Social Impacts of the Marking Scheme in Public Housing in Hong Kong

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Abstract To improve environmental hygiene in public housing estates in Hong Kong, the Housing Department launched the Marking Scheme for Tenancy Enforcement in Public Housing Estates in 2003. The marking scheme operates as a penalty-point system where sitting tenants will be expelled from their public housing units if they receive penalty points up to a certain level for committed misdeeds. By its nature, the marking scheme is a measure to tackle neighbourhood problems or so-called antisocial behaviour (ASB) in public housing. Yet, it was implemented without comprehensive public consultation a priori. Besides, why this control selectively targets public housing tenants but not residents in other housing tenures is not justified. More importantly, no previous attempt has been made to investigate the impacts of the marking scheme. To straddle the existing research gap, this study aims to explore the social impacts brought about by the marking scheme on public housing tenants through a structured questionnaire survey. In the respondents' eyes, the effectiveness of the scheme to rectify public housing tenants' bad behaviour is doubtful. Moreover, harmony within families and neighbourliness seems to be undermined by the scheme. Recommendations are then provided to public administrators regarding ASB control in Hong Kong.

Keywords Antisocial behaviour · Environmental cleanliness · Public housing · Social impacts · Quality of life

1 Introduction

Housing quality or liveability has been regarded as one of the major determinants of quality of life (QoL) in an urban environment (e.g. van Kamp et al. 2003; Das 2008). Similar to QoL, housing quality is multi-attribute by nature. It is not only determined by relatively fixed factors such as site planning, architectural design and provisions of

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building services. As pinpointed by Wong et al. (2006), ‘soft’ issues such as housing operations and management also matter in the determination of housing quality. While housing disrepair and mismanagement have long been ascribed to the non-participation or inactivity of residents in building upkeep, the impacts of neighbourhood problems or so-called antisocial behaviour (ASB) in housing started gaining growing attention from policy makers, housing authorities, residents and academics in Western countries in recent years. A large number of complaints about different types of ASB have been lodged, demonstrating the seriousness of the predicament. For example, approximately 25% of the population of Australia have complained about vandalism such as graffiti and damage to property in their neighbourhoods (Australian Bureau of Statistics 2006). In Northern Ireland, 101,561 incidents of ASB were reported in 2006/07 (Criminal Justice Inspection Northern Ireland 2008). In 2009, the American Housing Survey revealed that about 25.4 million and 9.8 million occupied housing units in the US suffered from typical problems of noise and litter, respectively (United States Census Bureau 2010).

Although different types of ASB in housing (e.g. littering, noise nuisance and throwing objects from heights) are common in Hong Kong, they did not attract much social concern before 2003. As shown in Table 1, ASB was dealt with in a fragmented manner then, and there was no central or consolidated policy to contain the problem. Yet, the picture changed after the outbreak of Severe Acute Respiratory Syndrome (SARS) in early 2003 in the city. In response to the epidemic, which revealed the painful consequences of neglected environmental hygiene in housing, the Government of the Hong Kong Special Administrative Region (hereinafter ‘the Hong Kong Government’) implemented the Marking Scheme for Tenancy Enforcement in Public Housing Estates in August 2003, with a stated aim to improve the hygienic and living conditions in public housing estates in the territory (Team Clean 2003). The marking scheme operates as a penalty-point system where sitting tenants will be expelled from their public housing units if they receive penalty points up to a certain level for committed misdeeds.

According to the Hong Kong Government’s publicity, the marking scheme is represented, to all intents and purposes, as a measure to curb residents’ misbehaviour in public housing estates. Nevertheless, it was implemented without any prior inclusive public consultation (The Democratic Party of the Hong Kong Special Administrative Region of the People’s Republic of China 2003; Yau 2010a). In this light, its legitimacy is subject to challenge. Besides, why this control selectively targets public housing tenants but not residents in other housing tenures is not justified (Yau 2008). More importantly, much has been said, particularly in recent policy literature, about the harm caused by ASB to local neighbourhoods and controls against ASB in housing (e.g. Flint and Mixon 2006; Millie 2007, 2009). There has

Table 1 Legislation controlling ASB in Hong Kong

Type of ASB	Legislation
Noise nuisances	Noise Control Ordinance Summary Offences Ordinance
Deliberate littering	Fixed Penalty (Public Cleanliness Offences) Ordinance
Deliberate spitting	Fixed Penalty (Public Cleanliness Offences) Ordinance
Objects thrown from height	Summary Offences Ordinance
Drunkenness	Summary Offences Ordinance
Graffiti and vandalism	Summary Offences Ordinance

been relatively little research, however, into the experiences of people subject to the controls. To straddle the existing research gap, this study aims to explore the social impacts brought about by the marking scheme on public housing tenants in Hong Kong through a structured questionnaire survey. In the respondents' eyes, the effectiveness of the scheme to rectify public housing tenants' bad behaviour is doubtful. Even worse, harmony within families and neighbourliness seemed to be undermined by the scheme. The public housing residents' trust in the government dropped. Recommendations are then provided to public administrators regarding the control of ASB in housing in Hong Kong.

2 ASB: Definitions, Causes and Control

2.1 Definition and Causes of ASB

Antisocial behaviour is very difficult to define (Greathouse 2006). It is generally taken as synonyms of other terms such as 'QoL issues', 'minor disorder', 'incivilities' and 'neighbourhood problems'. The term 'ASB' has been used in the psycho-social literature for many years (e.g. Lane 1987; Millon et al. 1998). It was broadly defined, from a psycho-social perspective, as "a multitude of sins ... such as theft, burglary, robbery, violence, vandalism, fraud and drug use ... bullying, reckless driving, heavy drinking and sexual promiscuity ... heavy smoking, heavy gambling, employment instability and conflict with parents" (Farrington 1995, pp. 84–85). In recent years, the label 'ASB' has been used by politicians and the media to collectively describe different types of neighbourhood problems (Burney 2005; Millie 2007). Owing to the lack of a universally accepted definition, it is not difficult to understand why different authorities and parties may perceive ASB very differently (Matthews and Briggs 2008).

The causes of ASB are multi-faceted. As put forward by the Home Office (2003), possible contributors of ASB include family problems, poor educational attainment, unemployment, and alcohol and drug misuse. Poor housing design and limited opportunities available for young people are conceived factors contributing to ASB in Australia (Jacobs and Arthurson 2003). On the other hand, over half of the respondents in the survey done by Ipsos MORI (2006) thought that 'parents not bringing up their children appropriately' was the main cause of ASB in the contemporary UK. Millie (2009) also ascribed the ASB problem to the social and moral decline (e.g. decline in moral standards and family values). Moreover, based on Eysenck's (1996) personality theory of crime, Cale (2006) suggested that personality played a significant role in one's performance of ASB.

2.2 Measures to Control ASB in Housing

ASB has severe impacts on the QoL of those affected by it (Jacobson et al. 2008), and that is why the ASB problem should be curbed. If at all possible, ASB should be dealt with using internal social controls, i.e. processes that cause people to be self-motivated to act in a conforming manner. In most situations, nevertheless, internal social controls fail and external social controls, i.e. pressures exerted on people to conform through the use of various formal and informal social sanctions, are needed. Throughout the world, different external social controls, varying in nature, have been adopted by the authorities to fight against ASB in housing. These controls are generally categorized into three main heads, namely contractual, legal and social approaches. Uses of introductory tenancies and acceptable behaviour contracts (ABCs) are typical examples of contractual controls

(Crawford 2003). For example, the local housing authorities offer introductory tenancies rather than secure tenancies to new tenants, and the introductory tenancies generally last for 12 months. If a tenant does not behave properly in the probationary period, the tenancy will be terminated. With the introductory tenancies, court proceedings are not required for tenant eviction because there is no requirement for the local housing authorities to prove any grounds for possession of the leased social housing during the probationary period.

On the other hand, legal approaches rely on punitive legislation, and involve the issuances of ASB, parenting and injunction orders by courts at different levels (e.g. Flint and Mixon 2006; Millie 2009). As for social controls, different schemes have been implemented in different jurisdictions. For instance, neighbourhood wardens were appointed to deal with neighbour disputes and handle ASB complaints at the neighbourhood level in the UK (Jacobson and Saville 1999). ASB in the UK is also tackled through Family Intervention Projects (FIPs) in which families living in FIP core accommodation are required to fulfil rules set by the local authorities (Respect Task Force 2006). These rules include visitors by permission only, restricted access in and out of the FIP building, and the mandatory presence of the children and adults in the accommodation at a set time in the evening. Through these restrictions, the local authorities aim to rectify the bad habits of the subject families. In lieu of restrictive means, a motivating approach has been adopted in Australia where tenants who meet the conditions of their tenancy agreements can enjoy rent concessions and accelerated home repairs under the Tenant Incentive Schemes (Jacobs 2008).

3 Marking Scheme in Public Housing Estates in Hong Kong

3.1 Background of the Marking Scheme

After the local epidemic of SARS between February and July 2003 which claimed 299 lives and infected more than 1,700 people, it was widely believed that poor environmental hygiene was one of the major contributing forces for the plague (SARS Expert Committee 2003). Therefore, the Hong Kong Government established an inter-departmental taskforce called Team Clean in May 2003.¹ The taskforce developed a number of proposals to improve environmental hygiene in Hong Kong, including sterner enforcement actions against public cleanliness offences (e.g. heavier fixed penalties for deliberate littering and spitting), special clean-up operations in domestic buildings, and the implementation of a penalty scheme in public housing estates (Team Clean 2003). The penalty scheme, which was called the Marking Scheme for Tenancy Enforcement in Public Housing Estates, was instituted by the Housing Department² on 1 August 2003. As stated by the Audit Commission (2005, p. 13), the marking scheme aimed to “promote personal and environmental hygiene in public housing estates; assist tenants in rectifying bad habits that jeopardize personal and public hygiene; and build up a sustained healthy living environment”. To signify its wider use for more effective management of public housing estates, the marking

¹ The taskforce was chaired by the Chief Secretary for Administration, and key departments involved in the taskforce included the Buildings Department, Food and Environmental Hygiene Department, Home Affairs Department and Housing Department.

² The Housing Department is the executive arm of the Hong Kong Housing Authority (HKHA) which plans, builds and manages different types of public housing to achieve the Hong Kong Government’s policy objective of meeting the housing needs of people.

scheme was renamed the Marking Scheme for Estate Management Enforcement in Public Housing Estates on 18 October 2006 (Hong Kong Housing Authority 2009b).

3.2 Mechanism of the Marking Scheme

By its nature, the marking scheme operates as a penalty-point system. As at 30 November 2010, 28 misdeeds were prescribed in the scheme.³ In cases where any member of a household commits a prescribed misdeed, points will be allotted to the household. As shown in Table 2, the marking scheme covers a wide variety of misdeeds, ranging from environmental nuisances (e.g. littering and noise nuisances), misuse of public housing resources (e.g. using the housing units as food factories or stores) to illegal activities (e.g. illegal gambling). More serious misdeeds account for the allotment of more penalty points. Besides, 12 misdeeds warrant prior warnings before actual point allotment probably because the Housing Department would like to encourage timely behavioural rectification by perpetrators. Penalty points are immediately allotted on conviction for the other 16 misdeeds owing to their significant impacts on environmental hygiene and public safety in the housing estates.

The points allotted to each household are valid for 2 years starting from the day that the misdeed concerned is committed (Hong Kong Housing Authority 2009b). Once 16 points have been allotted to a household within a 2-year period, a Notice-to-Quit (NTQ) will be served to terminate the tenancy of that household pursuant to section 19(1)(b) of the *Housing Ordinance* (Hong Kong Housing Authority 2009b). To strengthen the deterrent effect of the marking scheme, upon the tenancy termination under the marking scheme, the Hong Kong Housing Authority (HKHA) will bar the evicted households from applying for public rental housing (PRH) via the general waiting list for 2 years, counting from the day after the date of tenancy termination.⁴⁵ In the period between 1 August 2003 and 30 November 2009, there were 12,003 point-allotment cases which involved 11,204 households (Transport and Housing Bureau 2009). As at the end of the said period, 523 households received 10 or more points, and 27 households accrued 16 points or more. The Transport and Housing Bureau (2009) reported that a total of 19 NTQs had been issued by the Housing Department. Among all prescribed misdeeds, 'littering' and 'smoking or carrying a lighted cigarette in estate common area' were the most frequently committed (Transport and Housing Bureau 2009).

3.3 Merits and Censures of the Marking Scheme

The Public Housing Recurrent Surveys conducted by the Housing Department revealed that the proportion of public housing tenants satisfying the estates' environmental cleanliness has increased from 52.1% in 2003 to 70.1% in 2008 (Transport and Housing Bureau 2009), and the HKHA assertively assigned the institution of the marking scheme to this improvement. As a matter of fact, the marking scheme itself is not free from censure. On

³ When the marking scheme was first introduced in 2003, there were only 19 prescribed misdeeds. The other nine misdeeds were added to the scheme over the years.

⁴ To avoid the tenants taking advantage of the marking scheme to move to a better quality flat (e.g. one with better geographical locality, young age or higher floor level), the Housing Department will not offer a flat of better quality to those households with tenancies terminated under the scheme upon rehousing (Hong Kong Housing Authority 2009b).

⁵ In case the ex-tenants evicted from public housing become genuinely homeless, they may be offered interim housing flats in the New Territories.

Table 2 Misdeed items prescribed in the marking scheme (Subsidised Housing Committee 2009)

Misdeeds	Points	Effective from	Prior warning before point allotment	Applicable in tenants purchase scheme estates
1. Drying clothes in public areas (except in areas designated by the Housing Department)	3	1 August 2003	No	No
2. Utilizing laundry pole-holders for drying floor mop	3	1 August 2003	No	Yes
3. Putting dripping flower pots or dripping laundry on balconies	3	1 August 2003	No	Yes
4. Dripping oil from exhaust fan	3	1 August 2003	No	Yes
5. Obstructing corridors or stairs with sundry items rendering cleansing difficult	5	1 August 2003	No	No
6. Causing mosquito breeding by accumulating stagnant water	5	1 August 2003	No	Yes
7. Littering	5	1 August 2003	Yes	No
8. Keeping animal, birds or livestock inside leased premises without prior written consent of the Hong Kong Housing Authority	5	1 August 2003	Yes	Yes
9. Allowing animal and livestock under charge to foul public places with faeces	5	1 August 2003	Yes	No
10. Boiling wax in public areas	5	1 August 2003	Yes	No
11. Smoking or carrying a lighted cigarette in the estate's common area	5	1 January 2006	Yes	No
12. Causing noise nuisance	5	1 January 2007	No	Yes
13. Illegal gambling in public places	5	1 January 2008	Yes	No
14. Disposing of domestic refuse indiscriminately, such as improper disposal in lift lobbies or inside bins without cover	5	1 January 2008	Yes	No
15. Water dripping from air-conditioner	5	1 January 2009	No	Yes
16. Denying the entry of Housing Department staff or staff representing the Housing Department for repairs which are the responsibility of the Housing Department	7	1 August 2003	No	Yes
17. Refusing repair of leaking pipes or sanitary fittings for which the tenant is responsible	7	1 August 2003	No	Yes
18. Damaging sewage pipes causing leakage to the flat below	7	1 August 2003	No	Yes
19. Accumulating a large quantity of refuse or waste inside leased premises, creating offensive smells and hygienic nuisance	7	1 August 2003	No	Yes
20. Throwing objects from heights that jeopardize environmental hygiene	7	1 August 2003	Yes	Yes

Table 2 continued

Misdeeds	Points	Effective from	Prior warning before point allotment	Applicable in tenants purchase scheme estates
21. Spitting in public areas	7	1 August 2003	Yes	No
22. Urinating and defecating in public places	7	1 August 2003	Yes	No
23. Dumping or disposing of decoration debris indiscriminately at refuse collection points, within a building or in other public areas	7	1 August 2003	Yes	No
24. Using leased premises as food factory or storage	7	1 August 2003	Yes	Yes
25. Illegal hawking of cooked food	7	1 January 2006	Yes	No
26. Damaging or stealing Hong Kong Housing Authority's property	7	1 January 2007	Yes	No
27. Using leased premises for an illegal purpose	7	1 January 2008	Yes	Yes
28. Throwing objects from a height that may cause danger or personal injury	15	1 January 2006	Yes	Yes

one hand, the marking scheme was devised and implemented without any inclusive public consultation. Therefore, some misdeeds which are not against the social norm have been included in the scheme for the 'private interest' of the HKHA (Yau 2010a). On the other hand, Yau (2008, 2010a) queried why the ASB control by the marking scheme was tenure-biased, i.e. only public housing tenants, and not residents in other tenure modes, are subject to the control under the marking scheme in Hong Kong.

Moreover, Yau (2010b) analytically evaluated the social impacts brought about by the marking scheme. Based on the findings of LeBrasseur and Blackford (1988), Yau (2010b) envisaged that the public housing tenants' residential satisfaction would decline for the strictness of housing management. Besides, the public housing residents' tenure was rather secured in the past but the marking scheme unavoidably creates fear of eviction among the tenants, blemishing the residents' QoL (Chawla 2001; Kundu 2004). More importantly, since the marking scheme takes the household as a counting unit and relies heavily on tenants' complaints to spot misdeeds, a 'culture of blame' may develop among the residents in this climate, weakening the social ties within and between families (Yau 2010b). However, the actual impacts of the marking scheme on the public housing tenants have yet to be empirically studied. Therefore, this study aims to straddle the existing research gap by exploring the social impacts of the marking scheme in Hong Kong.

4 Conceptual Framework and Research Methodology

4.1 Conceptual Framework: Marking Scheme and QoL

The marking scheme can affect the public housing residents' lives in a number of ways. Firstly, the marking scheme may reduce the ASB problem in public housing. The impacts

of ASB on residents' lives were evidenced by Millie et al. (2005a) and Millie (2007) in which some residents' QoL in the UK was found to be adversely affected by ASB. Besides, the relationship between ASB and neighbourhood dissatisfaction has long been empirically established. For example, the level of neighbourhood satisfaction was found to negatively correlate with the level of incivilities in the UK by Hope and Hough (1988), Herbert (1993) and Millie et al. (2005b). Yet, what is the relationship between ASB control and residents' QoL? ASB control by means of the marking scheme may affect residents' QoL in various aspects. For example, the marking scheme can improve various aspects of housing quality like environmental cleanliness and quietness of the living place. At the same time, housing quality has been used as a social indicator for measuring individuals' happiness, life satisfaction and QoL in previous theoretical and empirical studies (e.g. Boyer and Sava-geau 1981; Paim 1995; Sirgy et al. 2000; Saris and Andreenkova 2001; Berger-Schmitt 2002; Kamp et al. 2003; Camfield et al. 2010; Gomes et al. 2010). A correlation between housing quality and happiness was also empirically found by Veenhoven (2006). Besides, Senlier et al. (2009) evidenced that a feeling of safeness in one's living place was a determinant of a person's satisfaction in Kocaeli, Turkey.

In reality, QoL or life satisfaction is not confined to the individual, but also extends to the family and neighbourhood. This is why the impacts of the marking scheme on the public housing residents have to be studied in a broader sense. Yau (2010b) surmised that the marking scheme would weaken family bonding and neighbourliness in the public housing sector owing to the household-based enforcement and heavy reliance on tenants' complaints to identify misdeeds. On the other hand, satisfaction with social contacts or ties has been one of the important measurements of QoL (Saris and Andreenkova 2001; Berger-Schmitt 2002; Chan and Lee 2006; Gomes et al. 2010). Furthermore, a positive image of neighbourhood may have a positive effect on QoL, through influencing personal attitudes, behaviour and self-conception (Healey 1998; Kearns et al. 2000; Meegan and Mitchell 2001; Muhajarine et al. 2008). Therefore, bonding and mutual support with family, and neighbourliness are considered important social capital affecting QoL. Empirical findings such as Sirgy et al. (2000), Aureli and Baldazzi (2002), Kwan et al. (2003), Brown et al. (2004), Lee (2005), Dunning et al. (2008), Muhajarine et al. (2008) and Senlier et al. (2009) indicated that QoL or life satisfaction is contingent on the quality of relationship with others in different social and cultural contexts. In addition, QoL increases with the opportunity for making friends in Montreal, Canada (Thériault et al. 2001). The above shows that the marking scheme may influence the public housing residents' social networks.

Furthermore, the marking scheme institutes a mechanism for the HKHA to evict its tenants. Nevertheless, life quality, particularly for those living in assisted housing, hinges on the security of housing tenure or fear of eviction (National Community Housing Forum 2000; Thériault et al. 2001). Put bluntly, the marking scheme may excite the fear of eviction among public housing tenants so that their life quality or satisfaction could drop. Besides, the marking scheme was, to a certain extent, a penalty system unilaterally imposed by the HKHA, and this institution may reduce the trustworthiness of the HKHA. Yet, individuals' confidence or trust in the government or policing authority has been found to correlate with QoL, life satisfaction or happiness (Brehm and Rahn 1997; Helliwell and Putnam 2004; Abbott and Sapsford 2006; Newton 2007; Abbott and Wallace 2007; Veenhoven 2008).

From the literature review above, it is conceptualized that the marking scheme can potentially affect the QoL of public housing residents in six aspects, as graphically illustrated in Fig. 1. Based on this conceptual framework, the impacts of the marking scheme on these different aspects of QoL are then studied empirically.

Fig. 1 Conceptual framework of the empirical study

4.2 Research Methodology

While both objective evidence and subjective perceptions can be used for social impact assessments, this study only deploys the latter type of information. This is mainly because the perceptions of the residents can reflect the QoL aspects discussed in Sect. 4.1 more appropriately. To assess the social impacts of the marking scheme on public housing tenants, a total of 339 respondents living in two PRH estates and two Tenants Purchase Scheme (TPS)⁶ estates were surveyed face-to-face using a preset questionnaire. The questionnaire included questions exploring the respondents' views on the extent of ASB or neighbourhood problems in their housing estates, and impacts of the marking scheme on them. Screening questions were also included in the questionnaire to exclude owner-occupiers in TPS estates and those tenants who had not heard of the marking scheme. The selected four estates are located in the Tai Po and Shatin districts, and the distribution of respondents and characteristics of the four estates are summarized in Table 3. All the interviews were carried out between November 2009 and January 2010.

Given the similar ages and localities of the four selected estates, there are no big differences in the design standards (e.g. use of material and accommodation standard) among them. Besides, the degrees of natural deterioration of the facilities in these estates can be assumed the same. By this choice of study targets, variations in the quality of the living environment perceived by the respondents depend very much, supposedly, on the differences in residents' behaviour and management quality in these estates. Moreover, tenants of two types of public housing (i.e. PRH and TPS) were chosen for investigation because they are subject to the marking scheme differently. In the 39 public housing estates covered by the TPS, both tenants and owners exist. The marking scheme is only applicable to 15 of these TPS estates because its application requires the written consent of the owner's corporations of the estates concerned. Moreover, only 15 'in-flat' misdeed items, instead of all 28 items, are enforceable in the TPS estates, as indicated in Table 2. In other words, misdeeds like smoking, littering and spitting in communal areas are sanctioned in the conventional PRH estates but not in the TPS ones. With this arrangement, differences

⁶ The TPS was announced by the Hong Kong Government in December 1997. Under the scheme, existing tenants of selected PRH estates were allowed to purchase their own flats at a discount from the estimated market price. The scheme was implemented in phases, starting in 1998.

Table 3 Characteristics of the four housing estates investigated

Characteristic	Estate A	Estate B	Estate C	Estate D
District	Tai Po	Tai Po	Shatin	Shatin
Type	PRH	TPS	PRH	TPS
Completion year	1985	1983	1987	1984
Number of blocks	6	8	7	4
Number of flats	2,700	6,200	1,200	2,100
Number of residents	7,600	19,600	3,600	5,900
Number of respondents	87	93	73	86

in the social impacts of the marking scheme on the residents in different types of public housing can be explored. As at 31 March 2010, there were 155 PRH and 39 TPS estates in Hong Kong. The intake years of all 39 TPS estates are between 1982 and 1991, and 24 PRH estates were inaugurated in the same period. For the reasons discussed above, these 39 TPS and 24 PRH estates constitutes the overall population of this study, and the sample represents 8.3% of PRH and 5.1% of TPS populations, respectively.

5 Data, Findings and Analyses

5.1 Descriptions of Data

The pool of respondents comprised 199 males and 140 females, and was dominated by those aged between 35 and 54 years (59.6%). Given that the median monthly domestic household income of the whole population in Hong Kong was HK\$17,250 in 2006 (Census and Statistics Department 2007), the majority of the respondents (at least 60%) came from the low-income group, largely because of the income eligibility for public housing allocation.⁷ On average, the respondents had been living in public housing for 20.0 years; 38.8% of the respondents were 45 years old or older. Less than one-third of the respondents attained tertiary education (including diploma and higher certificate) or above. As far as employment status is concerned, about half of the respondents were employees and 18.9% were self-employed. The sample was dominated by households with three to four members (67.8%); 20 respondents (5.9%) were not Chinese who were born or grew up in Hong Kong.

5.2 Survey Findings and Analyses

The respondents were asked about their satisfaction levels of various aspects of their housing estates using a five-point scale (with 1 = very satisfied and 5 = very dissatisfied). On the whole, the respondents were most satisfied with the social network and neighbourliness in their housing estates (mean = 3.47), as indicated by Table 4. On the other hand, facility condition was the most dissatisfied area (mean = 2.89). The survey findings show that respondents from PRH and TPS estates did not have significantly different satisfaction levels in all the quality aspects at least at the 10% level.

⁷ The income thresholds for the application for public rental housing in Hong Kong can be found on the website of the Hong Kong Housing Authority (<http://www.housingauthority.gov.hk>).

Table 4 Respondents' satisfaction levels to various aspects of their public housing estates (n = 339)

Aspect	Estate A		Estate C		Estate D		PRH		TPS		Overall	
	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
Environmental cleanliness	2.74	0.90	3.10	0.99	2.88	0.89	2.90	0.95	2.92	0.88	2.91	0.91
Quietness	2.86	0.79	2.92	0.78	2.97	0.82	2.89	0.78	2.96	0.83	2.92	0.81
Conditions of facilities	2.80	0.82	2.92	0.88	2.90	0.84	2.86	0.85	2.92	0.85	2.89	0.85
Personal safety and security	3.07	0.86	2.95	0.78	2.98	0.96	3.01	0.82	3.07	0.92	3.04	0.87
Social network and neighbourliness	3.55	0.91	3.48	0.93	3.37	0.92	3.52	0.92	3.42	0.92	3.47	0.92
Overall quality of the living environment	3.01	0.83	3.10	0.93	2.99	0.87	3.05	0.87	3.06	0.88	3.05	0.88

Moreover, the respondents were asked whether they agreed that neighbourhood nuisances or ASB problem were serious in their housing estates. The level of agreement or disagreement was measured on a five-point Likert scale (with 1 = strongly disagree and 5 = strongly agree). Table 5, which summarizes the findings of this question, reveals that 'litter and rubbish' was perceived as the most serious neighbourhood problem (mean = 3.62). Following this problem were 'illegal gambling in public spaces' (3.48), 'noisy neighbours' (3.46), 'objects thrown from height' (3.41) and 'uncontrolled dogs' (3.40). At the other extreme, the survey findings do not support that 'illegal hawking' (2.95), 'dripping water' (3.00), 'burglary' (3.05) and 'gangster' (3.10) were serious in the respondents' neighbourhoods in a general sense. Compared with the respondents living in TPS estates, those living in PRH estates more likely tended to agree that 'noisy neighbours' (significant at the 5% level) and 'waste accumulation' (significant at the 10% level) were serious neighbourhood problems.

In the questionnaire for this study, the surveyed public housing tenants were also asked to indicate their level of agreement or disagreement with the statements about the improvements and detrimental effects brought about by the marking scheme using a five-point Likert scale (with 1 = strongly disagree and 5 = strongly agree). As shown in Table 6, among all different aspects, the mean score returned for 'environmental cleanliness' (3.60) was the highest. That mean score is statistically higher than those of other quality aspects at the 1% level. The mean scores for other aspects like 'quietness' (3.05) and 'personal safety and security' (3.04) are not significantly different from the value of three which denotes neutrality towards the specified statement, even at the 10% level. These results imply that, in the eyes of the respondents, the marking scheme could at best improve environmental cleanliness in public housing estates and not other aspects. The PRH's mean score for 'environmental cleanliness' (3.74) was statistically higher than the TPS's score (3.49) at the 1% level. Perhaps, it is largely because the operation of the marking scheme in TPS estates is confined to in-flat misdeeds. The impacts of the marking scheme on the cleanliness and hygiene of these estates' communal areas might not be notable. On the other hand, the statement that 'the marking scheme has led to improved conditions of facilities in your housing estate' (2.88) was the least agreed among the others. The mean score was significantly lower than the value of three at the 1% level, indicating that the respondents generally disagreed with the betterment created by the marking scheme with regard to estates' facility condition. As a whole, only 127 out of 339

Table 5 Respondents' perceived seriousness of the neighbourhood nuisances and ASB problem in their housing estates before the implementation of the marking scheme (n = 339)

Problem	Estate A		Estate B		Estate C		Estate D		PRH		TPS		Overall	
	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
Litter or rubbish	3.62	0.96	3.57	0.84	3.68	0.97	3.60	0.83	3.65	0.96	3.59	0.83	3.62	0.89
Waste accumulation	3.23	1.05	3.11	1.08	3.32	1.09	3.09	1.00	3.27	1.07	3.10	1.05	3.18	1.05
Dripping water	3.01	0.93	2.96	0.95	3.03	0.99	3.01	0.93	3.02	0.95	2.98	0.95	3.00	0.95
Vandalism or graffiti	3.24	0.99	3.12	0.98	3.21	0.88	3.09	0.90	3.23	0.94	3.11	0.94	3.16	0.94
Noisy neighbours	3.55	1.00	3.38	0.99	3.59	0.98	3/36	1.06	3.57	0.99	3.37	1.01	3.46	1.01
Objects thrown from height	3.39	0.96	3.41	1.00	3.49	0.75	3.35	0.73	3.44	0.87	3.38	0.87	3.41	0.87
Burglary	3.10	1.01	2.99	0.93	3.08	0.85	3.05	0.87	3.09	0.94	3.02	0.92	3.05	0.92
Gangster	3.17	0.97	3.10	1.07	3.11	1.06	3.02	0.98	3.14	1.01	3.06	1.02	3.10	1.02
Illegal hawking	2.98	1.07	2.88	1.06	3.03	1.00	2.94	0.99	3.00	1.03	2.91	1.03	2.95	1.03
Illegal gambling in public spaces	3.60	0.81	3.43	0.93	3.51	0.99	3.41	1.00	3.56	0.90	3.42	0.93	3.48	0.93
Passive smoking	3.32	0.86	3.28	1.00	3.36	0.92	3.30	1.02	3.34	0.88	3.29	0.95	3.31	0.95
Uncontrolled dogs	3.38	0.91	3.41	0.92	3.41	1.09	3.40	0.99	3.39	0.99	3.40	0.97	3.40	0.97

Table 6 Respondents' perceived improvements or detrimental impacts brought about by the marking scheme (n = 339)

Aspect	Estate A		Estate B		Estate C		Estate D		PRH		TPS		Overall	
	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
<i>Improvements</i>														
Environmental cleanliness	3.75	1.03	3.51	0.95	3.73	0.92	3.47	1.05	3.74	0.97	3.49	1.00	3.60	0.99
Quietness	3.08	0.88	3.06	0.96	3.01	0.87	3.05	0.87	3.05	0.87	3.06	0.92	3.05	0.90
Conditions of facilities	2.94	1.03	2.81	0.98	2.84	0.96	2.92	0.90	2.89	0.99	2.86	0.94	2.88	0.97
Personal safety and security	3.10	0.99	3.06	0.93	2.97	0.93	3.02	0.95	3.04	0.96	3.04	0.94	3.04	0.95
Overall quality of the living environment	3.11	1.04	3.27	0.93	3.07	0.92	3.19	1.01	3.09	0.98	3.23	0.97	3.17	0.98
<i>Detrimental impacts</i>														
Tenure security	3.62	0.81	3.38	0.81	3.58	0.76	3.34	0.85	3.60	0.79	3.36	0.82	3.47	0.81
Family harmony	3.60	0.83	3.53	0.95	3.66	0.71	3.65	0.59	3.63	0.78	3.59	0.80	3.60	0.79
Neighbourliness	3.66	0.73	3.34	1.03	3.70	0.70	3.31	0.83	3.68	0.71	3.33	0.93	3.49	0.85
Trust or confidence in the HKHA	3.46	0.97	3.41	0.80	3.47	0.91	3.37	0.93	3.46	0.94	3.39	0.86	3.42	0.90

respondents (37.5%) opined that the marking scheme had improved the overall quality of living environment in their estates.

As for the downsides of the marking scheme, the mean scores for 'tenure security', 'family harmony', 'neighbourliness' and 'trust or confidence in the HKHA' were significantly greater than the value of three at the 1% level, signifying the negative impacts of the marking scheme perceived by the respondents. As shown in Table 6, among the four aspects, 'family harmony' (3.60) and 'trust or confidence in the HKHA' (3.42) were opined to be the most and least affected, respectively. Furthermore, opinions of respondents living in the PRH and TPS estates deviated notably with respect to the impacts of the marking scheme on 'tenure security' and 'neighbourliness'. For these aspects, the mean scores of PRH respondents were significantly higher than those of TPS scores at the 1% level. Again, these divergences can be explained by wider coverage of the marking scheme in PRH estates. It is reasonable for one to predict that, keeping other things constant, the probability of point allotment should increase with the number of misdeeds prescribed in the marking scheme. Facing a larger number of prescribed misdeeds, PRH respondents had a greater fear of tenancy termination. Besides, confrontations arising from the marking scheme between TPS respondents with their neighbourhoods could be less likely because misdeeds occurring in the communal areas were not applicable to them. The marking scheme would seldom be the subject of quarrels or disputes among residents in the TPS estates, and neighbourliness in these estates could thus be better preserved.

When being asked about the perceptions or feelings towards the marking scheme, the respondents did not hold a straight agreement towards the effectiveness of the marking scheme in tackling the neighbourhood nuisances or ASB problem in their housing estates in the long run. For this issue, a mean score of 2.94, measured on a five-point Likert scale (with 1 = strongly disagree and 5 = strongly agree), was returned from the survey, as shown in Table 7. Therefore, the usefulness of the marking scheme in improving the living environment was not corroborated by the respondents. Besides, although the respondents did not generally agree that the penalty imposed by the marking scheme was too heavy (mean = 2.88), they opined that the household-based punishment system was unfair (mean = 3.29). The respondents also concurred that the marking scheme stereotyped public housing tenants as problematic residents (mean = 3.22), and that someone abused the marking scheme to pick on them (mean = 3.15). Among the 20 respondents who were not born or did not grow up in Hong Kong, 16 (80.0%) agreed or strongly agreed that they were being directed against by others under the marking scheme.

Table 8 indicates that 48.1% of the respondents opposed the institution of the marking scheme. Given that the attitudes of the respondents to the marking scheme were measured with a five-point scale (with 1 = strongly oppose and 5 = strongly support), the low overall mean score (2.56) can be taken as a sign of antagonism towards the marking scheme. In particular, the mean score for the PRH respondents (2.46) was significantly lower than that for the TPS ones (2.66) at the 5% level. This implies that the marking scheme has attracted stronger opposition from the tenants in the PRH estates. Perhaps, the study by LeBrasseur and Blackford (1988) offers a good explanation for the disparity in attitudes between the PRH and TPS respondents. In their study, housing satisfaction in public housing was found to be negatively correlated with the strictness of housing management. PRH tenants who are subject to more control under the marking scheme (28 prescribed misdeeds) in comparison with the TPS tenants (15 prescribed misdeeds) would be unhappy with the scheme. Their discontent was then reflected in the hostility towards the scheme.

Table 7 Respondents' feelings about the marking scheme (n = 339)

Statement	Estate A		Estate B		Estate C		Estate D		PRH		TPS		Overall	
	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
The marking scheme is ineffective at tackling the neighbourhood or anti-social behaviour problems in your estate in the long run	2.90	0.95	2.98	0.96	2.90	0.88	2.97	0.98	2.90	0.92	2.97	0.96	2.94	0.94
The household-based punishment system is unfair	3.33	1.00	3.22	1.10	3.36	1.05	3.27	0.93	3.34	1.02	3.24	1.02	3.29	1.02
The penalty of the marking scheme is too heavy	2.87	1.07	2.86	1.06	2.95	1.01	2.84	1.13	2.91	1.04	2.85	1.09	2.88	1.06
The marking scheme stereotypes public housing tenants as problematic residents	3.24	1.03	3.18	1.05	3.23	1.02	3.21	0.87	3.24	1.02	3.20	0.97	3.22	0.99
Someone abuses the marking scheme to pick on you	3.18	0.97	3.20	1.05	3.08	1.05	3.13	0.89	3.14	1.01	3.17	0.97	3.15	0.99
The proposal has not been well consulted before the implementation of the marking scheme	3.20	0.89	3.15	0.92	3.19	0.79	3.12	0.93	3.19	0.84	3.13	0.92	3.16	0.88

Table 8 Respondents' attitudes towards the marking scheme (n = 339)

Attitude	Estate A		Estate B		Estate C		Estate D		PRH		TPS		Overall	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
(5) Strongly support	5	5.7	5	5.4	5	6.8	6	7.0	10	6.3	11	6.1	21	6.2
(4) Support	8	9.2	14	15.1	7	9.6	13	15.1	15	9.4	27	15.1	42	12.4
(3) Neutral	31	35.6	35	37.6	19	26.0	28	32.6	50	31.3	63	35.2	113	33.3
(2) Oppose	24	27.6	25	26.9	24	32.9	21	24.4	48	30.0	46	25.7	94	27.7
(1) Strongly oppose	19	21.8	14	15.1	18	24.7	18	20.9	37	23.1	32	17.9	69	20.4
Mean score	2.49		2.69		2.41		2.63		2.46		2.66		2.56	
σ	1.11		1.07		1.16		1.18		1.13		1.12		1.13	

6 Discussion

The survey findings and analyses above confirm that the respondents generally perceived a positive change in the environmental hygiene of their housing estates. This may suggest that the stated objective of the marking scheme to improve environmental hygiene has been achieved from the residents' perspective. However, the scheme itself has undermined the life quality of the public housing residents in various ways. First of all, it has weakened tenure security which was regarded in the World Bank's (1993) policy paper as one of the most important issues in housing. Whilst housing tenure in the form of owner-occupation is much more secure than public renting, the latter is comparatively more protected than private renting because governments or non-government organizations offering social or public housing usually assume a duty to ensure occupancy security and freedom from the fear of eviction. The marking scheme which administratively makes tenant eviction more justifiable creates a fear of eviction among public housing tenants. Given that everyone should be conferred with a right to adequate housing, creating a fear of eviction through the institutionalization of a punishment system is certainly unacceptable.

Although the penalty imposed by the marking scheme was not regarded as too heavy, the scheme was criticized for its unfairness. The household-based enforcement induces no-fault eviction of innocent tenants who had an exile penalty brought against them for the misconducts of their household members. Moreover, the collateral punishment also provokes double victimization because household members of the perpetrators may be victims as well. For example, one's propensity to deliberately litter is associated with that person's sense of personal hygiene. It is likely that those littering in public areas also create hygienic problems for their own families or living partners in their dwelling units. The same may apply to the case of noise nuisances as well. If the household members who are victims are sanctioned with no-fault eviction eventually, the marking scheme, in essence, victimizes these parties doubly. This situation is very similar to the eviction of domestic violence victims from public housing in the US under the so-called zero-tolerance policy (Vrettos 2002). Whether the whole household should be liable for the misdeed committed by one or some of its members is highly debateable.

Furthermore, the marking scheme punishes the perpetrators or those who have committed the prescribed misdeeds without differentiating between cases originated with different causes. In other words, the HKHA does not seek to address the underlying causes of unacceptable behaviour. While most misdeeds may be committed because of convenience and rationality, it is an undeniable fact that some ASB or nuisance cases are ascribed to residents with mental illness or a psychological disorder. In fact, many previous studies (e.g. Burney 2000; Warner and Gabe 2004) associated psychosis with ASB. Under the current marking scheme, perpetrators with psychosis are only sanctioned through point allotment and tenancy termination in extreme cases. Counselling or follow-up measures are absent in the ABS policy of the HKHA. Without these measures, these perpetrators will most likely repeat the misbehaviour, and will be evicted from public housing sooner or later. Apparently, the marking scheme cannot help certain groups of people rectify their bad habits. On the contrary, it simply displaces problematic or troublesome tenants from one place to another. Following what was suggested by Hunter et al. (2005), the marking scheme will eventually result in the social exclusion of this group of tenants from the public housing sector.

At the same time, the survey findings suggest that the marking scheme has blemished the family harmony of public housing tenants. On the one hand, the HKHA has endeavoured to foster mutual family support and create harmonious family relations through

different schemes such as the Families with Elderly Persons Priority Scheme and the Special Scheme for Families with Elderly Persons. Besides, the HKHA entered into a joint venture with the Caritas Family Crisis Support Centre in 2007 to offer advice to public housing tenants on how to enhance mutual communication and support among family members. On the other hand, however, the marking scheme runs in the opposite direction to this policy. The household-based operation of the scheme makes the whole household liable for collateral punishments (e.g. point allotment and tenancy termination) even if only one of its members has committed the prescribed misdeeds. Supposedly, these punishments-by-association attempt to mobilize family members' efforts to help the perpetrators stop conducting misbehaviour, and to rectify the latter's bad habits. Yet, tensions among family members can be generated because of the 'culture of blame'. Moreover, in the US, the fear of being evicted for the future criminal acts of the returning family members was once a legitimate concern for those tenants in public housing (Bradley et al. 2001). Similar situations may apply to Hong Kong's public housing as the marking scheme builds an unfavourable condition for the re-integration of rehabilitated offenders, particularly those who have committed drug-dealing offences or thrown objects from height before, into their families. The poor records of the released offenders can prejudice their family members against them under the fear of being evicted for the repeated wrong-doings of the returning members. On the whole, the family relationship is negatively affected by the marking scheme if the household is treated as a counting unit for the point allotment.

Similarly, while the Hong Kong Government is keenly promoting a harmonious community in the city (Hong Kong Housing Authority 2009a), the marking scheme brings about detriments to the neighbourliness in public housing. Owing to the limited resources of the Housing Department, frequent regular patrols by housing management staff in housing estates to spot misdeeds are unlikely. Inspections are conducted in an *ad hoc* manner or upon the complaints of the residents. In this regard, misdeed identification relies heavily on the complaints or information provided by the tenants. This system catalyzes the evolution of lateral surveillance among public housing residents, worsening the neighbourliness in the housing estates. In addition, the marking scheme may be abused by some tenants to keep unfavourable neighbours out of their estates. This situation, as evidenced by the survey findings of this study, is even worse for those are not locally born and trained. In the absence of any explicit policy or regulation governing ethnic integration in local neighbourhoods, new immigrants from mainland China and other ethnic minorities may be edged out from their public housing units easily under the marking scheme.

At the same time, tenants' trust or confidence in the HKHA has been sabotaged by the marking scheme. This is perhaps largely because the scheme, which could have a significant impact on tenants' security, was unilaterally imposed by the HKHA without adequately consulting the former. Secondly, the distrust may be augmented by the lack of transparency in the enforcement. Although a tenant who receives penalty points under the marking scheme can lodge a complaint or appeal to the HKHA, the case will be first handled by the officers in the Housing Department. This kind of self-monitoring appeal system cannot make the public housing tenants believe that they are subject to fair treatment under the marking scheme. The Appeal Panel (Housing) which is an independent statutory body to hear appeals from PRH tenants may help the discontented tenants but it only deals with appeals against the HKHA's decisions of tenancy termination.

As a whole, the findings of this study largely confirm Yau's (2010b) surmises. The marking scheme was not so well received by the respondents. It has improved environmental cleanliness in public housing at the costs of tenure insecurity, family discord, degraded neighbourliness and increased distrust in the government. In point of fact, these

undesirable side-effects of the scheme are avoidable. To achieve a more credible decision making on the ASB control in the city, the Hong Kong Government should consult the community inclusively to identify the types of neighbourhood nuisances and ASB that the general public want to regulate. More importantly, whether only public housing tenants are subject to the control should be discussed among the community. Although public housing tenancy is a kind of blessing offered by the Hong Kong Government to low-incomers, the selective control by means of the current marking scheme puts a bad label on public housing tenants. This may sooner or later further aggravate the marginalization of public housing. While penal sanction clearly has its merits, a key disadvantage is simply that it punishes the perpetrators for doing wrong. What is needed in a socially responsible ASB policy is to encourage potential wrong-doers to do right. Therefore, there is an urgent need for the Hong Kong Government or HKHA to rethink the value of, and social destruction created by, the marking scheme in public housing, and to formulate a tenure-neutral policy on ASB in housing in the city. Other than penal sanctions, the uses of motivating incentives and proactive intervention approaches should be considered by policy makers.

7 Concluding Remarks

Everyone desires to have good housing. However, housing quality is contingent on a number of factors, one of which is the behaviour of the residents. On account of the environmental nuisances and ASB problems in public housing in Hong Kong, the HKHA launched a marking scheme to penalize non-conforming tenants in 2003. While the scheme seemingly improves the environmental cleanliness in public housing estates, it also imposes impacts on other aspects of QoL of the residents. That is why this study attempted to explore these social impacts empirically. A total of 339 respondents living in different types of public housing estates, namely PRH and TPS estates, in Hong Kong were interviewed using a structured questionnaire. The survey findings suggested that the respondents had experienced serious problems of deliberate littering, noise nuisances and illegal gambling in public spaces before the implementation of the marking scheme. However, there was no strong evidence that the respondents' perceived marking scheme was effective in tackling the neighbourhood nuisances and ASB problems in their estates in the long run. On the other hand, the research findings showed that family harmony and neighbourliness were undermined by the scheme. More importantly, the weakening of tenure security seemingly created a fear of eviction among respondents, particularly those living in the PRH estates. For now, the results of this study emphasize the injustice or unfairness created by the marking scheme to the public housing tenants. The HKHA need to play a supportive role to enable the perpetrators to rectify their bad habits and live happily with their families and neighbours in public housing.

Though it is difficult to quantify, the contributions of this paper are substantial. This paper contains pioneering research on the impact of housing-related ABS controls on residents' QoL. Very probably, behavioural change is only one of the many outcomes of ASB controls. Public administrators and housing managers should be aware of the possible side-effects of the measures. One should bear in mind that neighbourhood or ASB problems are not unique to public housing. Similar problems also happen in private housing but this sector has been largely ignored in the ASB literature. More research is warranted to assess the comparative effects of different measures tackling ASB problems in private and public housing. Besides, further studies to explore the determinants of the extent or

seriousness of ASB problems in a neighbourhood or housing estate, be it private or public housing, are recommended.

In closing, the marking scheme is far from being a 'one-size-fits-all' solution to the ASB problem in Hong Kong's public housing. In spite of its imperfections, the marking scheme is still a bold, determined move by the Hong Kong Government to improve the living environment in public housing estates in the city. It is important to note that the government's aim of 'making the living environment cleaner and more pleasant' with the scheme is fairly uncontroversial. Yet, linking this to issues of social sustainability takes the ASB agenda into a different policy direction. While the government attempts to create places where people are happy to live in, sustainability has to be considered in a much wider context.

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