

The Quality of Life of Residents in Five Urban Renewal Districts

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Housing and Quality of Life

When the Government designates a particular cluster of buildings (henceforth referred to as a “district”) for urban renewal, it makes the assumption that the buildings’ physical condition has deteriorated beyond reasonable repair. Objective data on the structural condition of these buildings will no doubt inform the decision-making process. What have been overlooked, even ignored, are the residents’ subjective perceptions of and (dis)satisfaction with the physical condition of their residence, and how those perceptions and (dis)satisfaction may vary from one urban renewal district to another. Knowledge of the subjective, human side to urban renewal can throw light on the situation beyond the structural conditions of buildings, particularly in the difficult and often protracted process of persuading residents to vacate their homes. For example, the Urban Renewal Authority’s recent attempts at land resumption and property acquisition for development have shown that residents who are satisfied with their residential situation, compared to those who are not, are more resistant to vacating their homes (Ho *et al.*, 2003).

The human side of urban renewal is not confined to the residents’ subjective perception of their immediate living environment. It also extends to the surrounding neighbourhood and community environment: how residents perceive their neighbours and the surrounding community, the extent to which they are satisfied or dissatisfied with them, their access to

interpersonal networks and social services therein, their social participation in the area and so forth. Residents can see in their “old” buildings and “old” communities economic advantages, convenience and charm that can easily escape the attention of planners and, along with this oversight, the many problems that residents have to deal with once they embark on their journey of relocation. Knowledge of residents’ views and feelings would better inform our understanding of what it really means to be relocated; the social costs to individual residents, the disruption of the “social capital” (Putnam, 2000) that has been accumulated in the community, the problem of social integration in the new community and so on.

Research in the social sciences has shown that relocation or resettlement will disrupt not only the living pattern to which residents have become habituated, but also their existing social support network. Both the Organization of Economic Co-operation and Development (OECD) and the World Bank have incorporated these psycho-social considerations in their guidelines on “voluntary resettlement”, a subject not unlike relocation in the present context of urban renewal and, more generally, on the importance of nurturing and retaining social capital (OECD, 2001; World Bank, 2001). In Hong Kong the Urban Renewal Authority set up by the government to be responsible for the massive programme of urban renewal, has similarly endorsed the importance of human considerations. This is enshrined in its “people-first” or “people-centred” policy discussed by Kam *et al.* (2004, chapter 4 in the present volume. See also Fisher, 2001).

In this chapter, we develop a Quality of Life (QoL) approach to understanding the housing situation of residents who are caught up in urban renewal. QoL is a multi-faceted, complex concept that has generated numerous studies ranging from sociology (Schuessler & Fisher, 1985) to medical sociology (Farquhar, 1994) and nursing (Draper, 1997), and from ageing (Abeles *et al.*, 1994) to the frail elderly (Birren *et al.*, 1991) and health care (Nordenfelt, 1994). It has become a scholarly concern on the international scene (Orley & Kuyken, 1994). To our knowledge, no QoL study has been carried out specifically on residents facing urban renewal. In this context, our research represents a pioneering attempt to extend QoL research to urban renewal, an important socio-economic development in Hong Kong and, in so doing, to shed new light on discussion of urban renewal from a QoL perspective. Given the importance of housing as both an economic and a social concern, the usefulness of housing-based QoL indicators to gauging social development in Hong Kong should be obvious (Hong Kong Council of Social Service, 2002).

Below, we treat residents’ perceptions of and satisfaction with their (a) home and the (b) wider neighbourhood/community as two housing-specific domains of QoL. Indicators in these two domains will be constructed to gauge residents’ QoL and to compare the QoL of residents in five urban renewal districts. In addition to housing-specific QoL, we also adopt a generalized measure of QoL to establish the extent of correlation between housing-specific and generalized measures of QoL. For present purposes, a shorthand version of the latter in the form of “Life Satisfaction” will suffice. That is, we shall make use of LS as a simplified measure of QoL: the higher the LS the better the QoL (Neugarten *et al.*, 1961).

Survey

A survey was carried out in February–March and in June, 2003 of 539 residents in five districts. (The timing of the survey was determined in part by the urban renewal timetable of the Urban Renewal Authority and by the outbreak of the “Atypical Pneumonia” epidemic from mid-March to early June.) All household units still living in the districts at the time of the survey were contacted, with the aim of interviewing a household member in one of these classes: elderly (56 years or above), middle-aged (30–55 years) or young (12–29 years). Missed calls were revisited once before discarding the subjects from the sample. The response rate, excluding missed calls, was high (82%).

The 539 residents were distributed in the five districts as follows: Tai Kok Tsui (128), Sham Shui Po/Mongkok (112), Wan Chai (42), Sai Ying Pun (169) and Sheung Wan (88). Mongkok, with relatively few residents ($n=34$), was combined with Sham Shui Po as one district for data analysis because of their geographical proximity to each other and the similarity of the structural conditions of their buildings. The relatively low number in Wan Chai was due to the small number of affected buildings and the early relocation of the residents before the present survey began.



Figure 7.1 Location of the five urban renewal districts

As can be seen in Table 7.1, for the sample as a whole, men and middle-aged residents were over-represented whereas women and younger residents were under-represented. Gender and age stratification was uneven in the five districts. To control for possibly confounding effects due to the uneven distributions of gender and age, gender and age were treated as covariates in the Analyses of Covariance (ANCOVA) below.

Table 7.1 Age and gender distribution of the sample

	Gender		Total
	Male	Female	
Below 30 years	47	41	88
30–55	142	111	253
56 and above	127	71	198
Total	316	223	539

Perception of and Satisfaction with the Residence

Perceived building problems

A perceived building problem (PBP) index was constructed by asking residents to check problems against seven categories:

1. Outside wall (such as peeling of paints and similar minor problems)
2. Inside wall and structure (such as a crack)
3. Water seeping into the building
4. Blockage of water and drainage pipes
5. Inadequate fire safety provisions
6. Unhealthy living environment
7. Other problems

Seventeen per cent of residents (n=91) indicated they had no problem at all. Another 50% encountered problems in three or more (3+) categories. If we take the 3+ PBP Index as an indication of severe problems, then approximately half of the overall sample perceived their living quarters to be in a seriously bad physical condition.

Variations of PBP Index across the five districts were tested by Analysis of Covariance (ANCOVA) with gender and age treated as covariates. The results showed a significant ($F(4,$

532)=23.567, $p<0.001$) variation with the worst PBP Index in Tai Kok Tsui and the best PBP Index in Sai Ying Pun (see Table 7.2).

Table 7.2 Mean perceived building problem (PBP) index

Districts	PBP Index
Tai Kok Tsui	3.8
Sheung Wan	2.8
Sham Shui Po/Mong Kok	2.6
Wan Chai	2.4
Sai Ying Pun	1.8

Note. PBP Index varies from 0 (best) to 7 (worst).

Satisfaction with residence

Residents were asked to indicate their level of satisfaction and dissatisfaction with various aspects of their residence, such as floor area, ventilation, hygienic conditions and natural light. Afterwards, they indicated their overall level of satisfaction on a 5-point scale (5=very satisfied). For the sample as a whole, the overall satisfaction was 2.9 which was slightly on the dissatisfaction side. Analysis of covariance across districts showed a significant ($F(4, 532)=4.873$, $p<0.001$) variation with the highest satisfaction in Sai Ying Pun and Sheung Wan and the lowest satisfaction in Sham Shui Po/Mongkok (see Table 7.3).

Table 7.3 Mean residential satisfaction

Districts	Satisfaction with residence
Sai Ying Pun	3.2
Sheung Wan	3.2
Tai Kok Tsui	2.9
Wan Chai	2.8
Sham Shui Po/Mong Kok	2.8

Note. Mean satisfaction varies from 1 (lowest) to 5 (highest).

Residential needs

A Residential Needs (RN) Index was constructed by asking respondents to indicate what aspects of their residential conditions they would most strongly expect to improve in their new residence. They could check up to nine items, as follows:

- Size of total residential area
- Size of sleeping area
- Size of kitchen area
- Size of dining area
- Size of study area
- Size of toilet area
- Ventilation
- Hygiene
- Natural lighting

The mean level of needs varied significantly across districts ($F(4, 532)=2.385, p<0.05$), with the highest need in Sheung Wan and the lowest need in Tai Kok Tsui (Table 7.4).

Table 7.4 Mean residential needs

Districts	Residential needs
Sheung Wan	5.6
Sai Ying Pun	4.8
Wan Chai	4.8
Sham Shui Po/Mong Kok	4.7
Tai Kok Tsui	4.2

Note. Needs vary from 0 to 9.

Residents' confidence in realizing their housing needs was quite high with an overall mean of 3.4 (1= no confidence, 5=very confident). The ANCOVA results showed that the confidence levels did not vary significantly across districts.

The Broader Context: Neighbourhood and Community

Satisfaction (or dissatisfaction) with the immediate living environment, as reported above, is an important aspect of residents' quality of life and should not be treated as synonymous with the adequacy or soundness of the physical structure of a building, even though the latter may

contribute greatly to subjective satisfaction. The neighbourhood and the community may also play an important role in shaping how one views one's living environment since the living quarter is embedded in a neighbourhood, which, in turn, is part of a larger community. It is also possible that people may assign different levels of importance to different aspects of the living environment. In terms of the level of satisfaction, some may focus exclusively on the units in which they reside, while others may look beyond their homes. These are issues that need to be determined empirically.

Although urban renewal is often based on the belief that the health and safety of residents may be compromised as a result of the progressive deterioration of residential buildings and the related infrastructure, the willingness or reluctance of the residents to relocate may be determined not just by the perceived "liveability" of their homes, but also by their attachment to their neighbours and the community. According to data from the survey, the respondents on average had lived just under 15 years in the same residential unit. On average, they had lived in the same district for 24 years. Social networks, human relationships and psychological attachments could have developed or emerged over those years (Moorer & Suurmeijer, 2001). Thus, it is important to assess the contextual effects of neighbourhood and community on people's willingness to co-operate with urban renewal efforts and to relocate.

Satisfaction with neighbourhood

In addition to asking various questions about how residents felt about the physical aspects of their residences, the survey assessed the extent to which the respondents were satisfied with their neighbours and the community. It appears that the residents were generally satisfied with their neighbours. Almost 65% of the respondents said that they were "very satisfied" or "fairly satisfied" with their neighbours. Less than 8% were either "dissatisfied" or "very dissatisfied". Table 7.5 shows the mean levels of neighbourhood satisfaction in the five districts.

Table 7.5 Mean neighbourhood satisfaction

Neighbourhood	
District	satisfaction
Wan Chai	3.9
Sheung Wan	3.8
Sham Shui Po/Mong Kok	3.8
Sai Ying Pun	3.7
Tai Kok Tsui	3.7

Note. Mean satisfaction varies from 1 (low) to 5 (high).

This fairly high level of satisfaction was generally borne out by three other questions on interactions with neighbours. For instance, about 36% of the respondents indicated that they talked to their neighbours “always” or “often”. With respect to neighbours helping one another, 28.5% of the respondents indicated that they and their neighbours “always” and “often” helped one another. Thus, it is not surprising that 65% the respondents reported that they were “very satisfied” or “fairly satisfied” with their overall relationship with their neighbours. All three questions were fairly highly correlated with neighbourhood satisfaction.¹

Variations of neighbourhood satisfaction across districts were tested by an analysis of covariance. The results showed no significant variation across districts.

Satisfaction with the community

Generally speaking, the level of satisfaction with the communities in which the residents of the five urban renewal projects lived was very high. Slightly over 70% of the respondents indicated that they were either “very satisfied” or “fairly satisfied” with their community. Only about 9% of the respondents were “dissatisfied” or “very dissatisfied” with their community. Variations of community satisfaction across districts was significant ($F(4, 528)=8.79, p<0.001$), with the lowest level of satisfaction in Tai Kok Tsui and the highest in Wan Chai (see Table 7.6).

Table 7.6 Mean community satisfaction

District	Satisfaction with community
Wan Chai	4.3
Sai Ying Pun	3.9
Sheung Wan	3.9
Sham Shui Po/Mong Kok	3.8
Tai Kok Tsui	3.5

Note. Mean satisfaction varies from 1 (low) to 5 (high).

Attachment to the community

An indication of community attachment is whether or not the respondents would miss the community in which they live once they were “resettled”. The results show that the respondents

¹ Correlation coefficients of “satisfaction with neighbourhood” with “talked to neighbours”, “neighbours helping one another” and “satisfied with overall relationship with neighbours” are 0.41, 0.38 and 0.48, respectively. All are statistically significant at $p<0.01$.

were fairly evenly split. About 48% of the respondents said that they would not miss their present community at all or would miss it “a little bit”. On the other hand, about 52% said that they would “strongly miss” or would miss their present community “quite a bit”. Analysis of covariance showed no significant variation across the five districts.

The proportion of respondents who would miss their community was somewhat smaller than the proportion of respondents who were satisfied with their community. This apparent discrepancy could be due to the fact that many residents believed the new community into which they were to be resettled would be better than the one they were residing in at the time of the survey. Thus, about 54% of the respondents were either “very confident” or “fairly confident” that their future community would be better than their current one. It is worth noting that there was a negative correlation ($r = -0.23$; $p < 0.01$) between community satisfaction and confidence that future community would be better. In other words, those who said that they would not miss their present community were more likely to believe that they would be moving into a better community.

Linking Residence with the Wider Neighbourhood and Community

The three residence-based QoL indices (PBP index, satisfaction with residence, and residential needs) were significantly inter-correlated, as were the three neighbourhood/community-based QoL indices (satisfaction with neighbours, satisfaction with community, and miss community). As shown in Table 7.7, the two sets of inter-correlations, highlighted respectively in italics (residence-based indices) or bold type (neighbourhood/community-based indices), varied from .17 to .38 (in absolute values) and thus indicated a moderate level of internal consistency. Between the two sets of indices, as can be expected, the correlations (shown in plain type) were generally weaker and some were not significant.

Table 7.7. Intercorrelations among housing-based QoL indices

	General Building Problems	Satisfaction with residence environment	Residential need	Satisfaction with neighbours	Do you miss your community?
Satisfaction with community	-0.24**	0.34**	-0.14**	0.27**	0.30**
Satisfaction with neighbours					0.17**
Perceived Building Problems Index		-0.38**	0.18**	-0.14**	-0.06
Satisfaction with residence			-0.37**	0.22**	0.17**
Residential need				-0.11*	-0.01

Note. Italicized correlations are correlations among residence-based indices; those in bold type are correlations among neighbourhood/community-based indices. Correlations between residence- and neighbourhood/community-based indices are shown in plain type.

Life Satisfaction

In the survey, residents were also asked to respond to items measuring life satisfaction in general:

- I am as happy as when I was younger.
- My life could be happier than it is now (reversed coded).
- These are the best years of my life.
- The things I do are as interesting to me as they ever were.

The four items were selected from the Life Satisfaction Index Form A (Neugarten *et al.*, 1961). The index is easy to administer and acceptable to a wide age range, including older people (James & Davis, 1986), thus making it a more suitable tool for the present study than

other, more lengthy instruments (such as World Health Organization, 1998). The four items were translated into Chinese for the present survey and found to have satisfactory reliability ($\alpha = .72$). To test whether QoL varied across districts, a one-way ANCOVA was carried out on the LS scores with gender and age treated as covariates. The results showed no significant variation.

Predicting life satisfaction from housing-based QoL indices

The 4-item Life Satisfaction scale scores were regressed on the six housing-based QoL variables and, in order to control for demographic variations, also on gender, age, and district. The variables were coded as follows:

- Gender (male=1, female=2).
- Age (young =1, middle-aged = 2, elderly=3).
- Districts (Tai Kok Tsui = 1, Sham Shui Po/Mong Kok = 2, Wan Chai = 3, Sai Ying Pun = 4, Sheung Wan = 5).
- Perceptions of/satisfaction with residence (perceived building problem index, overall satisfaction with residence, and residential needs index).
- Perceptions of/satisfaction with neighbourhood/community (satisfaction with neighbours, overall satisfaction with community, extent of missing community if relocated).

The results are shown in Table 7. 8. Collectively the nine predictor variables accounted for 11% of the variance. However, only three variables had significant independent effects on life satisfaction. LS was higher (a) for men than for women, (b) when residents perceived fewer building problems and (c) when residents were more satisfied with their living quarters. Note that none of the neighbourhood/community variables had any significant independent effects, whereas two of the residence variables had.

Table 7. 8. Outcome of regression analysis predicting life satisfaction

Predictor variables	β	$p =$
Age group	0.02	0.663
Gender	- 0.10 *	0.040
Renewal districts	0.01	0.832
Perceived building problems	- 0.12 *	0.022
Satisfaction with residence	0.19 *	0.001
Residential need	0.07	0.184
Satisfaction with neighbours (5=very satisfied to 1=very dissatisfied)	0.08	0.123
Satisfaction with community (5=very satisfied to 1=very dissatisfied)	0.07	0.223
Extent of missing community when relocated (4=strongly missed to 1=not missed)	0.01	0.901

* $p < .05$

Conclusion

In an attempt to reveal residents' subjective, human responses to urban renewal, two sets of housing-based Quality of Life indices were developed to tap into the quality of the immediate living environment and of the wider neighbourhood/community, respectively. Indices were, as expected, moderately inter-correlated within each set and weakly inter-correlated between sets. This pattern of correlations indicates a satisfactory degree of the convergent and divergent validity of the indices, in addition to the face validity of the indices. Thus the indices provide the necessary tools for applying a QoL approach to urban renewal. From a survey of 539 residents based on these indices two broad findings are discernable.

First, QoL pertaining to the immediate living environment (residence) was generally poorer than QoL pertaining to the wider environment. For example, satisfaction with the residence (mean = 2.9) was much lower than satisfaction with the community (mean = 3.8). An important implication of this comparative finding is that urban renewal in the form of pulling down

buildings and dispersing residents from the community may place residents in a dilemma. On the one hand, relocating residents to a physically better residence would improve their currently low residence-based QoL, and hence would be able to make an immediate positive impact on a domain of QoL that is most in need of improvement. On the other hand, however, moving away from a familiar neighbourhood and community that has contributed positively to residents' QoL would place them in a new, uncertain environment that may turn out to be of poorer quality. How residents cope with relocation and improve their QoL in the new environment are issues that the Urban Renewal Authority should address under its "people-centred" approach to urban renewal. It is here that social science research can play an important part by understanding residents' coping strategies and environmental determinants of their QoL.

The second broad finding is that on most housing-based QoL indices, Tai Kok Tsui stood out as the poorest among the five districts. If we take Tai Kok Tsui as a benchmark for identifying districts for priority urban renewal, then the housing-based QoL indices developed in the present survey may be used to prioritize the districts that are in the queue. This application is pertinent given the economic downturn in Hong Kong and the increasing need to reduce the financial burden of the Urban Renewal Authority by taking some of the districts off the renewal list for alternative treatment such as rehabilitation and better maintenance (see Kam *et al.*, 2004). The question of how to identify districts that would be most suitable for, and benefit the most from, building rehabilitation and other means of lengthening their life span has become critically important. The application of QoL indices, we propose, would be a viable and relative cheap way of collecting relevant "people-centred" data for making informed decisions. Another advantage of applying a QoL approach to this issue is that decisions based on QoL would be more acceptable to residents concerned. Further, QoL information would be useful for channelling limited resources to specific areas of the residential and community environments most in need.

Having developed a QoL approach to ageing buildings by constructing housing-based QoL indices, we also attempt to link these indices back to traditional QoL research by relating the housing-based QoL indices to a generalized measure of QoL (Life Satisfaction). For this purpose the latter was regressed on the six housing-based QoL indices along with gender, age, and district. The results showed that QoL pertaining to residence, but not QoL pertaining to the wider environment, significantly predicted life satisfaction. Specifically, perceived building problems and the overall satisfaction with residence were the significant housing-based QoL predictors (along with gender). The finding suggests that at least for the present sample of residents, their immediate living environment was more important than the wider environment for their life satisfaction.

In addition to the results and findings summarized above, the present survey provides a baseline prior to relocation for a future longitudinal study on residents' post-relocation QoL. The comparative data, when available, would be useful for assessing the social impact of urban renewal and, just as important, for understanding how residents cope with and make the best use of the experience, and why some of them may have been more successful than others. These are important issues because the impact of rehousing, though it superficially appears as a

potentially positive change to physical living conditions, is in fact complex. For example, in a pioneering study of the impacts of housing the poor in Hong Kong in the 1960s, Hopkins (1971) has cast doubt on the belief that resettled people would necessarily experience an improved quality of living that was beyond the reach of squatters who remained unresettled. The current situation, some 40 years later, is even more complex. As a result, the extent to which urban renewal can achieve the Urban Renewal Authority's "people-centred" objective should not be taken for granted, but requires even closer research scrutiny.

Since people work and live in buildings, the environment created by buildings is a major determinant of their quality of life. The building and quality of life nexus, being so strongly bonded, beckons the attention of both the building and social sciences. To this end, the purpose of the present chapter has been to look at the quality of life end of the nexus. In closing, let us touch base with the wider social context in which urban renewal has become a necessary and regular part of city life. As the population of Hong Kong grows, so does the number of new buildings and, importantly – as this is the focus of the present volume – the number of ageing buildings. The stock of ageing buildings is vast and increasing. Many of them are falling into dilapidated and irredeemable conditions and yet a large number can be rejuvenated. In the past, urban renewal policy driven mainly by economic considerations has narrowed the option of urban renewal to one of demolishing old buildings and replacing them with new ones, when in fact a wider range of options, such as rehabilitation and preservation, are available. These other options may contribute more to quality of life, and if so, their adoption will pay dividends. In the present climate of economic downturn and falling property prices, where demolition and rebuilding are no longer as economically attractive as before, it is all the more compelling to place the building and quality of life nexus in the wider context of rehabilitation and preservation.

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