social classes or by dispersing them into various communities and interacting among themselves. This is because, from numerous studies, it was shown that a strong correlation exists between bad housing and disease, delinquency, and other personal and community disorders. Properly planned residential projects have been seen to help foster good relationships among people in the community and also help raise their aspirations. In addition to its high social utility, better housing will contribute to political stability by moderating people's impatience with the slow tempo of improvement in their living conditions.

Those who are against total heterogeneity, for example Gans (1968:129) argued that people derived more satisfaction from their residential area when they have neighbours who have similar backgrounds and interests. The argument is that people tend to choose friend on the basis of similarities in background such as age and socio-economic level; values, such as those with respect to privacy or child-rearing; and interests, such as leisure-activity preferences. This finding suggests that social relationships are influenced and explained by people's homogeneity with respect to a variety of characteristics. Other research has shown that having neighbours similar to oneself in terms of various characteristics is directly related to satisfaction with the residential environment (Weideman and Anderson 1985:163). Cohen (1986:115) argues that "the attitudes of people toward their neighbourhood could serve as an indication of the degree to which the neighbourhood is measured by attitudes towards it and particularly by attitudes that reflect residential satisfaction from a dwelling and its principal surroundings". Therefore it can be assumed that a neighbourhood where most of the population is satisfied with its residential conditions, is a stable neighbourhood. However, a neighbourhood where the majority of its population is dissatisfied with the residential conditions, is a less stable neighbourhood that does not serve as a protection against the pressures of social change. A less stable neighbourhood is a place where its population does not possess an informal social network and this indicates that those who lived there are not protected against the pressures of the wider society to which they belong. It could well serve as an indication of alienation, anomie, and apathy. In another study done in the Republic of Ireland, it was found that anomie was significantly related to dissatisfaction with neighbours. This is not surprising given that anomie measures alienation from society and the lack of social integration (Davies and Fine-Davies 1981:483). In conclusion, it can be said that people who are satisfied with their residential area will also be satisfied with their neighbours. This is then followed by an attachment to the neighbourhood, creating a strong social cohesion in the neighbourhood. This is because residential areas serve as an area for social interaction, an agent for socialization, a component of social status, a source of opportunities and services, an environment for self-fulfillment, and a protected area for inhabitants (Menahem and Spiro 1989:29).

Therefore in this study 'residential satisfaction' encompasses both housing satisfaction and neighbourhood satisfaction. The focus is on satisfaction because:

1) A failure to meet low cost housing targets means that housing demand cannot be satisfied. This, in turn, means that choice is limited. The government allocation policies determine which house an applicant gets, and such restrictions may affect residential satisfaction.
2) Low cost housing implies a lower standard of housing. Compact design and lower quality material may be used. This might affect the satisfaction of the residents (Peng 1981:49-50) who discussed the poor quality of housing construction, especially in low cost housing. In trying to provide affordable housing the standard of houses is always being compromised. The finishing of the houses, the material used, the design and size of houses are among the major complaints received about low cost housing. Other than the physical aspects, people who are allocated low cost housing have no say in choosing who their neighbours are, and if it involves squatters' allocation then the location of the area is also identified by the authorities. All these factors influence people's evaluation of their housing and neighbourhood and will also influence peoples' behaviour, especially in their relationships with others in the community.
3) Satisfaction is always being associated with the residential environment, and is especially

used as a predictor for migratory or moving behaviour (Marans and Rodgers 1975). With regard to mobility, in a community where the residents keep changing due to people often moving in and out of the area, the integration in the community will be low compared with an area where the residents are less mobile. New residents take time to adjust to the new environment and to socialise with the community. Therefore the assumption is that if satisfaction is shown to influence peoples' thoughts about moving or moving behaviour then it will also influence social integration in the community.

The other important factor is ethnic groups. A study done in Singapore shows that people from different ethnic backgrounds live together peacefully and harmoniously in public estates (Tai 1988). Tai also found out that living together brings a greater opportunity for inter-ethnic contacts and living together in the same residential area harmoniously. Therefore, the interactions and acceptance among the major ethnic groups living closely together in a housing area is an important variable to study.

METHODOLOGY

In this paper the term 'estate' was used during all interviews with the residents. In order to ensure that the term 'estate' would be unambiguous, the name of the housing estate was mentioned when ever referring to the neighbourhood. For example, 'Taman Shah Jaya' was used in referring to the neighbourhood. 'Taman' here means housing estate, while 'Shah Jaya' is the name of the estate. As for social integration, 'having more friends here as compared to the previous place' is used as measurement (St. John, Austin and Baba 1986). A household was defined as two adults with or without children living together.

In terms of location, Selangor was chosen because of its high urbanization rate and because it is also among the earliest states that built low cost houses. The other reason is that the proportion of the three major ethnic groups in Selangor is quite similar to that of Malaysia. There are nine administrative districts in Selangor. They are Gombak, Klang, Kuala Langat, Kuala Selangor, Petaling, Sabak Bernam, Sepang, Ulu Langat and Ulu Selangor. For the purposes of the research, these districts were grouped into two categories: those surrounding Kuala Lumpur (Malaysia's capital city) and those further away. One district from each category was selected for this study. The housing estates chosen in Ulu Langat are located in or near Kajang, a town situated 20 km south of Kuala Lumpur. The three housing estates chosen in Kuala Langat are in or near Banting town, located 60 km southwest of Kuala Lumpur. Comparatively, Ulu Langat has a higher population than Kuala Langat. In terms of ethnic composition, there is not much difference between the two districts.

From each district a list of public low cost housing programmes was obtained. From the list, housing estates which were less than five years old and those with less than 100 houses were removed before the random sample was made. From those remaining, three public low cost housing estates in each of the two districts were chosen randomly. For every housing estate, respondents were chosen at random by using systematically random sampling. The total number of respondents involved in the surveys is shown in Table 1.

The first part of this analysis examines descriptively the household and housing characteristics of the respondents. The paper also discusses the relationship between residential satisfaction and social integration. It then looks at whether the sets of structural variables significantly add to the social integration, over and above satisfaction. If indeed these variables only affect social integration as they affect satisfaction, their inclusion will not add significantly to the fit of the model. Finally, both sets of structural variables are added simultaneously, and test the fit of the complete model against each of the less inclusive models. At each step in the analysis, the relative magnitude and direction of the effects of various specific factors are evaluated by looking at the logistic regression coefficient (Landale and Guest 1985).

Household and Housing Characteristics

Of the total sample of 472 households, 58% were Malay, 22% were Chinese and 20% Indians. All the Malays in the survey are Muslim, with 55% male, 31% between 41 to 50 years of age. 52% received less than six years of formal education and 25% work in the public sector

TABLE 1
Total number of respondents

Ethnic Groups	District					
	Ulu Langat		Kuala Langat		Total	
	n	%	n	%	n	%
Malays	156	64	118	51	274	58
Chinese	50	21	53	23	103	22
Indians	36	15	59	25	95	20
Total	242	100	232	99	472	100

with monthly incomes of RM500 or less, while the wives are mostly housewives. 39% have one or more children still living with them.

Most of the Chinese households (80%) are Buddhist but other religions are also represented. There are more female respondents as the husbands were out at work when the interview was done. The Chinese surveyed are within the age range of 31 to 50 years and nearly half (45%) have received more than nine years of formal education. This is considerably higher than for both the Malay and the Indian respondents. In terms of husbands' occupations, 50% are self-employed, in contrast to 14% Malay and 5% Indians. Perhaps not surprisingly, quite a high proportion of Chinese (56%) earn more than RM1,000 per month. 68% have three or more children living with them, again higher than for the other two groups.

Most Indians (88%) are Hindu and the majority of the Indian respondents are male. As with the other ethnic groups, the majority (58%) belongs to the age group of 31 to 50 years. 57% received nine years or less of formal education. 30% of the husbands work in the public sector and 45% in the private sector. Household incomes tend to be lower than those of Chinese respondents but higher than those of the Malays.

For housing characteristics, the majority of the respondents are homeowners (71%). Before moving here many of them rented a house (44%) and the rest either lived with their own families or in quarters provided by their employers. The house that they lived in at present is a two-bedroom terrace house, with one bathroom and a separate toilet. There is only one small kitchen available and shared space for the lounge and dining room.

EMPIRICAL RESULTS

The results of the logistics regression are presented in Tables 2 and 3. Table 2 shows that independent variables which are significant as shown in column 1, Table 2 were omitted in turn to see its effect and significance on the social integration value in the neighbourhood through the chi-square statistics (see column 2 to column 7, Table 2). The results are discussed in detail below.

Individual and Household Characteristics

It is expected that individual and household characteristics would influence social integration. Results show that only the age of respondents is consistently significant at least at $p<0.05$. To be specific, only residents in the age group of 30 and below show significance at $p<0.05$. The negative coefficient for age indicates that residents who are 30 years and below were one fifth as likely as residents older than 30 years to integrate into the community (see column 1, Table 2). The other variables did not show any significant relationship at the level of 0.05 (Table 2). In the process of integration, especially in making new friends, occupational status, educational attainment, and income are important factors (Jackson 1977:59). Carey and Mapes (1972:14-15) also point out that age, life stage, and job status are among the characteristics of individuals that are shown to affect the visiting level among the neighbours. Since this study focussed on the residents of low cost housing, these criteria are not so important, and are not major criteria influencing social integration. The reason for this is that residents living in public low cost housing tend to be similar in terms of educational attainment, occupational status and incomes, because the allocation policy for public housing is for people with incomes of RM750 or

TABLE 2
Logistic regression for social integration

Column Variable	model 1	2	3	4	5	6	7
Residential Educational Attainment							
5 years and below	-0.1802						
6 to 10 years	0.3450						
Household Incomes (RM)							
750 and below	0.0115						
751 to 1250	0.2596						
No. of Children Living Together							
1 to 2	-0.6253						
3 to 4	0.2850						
5 and above	0.0894						
Age of Respondents							
30 and below	-0.5921*	-0.6130**	-0.7958**	-0.5556*	-0.5653		-0.6940**
31 to 45 years	-0.0678	-0.0110	0.1240	0.0375	-0.0639		-0.0040
Length of Residence In Years							
5 years and below	-0.2718						
6 to 10 years	0.0221						
Ethnic Group	0.7124**	0.7153**	0.6390**		0.6077**	0.6702**	0.7666**
Location	0.8669***	0.8919***	1.0145***	0.8068**	0.8510***	0.8719***	
Residential Satisfaction							
Housing satisfaction	0.7082**	0.6566**		0.5703*	0.6637**	0.5963*	0.6334**
Neighbourhood Satisfaction	0.9215**	0.8539**		0.6700*	1.0796***	0.7689*	0.8585**
Residential Attachments	0.6030*	0.4835	0.4520	0.5861*	0.4360	0.6920**	
Tenancy Status	-0.1118						
Constant	-3.5875	-3.9425	-2.4744	-2.7119	-2.2061	-3.0973	3.0973
(-2)Log likelihood	479.686	497.282	530.533	510.587	511.084	511.084	500.897
d.f.	379	394	420	397	396	396	395
Chi-square value	70.650	59.968	59.427	49.859	46.167	46.16	56.354
d.f.	17	7	5	6	6	5	6

* p<0.05, ** p<0.01, *** P<0.001

less per month. This is the reason why these variables are not significant in this study.

Location

It was assumed that the more urbanised the area, the less integrated its community, as the relationships were more formal and neighbourhood functions were subsumed by other societal institutions, while the less urbanised areas suggested a high degree of social integration and interaction among their residents. Results show that location is consistently significant, to the extent that it manifests the strongest relationship with social integration at level 0.001,

except in column 4 when ethnic group is left out (Table 2). The significance of this variable is also evident from the fact that its omission from the equation reduces the chi-square statistic and the fit of the equation substantially. The chi-square statistic falls from 59.97 (column 2, Table 2) to 43.66 (column 5, Table 2). This significance indicates that residents in Ulu Langat (an area which is more urbanised and is also situated nearer to the business centre, Kuala Lumpur, the capital city of Malaysia) shows higher integration compared to Kuala Langat (an area with small towns, situated further away from Kuala Lumpur). The table also shows that residents of public low cost housing in Ulu Langat are 2.4 times ($e^{0.8919}$=2.4, see column 2, Table 2) more likely to integrate into their neighbourhood than residents in public low cost housing in Kuala Langat. Therefore these findings do not agree with Wirth's (1938) theory which argued that the primary relationship between the residents has changed to a more formal or secondary relationship as a result of urbanisation. The results of this study have particular implications for social integration programmes. Many of the programmes to induce among members in a community have been focussed in urban areas, and the results indicate that these programmes have been relatively successful.

Ethnic Groups

Ethnic groups prefer to stay in areas where they are the majority because they feel more secure and are more likely to integrate with each other in this kind of community (Nuzhat Ahmad 1993). The results from this study show that the assumption holds true for the ethnic groups in Malaysia. In Table 2, the ethnic group's variable is consistently significant at $p < 0.01$. This implies that the Malays are more fully integrated in the community as compared to other ethnic groups, and this is not surprising as the majority of the population living in public low cost housing is Malay. This is due to the housing allocation ratio set up by the government for low cost housing. The ratio is 7:2:1, 7 for Malays, 2 for Chinese and 1 for Indians. From the table it can be seen that the Malays in public low cost housing are 2 times ($e^{0.7155}$=2.0, see column 2, Table 2) more likely than the other ethnic groups to integrate into the community. In addition, the occupation of the respondents also shows that the Malays, many of whom work in the public sector, spend more time in the neighbourhood compared to the Chinese, many of whom are occupied in their businesses. Normal working hours for public servants are from 8.00 in the morning until 4.30 in the afternoon. Those who are involved in business or private firms will tend to spend more time at work. The Malays also participate more in local organisations as compared to the other ethnic groups. All these factors influence the Malays' level of integration in the community especially among themselves, positively. This is not surprising because as stated by Mohd Razali (1992) the ethnic groups in Malaysia are more comfortable in their own ethnic groups and they sometimes, especially the Malays, demand that they should be allocated together in a block or area with their own ethnic group. However, he also stated that the Malay can more easily accept other ethnic groups to be with their community as compared to Chinese or Indians.

Community Attachments

Oropesa (1989) argued that there are residents who participate in local organisations because of personal, social or economic interests. Specifically, residents who own valuable property have an incentive to participate because of their economic interest in the state of the property market. Homeownership is seen as the most secure form of housing tenure. One of the benefits claimed for homeownership is that it can enhance democracy through creating incentives for greater community involvement and social attachment (Carlson 1989). Saunders (1990) also argued that homeowners have higher incentives to participate in local organisations. This would suggest that the same argument can be used for social integration where it might be assumed that homeowners will integrate more into the community than tenants. But this is not the case in this study. Table 2 shows that tenure is not a significant factor in social integration (at level 0.05). Homeownership or renting makes no difference to social integration among the residents of the low cost housing sector in Selangor.

Length of residence has also been regarded as a good indicator for social integration. The longer the length of residency, the higher the possibility for these people to integrate into the community where they live. But this analysis reveals that length of residence is not an

important factor for social integration. However, the negative coefficient value for residents of five years or less shows that they are less likely to integrate into the neighbourhood as compared to the other residents who have lived there longer (Table 2).

Many studies have shown the existence of a relationship between local friendships, neighbourhood and residential attachments. It was also found that attachment was generated by informal and formal participation in the local area (Woolever 1992:99-104). The analysis shows that residential attachment is not consistently significant with social integration. It is significant only in column 4 at level 0.05 when ethnic groups were left out and in column 6 at level 0.01 when the age of respondents was left out (Table 2). What can be concluded from these findings is that residents who are attached to their residence are 2 times more likely to integrate into the community ($e^{0.6920}$=2.0, see column 6, Table 2). Attachment towards residence may also be due to ethnicity. Since most of the neighbourhoods involved in this analysis are a Malay majority, it is not surprising to see that attachment is a variable for social integration in this study. The findings also show that households are more attached to a neighbourhood if the majority of the population is of a similar ethnic group as theirs, giving rise to a reluctance to move out of that neighbourhood. The implication of the finding is that in the future, there is likely to be an increase in the segregation of people by ethnic backgrounds in the public low cost housing sector.

Residential Satisfaction

This study shows that both housing and residential satisfaction are constantly significant with social integration ($p<0.05$, see Table 2). Residents who are satisfied with their neighbourhoods are 2.4 times ($e^{0.8539}$=2.4 see column 2, Table 2) more likely to integrate compared with residents who are not satisfied with their neighbourhoods. Residents who are satisfied with their housing are 1.9 times ($e^{0.6566}$=1.9 see column 2, Table 2) more likely to integrate than residents who are not satisfied. The finding implies that those who are satisfied with their residence are more likely to stay longer and be more integrated into the community as compared to those who are not satisfied. Razali (1991) stated that one of the reasons people move is because they are not satisfied with their existing house and neighbourhood. If the turnover rate of residents is high in the area, it can affect the style and strength of relationships in the area. This study also shows that without considering residential satisfaction (see column 3, Table 2) age, ethnic groups and location are significantly related to social integration. When the satisfaction variables are included as variable (column 2, Table 2), all the three statistical variables from column 3, which are significantly related to social integration, continue to have the same quality. Some of the coefficients are reduced in size, but the reduction is generally small. What can be concluded here is that all the variables, which show significant values, operate in an independent manner to predict social integration. Therefore satisfaction is an important variable in predicting social integration. In trying to solve housing demand, the government has introduced many standards and designs for low cost housing. There are even suggestions that size and quality should be sacrificed to ensure that housing targets can be achieved This study suggests that for public housing to be used as an instrument to achieve social integration, subjective measurements, that is the feelings, perceptions and attitudes of the people, should be taken into consideration.

Table 3 compares the two districts, Ulu Langat and Kuala Langat, and also Malays and non-Malays. For residents in Ulu Langat, the variable residential satisfaction has a significant relationship with social integration at $p<0.05$ (see Table 3). The other variables such as age, residential attachment and ethnic group did not show any significant relationship. Therefore in Ulu Langat, respondents who are satisfied with their houses are two times more likely ($e^{0.6790}$=1.97, Table 3) to integrate into the community than residents who are not satisfied. Residents who are satisfied with their neighbourhood are 3 times ($e^{1.1829}$=3.3, Table 3) more likely to integrate into the community.

For Kuala Langat, housing satisfaction, age and ethnic group variables have a significant relationship with social integration. Residents who are satisfied with their houses are two times more ($e^{0.7192}$=2.05, Table 3) likely to integrate into the community compared with residents who are not satisfied. The Malays here are three times ($e^{1.0032}$=2.7, Table 3) more likely to integrate

as compared with the non-Malays. The negative coefficient indicated that the age group of 30 years and less are one-quarter more likely to participate in social integration as compared with respondents of more than 30 years of age.

A comparison of the two districts shows that in Ulu Langat there is no difference between ethnic groups for social integration, while in Kuala Langat there is a difference. The Malays in Kuala Langat integrate more than the non-Malays. Residents in both areas feel that housing satisfaction is an important predictor of social integration, as both show a significant relationship with social integration at level 0.05 (Table 3). Between the two districts, there are no significant differences for the relationship between social integration and housing satisfaction. This means that for both districts, housing satisfaction is a very important predictor for social integration. One of the main reasons for this is that the majority of the respondents in both districts are Malays. For the Malays, housing satisfaction shows a strong significant relationship with social integration at level 0.001 (Table 3). The Malays who are satisfied with their houses are three times ($e^{1.175}$=3.2, Table 3) more likely to integrate as compared with Malays who are not satisfied with their houses. Residential attachment and district are also important predictors, for the Malays, for social integration. Both these variables show a significant relationship with social integration at level 0.05 (Table 3).

Lastly, looking at the non-Malays column it can be seen that none of the variables show a significant relationship at level p<0.05 with social integration (Table 3). This is one of the major differences between the Malays and non-Malays. The reason for this difference is that for the non-Malays, residential aspect is not an important factor in determining their behaviour for social integration. But for the Malays it is an important aspect and may be due to the probability of the Malay obtaining other low cost housing being higher as compared to the non-Malays.

CONCLUSION

To summarise the above findings, age of respondents, ethnic group, location, residential attachment and residential satisfaction are major determinants of social integration in public low cost housing in Selangor, Malaysia. The result of this study shows that social integration among residents here is driven by considerations different from those found in other studies in the developed countries. Even among the ethnic groups in Malaysia, it is shown that social integration is driven by different considerations. This is not surprising as the different ethnic groups have different cultures and ways of life.

The factors which could have a significant impact on social integration, and implications

TABLE 3
Logistic regression for social integration by ethnic groups and areas

Variables	Ethnic Groups		District	
	Malay	Non-Malay	Ulu Langat	Kuala Langat
Housing Satisfaction	1.1749***	-0.2208	0.6790*	0.7192*
Neighbourhood Satisfaction	0.7025	0.9261	1.1829**	-0.0485
Age				
30 years and less	-0.4482	-0.8727	-0.4095	-0.7788*
more than 30 years	-0.0914	0.1758	-0.1023	0.0778
Residential Attachment	0.7563*	0.2747	0.7431	0.4993
Ethnic Groups			0.3853	1.0032***
District	1.2268***	0.5760		
Constant	-3.5791	-2.3035	-2.7158	-1.1053
-2 Log Likelihood	258.089	201.156	257.259	235.924
d.f.	237	151	200	188
Chi square value	51.2	15.8	23.1	25.7
d.f.	6	6	6	6

* p<0.005,** p<0.01, *** p<0.001

for the restructuring policy of the government are location, ethnic group and residential satisfaction.

The significance of location suggests that the focus of the national unity programmes should be widened to include both urban and non-urban areas.

For ethnic groups, the results show that they prefer to live in an area where they are the majority. The results also suggest that the Malays are more likely to stay in their own community and the non-Malays are more receptive to living among other ethnic groups. This may be due to the Malays being the majority while the other ethnic groups are the minority. Therefore, to ensure the success of social integration programmes in public housing, the allocation ratio set by the government should be revised and a more balanced allocation introduced. Only then can the feeling of living together in one area be built up.

The significance of residential satisfaction in determining social integration also suggests that it may have wider implications for the national integration programmes. The introduction of a social integration policy for the residents in low cost housing should be in line with housing policy designed to maximise residential satisfaction. The results suggested that residents with a strong residential attachment and high level of residential satisfaction are more willing to participate in community activities, which may in turn enhance social integration. Factors which could affect residential satisfaction, such as defects in the physical structure of the housing, lack of well-maintained public facilities, and poor social and physical environment could also adversely affect the achievement of greater social integration.

REFERENCES

BASSET, K. and J. SHORT. 1980. *Housing and Residential Structure.* London: Routledge and Kegan Paul Ltd.

CAREY, L. and R. MAPE. 1972. *The Sociology of Planning.* London: B.T.Batsford Ltd.

CARLSON, J. 1987. Appendix B: a note on United States experience on security of tenure and shelter. In *Shelter, Settlement and Development,* ed. L. Rodwin, Allen and U.S.A. Unwin.

COHEN, Y. S. 1986. Attachment to place and social networks in times of change. In *Planning in Turbulence,* ed. D. Morley and A. Shachar. Jerusalem: The Magness Press Hebrew University.

DAVIES, E. E., and M. FINE-DAVIES. 1981. Predictors of satisfaction with housing and neighbourhood: a nationwide study in the Republic of Ireland. *Social Indicators Research* **9**: 477-494.

DRAKAKIS-SMITH, D. 1980. The role of the private sector in housing the urban poor in Peninsular Malaysia. In *Issues in Malaysian Development,* ed. J. C. Jackson and M. Rudner, p. 305-337. Kuala Lumpur: Heinemann Education Books (ASIA) Ltd.

GANS, H. 1968. *People and Plans: Essays on Urban Problems and Solutions.* New York: Basic Books.

HUSNA, S. and Y. NURIZAN. 1987. Housing provision and satisfaction of low-income households in Kuala Lumpur. *Habitat International* **11(4)**: 27-38.

LANDALE, N. S. and A. M. GUEST. 1985. Constraint, satisfaction and residential mobility: Speare's model reconsidered. *Demography* **22(2)**: 199-222.

MARANS, R. W. and W. RODGERS. 1975. Towards an understanding of community satisfaction. In *Metropolitan America,* ed. A. H. Hawley and V. P. Rock. National Academy of Science.

MENAHEM, G. and S. SPIRO. 1989. Urban neighbourhoods and the quest for community: implications for policy and practice. *Community Development Journal* **24(1)**: 29-40.

MOHD. RAZALI AGUS. 1992. *Pembangunan Perumahan, Isu dan Prospek.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

New Straits Times. 1992. July 29.

NUZHAT AHMAD. 1993. Choice of neighbourhoods by mover households in Karachi. *Urban Studies* **30(7)**:1257-1270.

OROPESA, R. S. 1989. Neighbourhood associations, political repertoires and neighbourhood exits. *Sociological Perspectives* **32(4)**: 435-452.

PACIONE, M. 1990. Urban liveability: a review. *Urban Geography* **11(1)**: 1-30.

PENG, K. K. 1982. The housing crisis and Fourth Malaysian Plan. *Development Forum* **12(1)**.

RAZALI, I. 1991. The residential mobility of the Malay middle class in Kuala Lumpur, Malaysia. Thesis submitted to the University of Sheffield, Department of Town and Regional Planning, Unpublished Ph.D Thesis. June.

SAUNDERS, P. 1990. *A Nation of Homeowners.* London: Unwin Hyman Ltd.

SATSANGI M. and A. KEARNS. 1992. The use and interpretation of tenant satisfaction surveys in British social housing. *Government and Policy, Environment and Planning C* **10(3)**: 317-331.

ST. JOHN, C., M. D. AUSTIN and Y. BABA. 1986. The question of community attachment revisited. *Sociological Spectrum* **6**: 411-431.

TAI, C. 1988. *Housing Policy and High Rise Living. A Study of Singapore's Public Housing.* Singapore: Chopmen Pub.

WEIDEMANN, S. and J. R. ANDERSON. 1985. A conceptual framework for residential satisfaction. In *Human Behaviour and Environment* ed. I. Altman and C. Werner, **2:** 153-182. New York: Plenum Press.

WIRTH, L. 1938. Urbanism as a way of life. *American Journal of Sociology* **44** July: 1-42.

WOOLEVER, C. 1992. A contextual approach to neighbourhood attachment. *Urban Studies* **29(1)**: 99-116.

(Received: 24 April 2001)