



# OUTSTANDING DISSERTATION 最佳碩士論文



## The Relationship between Qualities of Public Space and Level of Place Attachment: A Case Study of Shopping Centres of Public Rental Housing Estate in Hong Kong



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### Introduction

The shopping centre of public housing estate in Hong Kong is a public space that captivates large population and operates a vehicle to the community development. It is perceived as one of the most profound public spaces central to guaranteeing the well-being of the residents of public rental housing in Hong Kong due to its mandated responsibility to ensure access to affordable goods for residents of public rental housing estates to cater to their daily needs. Beyond providing spaces for consumption, the shopping centre typically represents an important social space that people probably visit every day for shopping, catering, entertainment and social interactions.

Since late 1990s, Hong Kong got ahead to the era of privatization or commodification of public asset. Acknowledging the build-up of financial distress arising from operating the public assets of the Hong Kong Housing Authority, it ushered in the divestment of retail and car park facilities to Link Real Estate Investment Trust (REIT) in 2005. Since 2014, the Link REIT has accelerated its push

to improve the profitability by selling off some of its shopping centres and car park facilities in its portfolios. Up to 2018, the Link REIT has disposed of 44 shopping centres and car park facilities in public housing estates. Behind the disposal of the shopping centre from Hong Kong Housing Authority, the Link REIT to the private landlord is the significant changes brings forth to physical and environmental of the shopping centre. The “disruption” to the place attachment and quality of public space includes limited choices of retailer, the growing numbers of vacant shops, the despair of the facilities or the change of land use of the public space and wet market. Such changes stand out as threats to the creation of a pleasurable visitation experience.

Previous research has focused on people's attitude towards place in residential setting or tourist destination. Little research has been done on the relationship between visitor and the shopping centre of public rental housing estates. Stokols & Shumaker (1981) indicates the quality of public space plays a pivotal role in developing place attachment. However, the relationship between the place attachment and quality of public space has not been clearly reconciled. Such paucity of previous studies merits more scholarly attention to expand the existing knowledge. This study is designed to achieve the following objectives:

- To investigate the relationship between the quality of public space and the level of place attachment in the context of shopping centre of public rental housing estate;
- To examine other predictors affecting the level of place attachment in the in the context of shopping centre of public rental housing estate; and



- To determine whether there is any significant difference of the level of place attachment in the context of shopping centre of public rental housing estate among visitors with different visitation characteristics in terms of length of residence, visit group, visitation frequency.

## Literature Review and Development of Hypothesis

### *Conceptualization of Place Attachment*

Place attachment is conceptualized as one's attachment to the physical place and the meanings ascribed to the place. Place attachment is portrayed as a multifaceted concept with four sub-dimensions of place dependence, place identity, place affect and place social bonding (Ramkissoon et al., 2013). Despite the various sub-dimensions of the place attachment, the mainstream of researches has strongly relied on the explanatory dimensions of place identity and place dependence. Place identity describes the symbolic aspects or psychological investment of a person to a place. It relates to the set of connections and feelings about the setting that give rise to how individuals see the setting as part of themselves (Proshansky, 1978). Place dependence describes the functional aspect of place attachment. Specifically, it describes how the physical setting meets the needs and goals of an individual and whether it is superior to other available places in terms of the achievement of these goals (Williams & Roggenbuck, 1989).

### *Conceptualization of Quality of Public Space*

Madanipour (1996) identifies public space as a space which is publicly accessible places regardless of the private ownership. Places including parks, playgrounds, shopping centres, promenade and streets are conceived as public space (Lloyd & Auld, 2003). Public space plays an important role in sustaining the public realm. Good public space creates a platform for engagement and discussion, for planned and spontaneous encounters, and for learning of diverse attitudes and beliefs. Mehta (2014) designs a public space index to produce an evaluation of the quality of public space by empirically assessing its inclusiveness, meaningfulness, safety, comfort and pleasurability.

- (i) **Inclusiveness:** It denotes the ease of the space for being reached. It is associated with factors like accessibility, connectedness and control of entrance to public space;
- (ii) **Meaningful activities:** It refers the ability of the public space to accommodate to basic needs such as shopping, eating meals or social interaction. It is primarily concerned with factors like the presence of community-gathering places, space's flexibility to suit user's needs and suitability of space for relaxation and activities;
- (iii) **Comfort:** It denotes perceived levels of comfort in terms of familiarity with the spatial setting and physical conditions. It encompasses factors like free seating and design elements fostering the interactions;
- (iv) **Safety:** It refers to a feeling of safety which has relevance with constant presence of people. It includes factor like physical condition and maintenance, presence of closed-circuit television, security guards; and
- (v) **Pleasurability:** It denotes the level of spatial quality and sensory complexity of the space. It contains factors like memorable architectural or landscape feature, perceived attractiveness of space and perceived interestingness of space.

Nevertheless, only meaningful activities and comfort will be used in this study due to their indispensable significance in contributing to the measurement of quality of public space varies in the context of Hong Kong. The other three dimensions are perceived less significant in evaluating the public space in the context of shopping centre in Hong Kong.

### **Quality of Public Space and Place Attachment**

#### **(i) The Relationship between Meaningful Activities and Place Attachment**

The association between the place attachment and meaningful activities is based on the functionality of the shopping centre to provide a setting that supports individual's needs and activities ranging from consumption to social interactions (Williams and Vaske 2016). The greater the range of needs satisfied by the shopping centre, the heavier the reliance on the shopping centre (Stokols & Shumaker, 1981), thus creating place attachment.

#### **(ii) The Relationship between Comfort and Place Attachment**

The spatial setting and physical condition of the shopping centre are often highly correlated with comfort. It hence intensifies visitor's positive emotion. From this, it is possible to draw repeat visitation, thereby giving rise to place attachment.

### **Other Predictors and Place Attachment**

Past researchers have found several predictors of place attachment. They include (i) visitation frequency, (ii) length of residence and (iii) visit group.

#### **(i) Visitation Frequency**

Visitation frequency has been demonstrated as an important driver for place attachment. Human-place attachment is formed and consolidated through frequent interactions with the place due to the accumulation of social ties, place memory and place familiarity (Brooks et al., 2006; Manzo, 2005).

#### **(ii) Length of Residence**

The length of residence is powerful predictor for place attachment since longer residence in a community enables accumulation of place knowledge such as the routes, shops, tenants and spatial relationship and social ties in the place. It explains why older residents tend to report higher place attachment (Pretty et al., 2003; Lewicka, 2010).

#### **(iii) Visit Group**

The visit group such as family, friends or colleagues refers to the social bonding occurred in the place. In the context of shopping centre, the social interactions with the companions in the place can strengthen the emotional bond with the place since the memories tied with the significant others can be a significant determinant of the place attachment (Hammit, Kyle, & Oh, 2008).

### Research Model and Hypothesis Development

A research model which incorporates hypothesis related to the relationship between the quality of public space and place attachment in the context of shopping centre of public rental housing estates in Hong Kong is established (Figure 1). Hence, the hypothesis of this study is as the following:

**Hypothesis 1 (H1): The quality of public space positively affects the place attachment.**

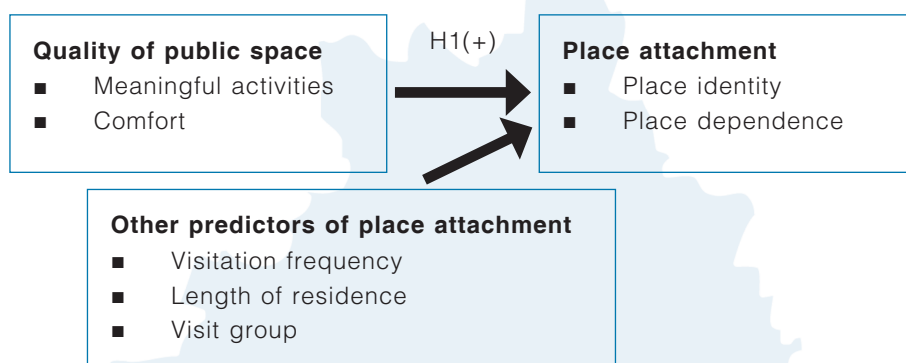


Figure 1: Research Model of Hypothesized Relationship

### Findings and Discussion

#### Research Methodology

A survey approach was employed to test the hypothesis. Data was collected from two types of shopping centres, i.e. shopping centre disposed by the Link REIT and the shopping centres which are currently managed by the Link REIT. Tsui Lam Shopping Centre and Tin Ma Court Commercial Centre are the neighborhood shopping centre disposed by the Link REIT whereas Tak Tin Plaza and Un Chau Shopping Centre are the neighborhood shopping centre currently managed by the Link REIT.

#### Sampling and Data Collection Procedures

This study used a convenience sample of 320 numbers of respondents with 80 numbers of respondents from each shopping centre, i.e. Tak Tin Plaza, Un Chau Shopping Centre, Tsui Lam Shopping Centre Tin Ma Court Commercial Centre. The visitor of the shopping centre served as the unit of analysis. A total of 4 post-survey interviews were conducted. The four interviewees were recruited from the Tin Ma Court Commercial Centre, Tsui Lam Shopping Centre, Tak Tin Plaza and Un Chau Shopping Centre.

#### Hypothesis Testing

Data was analyzed using IBM SPSS statistics 24.0. Multiple regression analysis was adopted to test the hypothesis from the research model.

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3111.800	4	777.950	66.379	.000 <sup>b</sup>
	Residual	3691.752	315	11.720		
	Total	6803.552	319			

a. Dependent Variable: Place Attachment

b. Predictors: (Constant), Quality of Public Space, Length of Residence, Visitation Frequency, Visit Group

Table 1: ANOVA Table of Hypothesized Model

As indicated in Table 1, the overall regression model is significant,  $F(4,315) = 66.38$ ,  $p < .001$ ,  $R^2 = .457$ . In other words, the predictors in the model (i.e. quality of public space, length of residence, visitation frequency and visit group) are capable to account for significant amount of variance in the level of place attachment. The regression model is hence significant.

#### Coefficients<sup>a</sup>

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1					
(Constant)	9.852	1.429		6.895	.000
Length of Residence	.367	.254	.061	1.446	.149
Visitation Frequency	-.024	.144	-.008	-.169	.866
Visit Group	-.308	.281	-.049	-1.095	.274
Quality of Public Space	.616	.041	.674	15.060	.000

a. Dependent Variable: Place Attachment

Table 2: Coefficients of Hypothesized Model

Table 2 suggests that the quality of public space has a positive influence on place attachment ( $\beta = .67$ ;  $p = .000$ ). However, the findings demonstrate that the length of residence, visitation frequency and visit group do not have any significant influence on place attachment ( $\beta = .61$ ;  $p = .15$ ;  $\beta = -.008$ ;  $p = .87$ ;  $\beta = -.05$ ;  $p = .27$ ). Consistent with the hypothesis, this study has found that the quality of public space is statistically significant at 95% confidence level to the place attachment. Partial support of the research model is observed.

This study indicates that the quality of public space is an antecedent variable for predicting the place attachment in the context of shopping centre of public rental housing estate. In this vein, the hypothesis is supported. Clearly, some findings in this study do not lend support to the prior researches. The place attachment is not significantly affected by length of residence, visitation frequency and visit group is particularly noteworthy. The divergent findings are possibly due to the different spatial settings, different measures and method of analysis applied. Most previous researches have predominantly focused on place attachment to the residential

settings. This tendency explicitly leads to different expectations and preferences on the place. Residential settings tend to enable the length of residence, visitation frequency and visit group (social relations) to deepen the emotional connection to the place and form place attachment. On the contrary, shopping centre is typically perceived as a leisure or recreational setting which is experience-based place. People usually perceive their connection to shopping centre based more on the salience of the physical setting (i.e. quality of public space) since the personal experience at the place is highly associated with perception of place, influencing place attachment. Contrary to the residential settings, the intention to revisit is based on whether the people can obtain desired benefits, such as relaxation, social interactions and fun in the shopping centre. Quality of public space in the context shopping centre exerts greater influence on place attachment than other factors. Therefore, it is necessary to test the model further by applying it in other leisure or recreational settings to study whether there are logic explanations for the differences in the model testing.



### Multi-Group Analysis

To verify the interaction effect between the place attachment and other predictors such as type of ownership of shopping centre, length of residence, visit group and visitation frequency, the initial sample was split into subsamples to make comparison of their level of place attachment by means of independent-sample t-test.

#### (i) Comparison of Visitor between Link REIT's Shopping Centre and Non-Link REIT's Shopping Centre

##### Group Statistics+

	Type	Number	Mean	Std. Deviation	Std. Error Mean
Place Attachment	Link's Shopping Centre	160	32.5525	2.35220	.18596
	Non-Link Shopping Centre	160	25.1875	3.15668	.24956

Table 3: Group Statistics of Place Attachment for Link and Non-Link Shopping Centre

As indicated in Table 3, the visitors of shopping centres currently managed by the Link REIT (i.e. Tak Tin Plaza and Un Chau Shopping Centre) rated a higher place attachment scores than that of shopping centres disposed by the Link REIT (i.e. Tsui Lam Shopping Centre and Tin Ma Court Commercial Centre).

##### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			95% Confidence Interval of the Difference		
Model		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower Upper
Place Attachment	Equal variances assumed	23.990	.000	23.665	318	.000	7.36500	.31122	6.75269 7.97731
	Equal variances not assumed			23.665	293.960	.000	7.36500	.31122	6.75249 7.97751

Table 4: Independent Samples Test of Place Attachment for Link and Non-Link Shopping Centre

Referring to Table 4, statistically significant difference was found between visitors shopping centres currently managed by the Link REIT and disposed by the Link REIT ( $t=23.665$ ,  $p<.05$ ).

##### Group Statistics

	Type	N	Mean	Std. Deviation	Std. Error Mean
Quality of Public Space	Link's Shopping Centre	160	32.3125	3.65181	.28870
	Non-Link Shopping Centre	160	26.9813	4.84797	.38327

Table 5: Group Statistics of Quality of Public Space for Link and Non-Link Shopping Centre

Shopping centres currently managed by the Link REIT (i.e. Tak Tin Plaza and Un Chau Shopping Centre) had a higher score for the quality of public space than that of shopping centres disposed by the Link REIT (i.e. Tsui Lam Shopping Centre and Tin Ma Court Commercial Centre) as shown in Table 5.

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means			Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Quality of Public Space	Equal variances assumed	29.720	.000	11.111	318	.000	5.33125	.47983	4.38720	6.27530
	Equal variances not assumed			11.111	295.492	.000	5.33125	.47983	4.38693	6.27557

\*Significant at  $p < .05$ .

Table 6: Independent Samples Test of Quality of Public Space for Link and Non-Link Shopping Centre

Referring to Table 6, the p-value of Levene's test is as ".000" so that it is concluded that the variance in quality of public space of shopping centres currently managed by the Link REIT is significantly different than that of shopping centres disposed by the Link REIT. With the significant difference found in both place attachment and the quality of public space, this finding is consistent with the hypothesis of positive relationship between the quality of public space and the level of place attachment. In comparison with most landlords of the shopping centre disposed by the Link REIT, the Link REIT has made apparent effort to improve the quality of public space by carrying out asset enhancement work for enhancing the physical attributes of the shopping centre and broadening trade mix. There is no doubt that the better physical attributes and more diverse trade mix in the shopping centre managed by the Link REIT can contribute to the enhancement of shopping experiences and in turn influence the visitors' place attachment to the shopping centre. In this sense, statistically significant difference in the level of place attachment was found between visitors of the shopping centre of Link REIT and that disposed by Link REIT.

**(ii) Comparison of Visitors with and without Visit Group****Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means			Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Place Attachment	Equal variances assumed	5.598	.019	-2.680	318	.008	-1.37362	.51261	-2.38216	-.36508
	Equal variances not assumed			-2.703	317.957	.007	-1.37362	.50818	-2.37345	-.37379

\*Significant at  $p < .05$ .

Table 7: Independent Samples Test of Place Attachment for Visitor with and without Visit Group

T-test result (Table 7) indicates that there is statistically significant difference in level of place attachment between visitors without visit group and that with visit group on place attachment ( $t = -2.703$ ,  $p < .05$ ). As stated above, social interactions which evoked among the family, friends, classmates or colleagues can contribute to hedonic experience (Stewart, Fujimoto, & Harada, 1999). The presence of visit group easily leads to memory-nudged visit experience that can strengthen place attachment. In this regard, statistically significant difference in the level of place attachment was found between visitors without and with visit group.



**(iii) Comparison of Visitors with Different Visitation Frequency****Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means			Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Place Attachment	Equal variances assumed	1.424	.234	-.643	318	.521	-.34449	.53559	-1.39823	.70925
	Equal variances not assumed			-.643	244.910	.521	-.34449	.53562	-1.39950	.71053

\*Significant at  $p < .05$ .

Table 8: Independent Samples Test of Place Attachment for Visitor with Different Visitation Frequency

T-test (Table 8) indicated that statistically significant difference in level of place attachment was not found between frequent visitors and non-frequent visitors ( $t = -.643$ ,  $p > .05$ ). Some plausible reasons exist to explain this inconsistent result. First, the higher visitation frequency to the shopping centre is not necessarily driven by place attachment. Instead, it is attributed to the fact that the shopping centre is the pathway necessary for access to their residence location. For example, Tak Tin Shopping Centre is connected with Tak Tin Estate, Lam Tin Estate and Hong Ying Cour while Un Chau Shopping Centre is connected with Un Chau Estate. At the same time, Tsui Lam Shopping Centre is connected with Tsui Lam Estate and King Ming Court while Tin Ma Court Commercial Centre is connected with Tin Ma Court. In line with this, the result of questionnaires shows that more than 38% of respondents visited shopping centre since they passed by. In other words, the repeat visitation arising from the need to pass by is not necessarily a great source of positive visitation experience that generates place attachment.

**(iv) Comparison of Visitors with Different Length of Residence****Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means			Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Place Attachment	Equal variances assumed	14.093	.000	-.979	318	.329	-.59646	.60948	-1.79559	.60267
	Equal variances not assumed			-.862	103.499	.391	-.59646	.69185	-1.96850	.77557

\*Significant at  $p < .05$ .

Table 9: Independent Samples Test of Place Attachment for Visitor with Different Length of Residence

According to Table 9, contrary to prediction, the length of residence does not yield contribution to any significant difference in place attachment between visitors with longer length of residence and that of shorter length of residence. A tenable explanation is that longer length of residence does not necessarily contribute to the longer length of involvement in shopping centre. Although the length of residence is pointed to influence the place attachment through the accumulation of social ties (Lewicka, 2010), it is worth noting that the social ties can be built in other leisure settings outside shopping centre such as park or the open area of the estate. According to the researcher's observation, except Tak Tin Shopping Centre, there is no free seating provided in the shopping centre in another three shopping centres. The lack of free seating place deprives the residents of opportunities for spontaneous social interactions, solidifying friend bonding. Therefore, no significant difference in place attachment has been found between visitors with longer length of residence and that of shorter length of residence.

### Conclusion and Research Implications

This study is the first attempt to identify the significantly positive role of the quality of public space plays in formulating people's level of place attachment to the shopping centre of public rental housing estate. However, inconsistent with our expectation, the study has found that length of residence, visitation frequency and visit group do not have any significant influence on place attachment.

This study provides a number of practical implications for owners and/or facility managers of the shopping centre. To enhance visitors' level of attachment, the shopping centre management practitioners could emphasize the trade-mix and hence broaden retail choices by combining anchor tenant with distinctiveness and other small tenants with features. It represents a critical factor in evaluating the functional aspect of a place. Significant effort should be made to provide customer-focused facilities to fulfill different needs

of different groups of shoppers such as barrier free access facilities, baby care room or family toilet. This is particularly useful for ensuring that that physical setting of the shopping centre is compatible with a range of activities such as social gathering.

Several weaknesses of this study should be addressed in future research. First, cross sectional design was used in this study, pointing to the risk of reversed causality or reciprocal causation in the relationship between the quality of public space and place attachment. Future study can extend the line of research using the longitudinal design since it is proven to be useful in investigating the timing of changes in the independent and dependent variables. Longitudinal studies entailing the investigation of visitor data over multiple years can provide an elaborative evidence on the relationship between the quality of public space and place attachment. Second, the research model in this study mainly focused on place identity and place dependence. Other dimensions of place attachment i.e. place affect and place social bonding, therefore, should be incorporated in the measurement of place attachment in future study to capture potential dimensions of this construct, thereby increasing the exploratory power of the model. Finally, it will be interesting to examine the model by using structural equation modelling which enables the testing of several relationships concurrently. Therefore, it can test the model's validity with another data analytical technique.

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## A Study on the Relationships between Housing Design, Neighbourliness and Anti-social Behaviour in Public Rental Housing in Hong Kong



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### Introduction

The Hong Kong Housing Authority (HKHA) took an initiative to curb anti-social behaviour (ASB) in public rental housing (PRH) through the implementation of the Marking Scheme for Tenancy Enforcement in Public Housing Estates in 2003, shortly after the outbreak of the Severe Acute Respiratory Syndrome (SARS). Later, the scheme was renamed as the Marking Scheme for Estate Management Enforcement in Public Housing Estates (hereinafter “the marking scheme”) in 2016. The coverage of the scheme was extended from misdeeds related to environmental cleanliness and hygiene to other estate management issues, noise nuisance and illegal gambling in 2006. Households who committed misdeeds will be allotted 3 to 15 points depending on the seriousness of the misdeeds. The tenancy will be terminated under the Housing Ordinance when 16 valid points or above recorded within two

years (HKHA, 2016). However, there has been no strong evidence of the effectiveness of the marking scheme in dealing with the ASB problems in PRH in long-term and no extensive support of the implementation of marking scheme has been received from the PRH tenants as it is considered as an unfair punishment system (Yau, 2012a).

Moreover, the scheme undermines the neighbourliness in PRH due to concentrated reliance on tenants' complaints and reports to ascertain misdeeds (Yau, 2012b). Tackling ASB from the root, i.e. design of the built environment, should, therefore, be considered. Researchers believed that building design could affect crime or ASB. For instance, fewer crimes exist in a low-rise building or dwellings facing each other as effective management can be achieved more easily and natural surveillance is more effective (Newman, 1972; Stollard, 1991; Holzman et al., 1996; Lab, 2010). Moreover, neighbourliness can influence crime occurrence or prevention. Neighbourhoods with close-knit and mutual trust among residents tend to have a lower crime rate due to greater social cohesion among residents and communal atmosphere (Cherney et al., 2008; Lab, 2010). Also, building design can influence

neighbourliness. Like smaller building and greater size of public spaces provide opportunities for more social interactions and identification of common interests between residents (Newman, 1972; Abu-Gazze, 1999; Foster et al., 2010).

Nonetheless, the literature tends to concentrate on crime and seldom investigates how housing design and neighbourliness can deal with the problem of ASB proliferation. To straddle the current research gap, this research aims to explore the relationships between housing design, neighbourliness and ASB in PRH estates in Hong Kong. It examines whether different types of housing block design, e.g. "Twin Tower", "Slab", "Single Aspect Building (Harmony)" and "Harmony I" contribute to varying degrees of neighbourliness and levels of ASB.

## Literature Review and Conceptual Framework

The relationships between housing design, neighbourliness and ASB were widespread neglected in the academic field. There is a large volume of literature on ASB and its control, concepts and measurement of neighbourliness and the relationships between housing design, neighbourliness and crime. All these previous studies form the strong bases for hypothesis development and methodological design of this research.

### Anti-social Behaviour: Concept, Control and Measurement

ASB has been defined "an act which caused or was likely to cause harassment, alarm or distress to one or more persons not of the same household as the perpetrator" (Crime and Disorder Act, 1998). It is also known as "incivilities" and "neighbourhood disorder", comprising problems of public order like fighting, street hassles, littering, groups of rowdy teens, public drug use and so on (Taylor, 1999; Skogan, 1986). The degree of ASB problem varies across different neighbourhoods or housing communities because of the differences in resident characteristics and efficacy of housing managers. Causes of ASB proliferation are multi-

dimensional. For example, ASB among children can be a result of poor parent-child relationship (Bronstein et al., 2003). With more parental support in the behavioural development of a child, the child is less likely to be engaged in ASB (Carlson & Sroufe, 1995; Ordóñez, 2009). Besides, the better is the image of a neighbourhood or the more CCTVs installed within the neighbourhood, the lower will be the level of neighbourhood problems (Lynch, 1960; Poyner, 1988; Chatterton et al., 1994).

Governments use different approaches like tenancy control, penalties and incentives to curb ASB. For instance, probationary or introductory tenancy, which usually lasts for 12 months, is used in social housing in the United Kingdom (UK). If a tenant violates the terms in the tenancy agreement, the social landlords could evict him or her before or on the expiry of the probationary tenancy without proof of any ground for possession and any judges of the courts (Crawford, 2003; Yau, 2014). The marking scheme implemented by the HKHA in Hong Kong is another form of tenancy control measure. In the marking scheme, 28 misdeeds are prescribed. Households who committed those prescribed misdeeds will be allotted 3 to 15 points depending on the seriousness of the misdeeds. The tenancy will be terminated when 16 valid points or above are accumulated within two years (HKHA, 2016).

Enforcement of legislation is another way to strengthen the control of ASB in society. The UK Government was empowered under the *Crime and Disorder Act 1998* and *Anti-social Behaviour etc. (Scotland) Act 2004* to issue Anti-social Behaviour Orders against perpetrators. Pursuant to the recently enacted *Anti-Social Behaviour, Crime and Policing Act 2014*, the court can decide the rules for the perpetrators to comply with at a period of time. If the perpetrators violate the rules, punishments (e.g. for instance, up to 2 years' imprisonment or unlimited fine for those who break the rules of civil injunction and aged over 18) will be imposed.

To control ASB with incentives, several countries such as Australia, the UK and Netherlands have adopted the tenant incentive schemes which are essentially manifestations of welfare contractualism. These schemes aim to encourage public or social housing tenants to obey the house rules and certain obligations by offering them additional rewards such as rent subsidies for their good behaviour (White, 2000; Jacobs, 2008). Alternatively, some governments launched family intervention projects like ASB family intervention programmes to provide intensive support (e.g. in forms of guided family planning) to the needy family to address their ASB problems (Department for Children, 2009).

Many researchers like Ross and Mirowsky (1999) measured the ASB level directly by asking the respondents how they perceive the level of ASB proliferation in their living places. For instance, the respondents may be asked to indicate their agreement with the statement “my neighbourhood is noisy” using a Likert scale. This approach was adopted by Yau (2012b).

### Neighbourliness: Concept, Measurement and Impacts

Neighbourliness is defined as “the neighbour together with neighbourhood efficacy” (Dhattiwala & Biggs, 2013) and “the communal institutionalization of the perception with neighbours” (Schnell & Goldhaber, 2001). Good neighbourliness is beneficial to the interactions and relation among residents within a housing community (Beaudoin, 2011). Neighbourliness is believed to be institutionalized and embodied in the social norms (Schnell & Goldhaber, 2001). To measure neighbourliness in an objective approach, scholars use different indicators. In Agrawal's (2008) study, neighbourliness was quantified in terms of frequency, place and method of social interactions among neighbours. Beaudoin (2011) measured neighbourliness with the frequency of visiting neighbours, exchanging things, providing and receiving help with small tasks like repair work or grocery shopping.

Kasarda & Janowitz (1974), Tobey et al. (1990) and Sampson & Laub (1993) found that longer length of residence was conducive to the creation of a strong, stable neighbourhood and thus increase the strength of neighbourliness. Compared with other factors such as community size and social class, length of residence seems to be a much stronger determinant of neighbourliness in a community. Moreover, Knies (2007) argued that residents from the lower-income groups tended to interact with their neighbours more frequently perhaps because people with a higher socioeconomic status are more likely to go for business trips and long-distance trips so their larger social networks inhibit them from spending time on interacting with their neighbours.

Besides, the study by Agrawal (2008) showed that residents interacted more often and invited each other to their homes because of their children. Schnell & Goldhaber (2001) also emphasized that the social interaction, social ties and neighbourliness of families with children were much higher than those no-child families. Traditionally, people avoid social isolation through neighbour contacts because neighbours are people who are easily got in touch with. However, advancements in telecommunication technology and public transportation make distance less of a constraint in maintaining contacts with like-minded people who may not live next door (Wellman, 2001). Therefore, neighbourliness starts declining in the modern world. On the other hand, Weening et al. (1990) argued that more efficacious information technology can allow better information sharing and exchange within a community, facilitating social control in the neighbourhood and harnessing neighbourliness.



### **Housing Design, Neighbourliness and Crime**

Abu-Gazze (1999) and Foster et al. (2010) stated the nearby public spaces provide opportunities for social interaction and identification of common interests between residents. Also, greater building size leads difficulty on recognition between legitimate users and strangers (Newman, 1972), and reduces the amount of social interaction (Newman & Franck, 1982). Besides, Cheshire and Buglar (2016) advocated that physical proximity like high-density units, or the flats which shared amenities causes residents deep involving in their neighbourhood's lives, mutual aid, and close friendships. Nevertheless, it is liable to increase prevalence of poor noise insulation, gossip, bullying, intimidation, neighbour dispute and social conflict (Cheshire & Buglar, 2016).

People commit a crime generally based on the factors of ability, opportunity and motive. Kushmuk and Whittemore (1981) argued that the effect of physical design influence crime through the intermediate goals, including access control like the use of closed-circuit television cameras and surveillance like dwellings facing each other or more placement of window and installation of lighting (Newman, 1972; Stollard, 1991; Lab, 2010). Newman (1972) and Newman and Franck (1982) believed that high rise or larger building is unmonitored and has multi-user entrances that allow strangers easy to access the dwellings, therefore has obliquely effects on the higher personal crime and the fear of crime by the less effective management.

Inhabitant with more close-knit and trusting tends to have lower crime rate, as residents are more willing to intervene to control and correct teenager's behaviour and to preserve the common community (Cherney et al., 2008). Kushmuk and Whittemore (1981) believed that the ability of residents to recognize their neighbourhoods from strangers and identify the needs of the community could enhance social cohesion among residents and build the communal atmosphere which facilitates to eliminate crime and other neighbourhood problem. That recognition and identification can be created by the interaction between legitimate users and other social events (Lab, 2010). In virtue of better neighbourliness, neighbourhood watch groups are more liable to be built for providing informal social control in the community, for example, discussing common problems in the neighbourhood and promoting joint action to address the mutual problem (Lab, 2010).

Hong Kong-Macao  
Greater Bay Area

## Conceptual Framework

The literature seldom investigates how housing design and neighbourliness shape ASB proliferation in a housing community. To straddle

the extant research gap, this study draws on the conceptual framework in Figure 1 to explore the relationships between housing design, neighbourliness and ASB in PRH in Hong Kong.

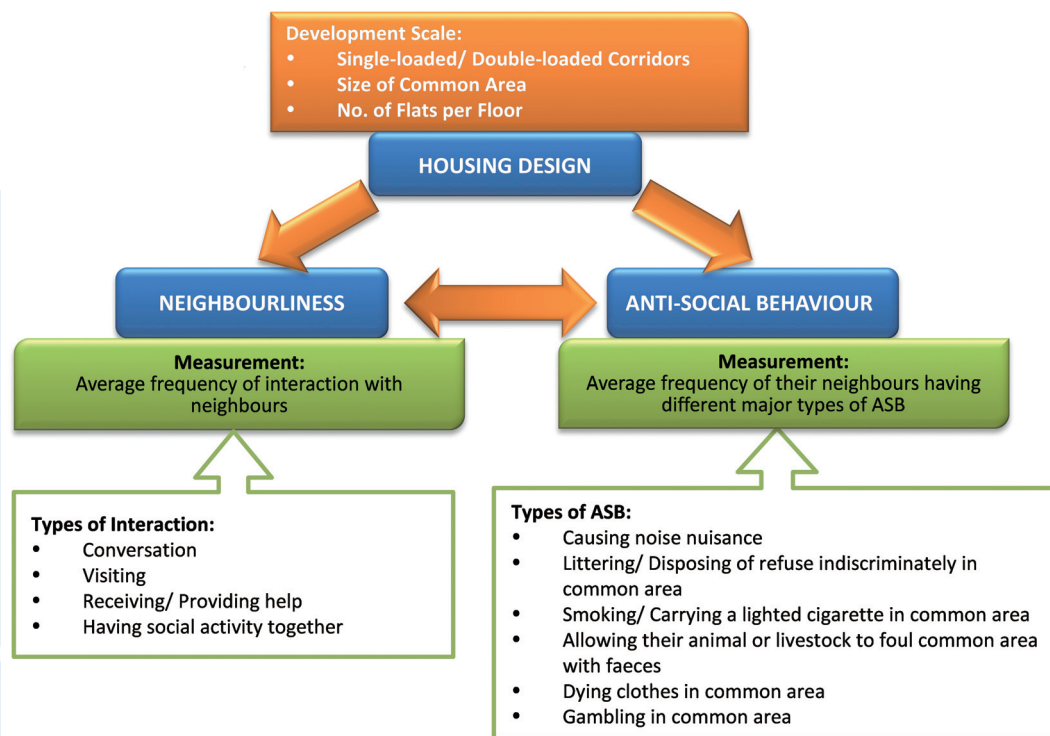


Figure 1: Conceptual Framework

## Research Design

To empirically test the relationships outlined in Figure 1, desk study, structured questionnaire surveys and in-depth interview were conducted.

### Desk Study

The background information of the selected PRH blocks, for instance, block design type, typical floor plan, block age and the total number of flats were collected through desk study. The major sources of desk study are the government published data such as the data from the official webpage of the HKHA, as well as the internal documents of the HKHA.

## Structured Questionnaire Surveys

Convenience sampling and face-to-face method were applied in the structured questionnaire survey. Other sampling methods like random sampling were infeasible because of the unavailability of the contact methods of all households in selected PRH estates and lack of access to individual flats. Compared with the postal and online survey, the face-to-face approach could allow more effective screening by avoiding the provision of false information by the respondents and increase the response rates.

As this research focuses on housing design, two housing estates with different block configurations were purposively chosen. These estates were Shun Lee Estate and Fu Cheong Estate. Housing blocks with different designs were picked in order to have some varieties in housing design for meaningful analyses in the later stage of the research. Table

1 summarizes the types of housing blocks in the two housing estates to be covered in the research. Altogether four types of housing blocks, namely "Twin Tower", "Slab", "Single Aspect Building" and "Harmony I" were studied.

Table 1: The Selected PRH Blocks

	SINGLE-LOADED DESIGN	DOUBLE-LOADED DESIGN	COMPLETION YEAR
SHUN LEE ESTATE	<b>Twin Tower</b>	<b>Slab</b>	<b>1978-1979</b>
FU CHEONG ESTATE	<b>Single Aspect Building (Harmony)</b>	<b>Harmony I</b>	<b>2001-2002</b>

Around 40 residents living in each type of selected housing blocks were surveyed. In other words, a total of 160 samples were collected from four selected blocks of two estates. The target respondents had to live in the selected PRH blocks for at least five years and had to be aged at or over 25. These delimitations aimed to ensure that the respondents knew the situations of their housing estates well and were mature enough to evaluate ASB seriousness in their estates.

The questionnaire was divided into four major aspects: (i) the screening questions such as age, the PRH block the respondent is living in and the length of residence in the PRH block; (ii) the respondent's perceptions and feelings on neighbourliness: the perception on neighbourliness was operationalized by the frequency of social interaction with neighbours in last three months; (iii) the respondent's perception to different ASBs in his or her building: the perception of ASB was also measured by the frequency of respondent's neighbours committing ASB in last three months; and (iv) the socio-demographic profiles of the respondents. The frequencies were measured on a five-point scale (with 1= Never; 2= Once to third times per month; 3= Once per week; 4= Twice to four times per week; 5= (Almost) daily).

### In-depth Interview

For acquirement of the relatively all-around perspectives on the relationship between housing design, neighbourliness and ASB seriousness in PRH in Hong Kong, in-depth interviews were carried out with a housing manager and two housing officers of the Housing Department. The interviews were conducted face-to-face such that the interviewers could more easily probe for explanations of responses as well as identify and understand the body language and facial expressions of the interviewees. The interviewees were asked to respond to the interviewers' questions based on their experience in the management of PRH in Hong Kong. To supplement the questionnaire survey, the interview questions concerned the interviewees' observations and perceptions about the relationships between housing design, neighbourliness and ASB in the PRH estates they were managing.



## Findings, Analyses and Discussion

Table 2 and Table 3 show the summary statistics of the respondents' responses to the questionnaire. Bivariate analyses were conducted to test the hypotheses of the research. The analysis results suggested that only one out of seven hypotheses was refuted empirically. The results of the one-tailed t-test supported H1: "the ASB problem is more serious in housing blocks with double-loaded corridors than in those with single-loaded corridors" ( $p < 0.1$ ). While open single-loaded corridor can admit more natural sunlight and allow better ventilation, double-loaded design of corridor comparatively has poor air circulation and illumination which amplify the influence of ASB like odour nuisances.

H2: "the more sizeable is the common area in a housing block, the less serious are the ASB problems in the housing block" was supported by the Pearson's correlation test ( $p < 0.1$ ). The Pearson's correlation coefficient was -0.3622. One of the possible explanations for the significant negative relationships between the size of common area and ASB seriousness is that the lift lobby can act as acoustic buffers. A more sizable is the lift lobby can diminish the adverse influence of noise nuisances affecting the residents. Similarly, H4: "the better the neighbourliness is, the less serious the ASB problem is" was also supported by the Pearson's correlation test ( $p < 0.1$ ). The Pearson's correlation coefficient was -0.3175. The analysis results demonstrate that a rise in overall neighbourliness level was associated with a decline in the overall ASB level. Perhaps, residents with better neighbourliness were more willing to participate the neighbourhood watch groups, take a role of surveillance to ASB, discuss common problems in the neighbourhood and promote joint actions to address the mutual problem. These activities helped reduce the proliferation of ASB within a housing community.

H5: "neighbourliness is better in housing blocks with single-loaded corridors than those with double-loaded corridors" was supported by the results of the one-tailed t-test ( $p < 0.1$ ). The results may be ascribed to the fact that environment of common areas (e.g. communal corridors) in housing blocks with a single-loaded design is better in terms of natural lighting and ventilation. Residents feel more comfort in using the common areas as a space of social interactions, which is conducive to the cultivation of neighbourliness among of the residents. As for H6: "the more public common area in PRH, the better neighbourliness", it was not refuted empirically. The Pearson's correlation coefficient was 0.5293 which was statistically significant at the 10% level. Residents were more likely to walk away from their home to the common space to interact with their neighbours if the common areas are more spacious.

Regarding H7: "the more flats per floor of the building, the worse neighbourliness", the Pearson's correlation test returned a negative but significant correlation coefficient ( $r = -0.4165$ ;  $p < 0.1$ ). The results imply that a reduction in the number of flats per floor was associated with an enhancement in overall neighbourliness level. It is probably because in smaller groups, consensus and norms are easier to develop so neighbour conflicts can be reduced. On the other hand, H3: "The level of ASB seriousness increases with the number of flats per floor in a housing block" was refuted by the empirical findings. The Pearson's correlation coefficient was found to be insignificant even at the 10% level. Since gossip is easier to create in those blocks, it has a positive impact on social control function including control of behaviour by excluding people who act anti-socially, and effective management can also be created when the quantity of staff allocation is based on the number of flats.

Based on the findings of the research, some policy implications were drawn with a view to better control of ASB in PRH. For instance, the HKHA should construct PRH blocks with single-loaded corridors rather than double-loaded corridors, with more sizeable common areas including corridors and lift lobbies and with fewer flats per storey to directly reduce ASB problems and indirectly reduce ASB problems through the enhancement

of neighbourliness. Also, the government should launch more engagement activities like organizing planting program in PRH regularly. It is important to strengthen support for the mutual aid committees for enhancing mutual care and support and fostering senses of identity and belonging within PRH. These would facilitate stronger neighbourliness to be developed and thus inhibit the proliferation of ASB in housing estates.

Table 2: Summary statistics of the respondents' levels of interaction with their neighbours

	Fu Cheong Estate					Shun Lee Estate				
	1	2	3	4	5	1	2	3	4	5
How often do you have conversations with your neighbour last three months?	15.00%	23.75%	30.00%	21.25%	10.00%	25.00%	42.50%	15.00%	12.50%	45.00%
How often do you visit your neighbour last three months?	61.25%	26.25%	8.75%	3.75%	0.00%	81.25%	16.25%	1.25%	1.25%	0.00%
How often do you provide or receive help from your neighbour last three months?	36.25%	40.00%	17.50%	6.25%	0.00%	50%	43.75%	6.25%	0.00%	0.00%
How often do you have social activities with your neighbour last three months?	71.25%	23.75%	5.00%	0.00%	0.00%	86.25%	13.75%	0.00%	0.00%	0.00%

Table 3: Summary statistics of the respondents' perceptions of ASB seriousness in their housing communities

	Fu Cheong Estate					Shun Lee Estate				
	1	2	3	4	5	1	2	3	4	5
How often do your neighbours cause noise nuisance last three months?	48.75%	21.25%	12.50%	15.00%	2.50%	57.50%	36.25%	5.00%	1.25%	0.00%
How often do your neighbours litter or dispose refuse in the common areas of the block last three months?	35.00%	36.25%	17.50%	11.25%	0.00%	57.50%	37.50%	2.50%	2.50%	0.00%
How often do your neighbours smoke or carry a lighted cigarette in the common areas of the block last three months?	63.75%	25.00%	10.00%	1.25%	0.00%	90.00%	8.75%	0.00%	1.25%	0.00%
How often do your neighbours allow their animals or livestock to foul the common areas with feces and urine last three months?	92.50%	7.50%	0.00%	0.00%	0.00%	86.25%	27.50%	0.00%	0.00%	0.00%
How often do your neighbours dry cloths in the common areas of the block last three months?	93.75%	6.25%	0.00%	0.00%	0.00%	70.00%	25.00%	3.75%	0.00%	1.25%
How often do your neighbours gamble in the common areas of the block last three months?	86.25%	13.75%	0.00%	0.00%	0.00%	88.75%	11.25%	0.00%	0.00%	0.00%

Remarks: 1-Never; 2-Once to third times per month; 3-Once per week; 4-Twice to Fourth times per week; 5-Almost daily

## Conclusion and Agenda for Further Studies

There is a large volume of research exploring the relationship between housing design and crime or fear of crime. The link between housing design and ASB has been largely neglected in the literature. To straddle this gap, this research aims to probe the relationships between housing design, neighbourliness and ASB in selected PRH estates in Hong Kong. It is interesting to know if we could tackle ASB problems by means of altering the built environment. This research could raise the awareness of the importance of housing design on promotion of neighbourliness and control of ASB, and facilitate insightful policy implications for future PRH development in Hong Kong to be drawn based on the empirical evidence. This research revealed that the ASB problems were considered less severe in housing blocks with single-loaded corridors, with more sizeable common areas or with better neighbourliness among residents. Besides, neighbourliness was found to be better in housing blocks with single-loaded corridors, with more sizeable common area or with fewer flats per storey.

“Housing design” in the current study is specific to the design of corridors (single-loaded vs. double-loaded), number of flats per floor and size of the common area. In fact, the scope of housing design can be extended to include choices of building materials and overall planning of a housing estate. Therefore, future research is warranted to see how housing design affects ASB proliferation in a housing estate in a more holistic manner. Furthermore, this research focuses mainly on the factors contributing to ASB proliferation in PRH. Further research can also pay attention to the impacts of ASB like its effects on residents’ physical and mental health and their participation on estate affairs. The research can be further extended to cover private housing as well in the future.

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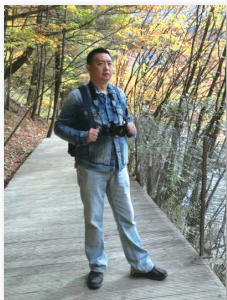
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## 我國物業管理服務現狀研究及對策



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### 摘要

隨著我國經濟水平以及城市化水平的高速發展，精神文明與物質文明建設使人們生活質量日益提高，人們不再滿足於一個水泥和鋼筋堆砌的、能栖身的家，享受舒適、安全、環境優美的居住環境已成為人們對居所普遍的要求。而物業管理服務質量已不能跟上人們對美好生活的期望，形成了困擾小區物業管理的主要問題，本文試從政策法規、傳統觀念、管理體制、管理方法等幾個方面，分析物業管理中存在的問題，提出推進小區物業管理的對策建議，提升小區物業管理服務質量，使小區物業管理企業、業主大會、政府形成合力，創建和諧的社區環境。

### 引言

隨著改革開放的不斷深化，市場經濟的日趨活躍，新建樓房的數量不斷增加，物業管理是社會經濟發展到一定水平的必然產物，隨著改革的不斷深入，越來越多的公有住房逐漸轉變為個人所有。與此相適應，原來的公房承租人士轉變為房屋的所有權人，原來的公房管理者與住戶之間的管理與被管理關係，也逐漸演變為物業管理企業與房屋所有權人的服務與被服務關係，物業的管理行業應運而生。在住房制度改革與城市化建設發展的過程中，形成了多元化的格局要求房屋的管理更加專業化。實現房地產業管理的社會化、企業化又具有強烈的社會公益性質。傳統的房屋管理將被新的物業管理體制與經營機制所代替，物業管理已具雛形，在目前的發展中充滿生機與活力。物業管理快速進入了社會經濟生活，並得到了迅猛的發展，成為社區建設、城市管理和國民經濟發展不可缺少的重要組成部分。物業管理行業被越來越多的人所關注，得到了空前發展，產生了良好的社會效益、經濟效益和環境效益，從管理體制來看，推行新的物業管理模式是房地產業深化改革的內容。但是物業管理工作目前尚處於初級階段，還存在基礎薄弱，法制不完善，運行不規範等諸多問題，並在管理

實踐中一一暴露出來，物業管理的發展還缺乏較為系統的、統一的操作規程。通過對管理的研究，物業管理的雛形已經初步形成。管理體制、管理模式、發展方向已經明確，為構建物業管理模式在理論上和實踐上奠定了良好的基礎。

### 一、物業與物業管理的含義

#### (一) 物業的概念

「物業」一詞在20世紀80年代由香港傳入我國沿海、內地，其含義是指以土地及土地上的建築物形式存在的不動產。物業是單元性的房地產，既可指單元性的地產，也可指單元性的建築物。物業有著大小之別，它可以根據區域空間作相對分割，整個住宅小區中的某住宅單位可作為一物業，辦公樓宇、商業大廈、酒店、廠房倉庫也可被稱為物業。

#### (二) 物業管理的概念

物業管理作為房地產市場的消費環節，實際上是房地產開發的延續和完善，是在房地產的開發和管理中完善市場機制，逐步建立起綜合的管理服務。物業管理是房地產管理的一個重要組成部分，也是現代城市管理是必不可少的，在國際上的流行並獲得了蓬勃的發展，被視為現代都市的「朝陽」產業。一般物業管理分為廣義與狹義，廣義的物業管理是指所有地產發展，租賃，銷售及售後服務；狹義的物業管理，其主要任務是建築的維修和養護，及管理的樓層機電設備和公共設施，包括治安保衛、環境綠化、發行的報紙、環境衛生等。

#### (三) 物業管理的重要意義

##### 1. 加強物業管理可以使物業價值升值

加強物業管理不僅可以使物業有價值，而且還可以升值。一方面，良好的物業管理可以使物業處於完好的正常運行，可以延長使用壽命的特性，



而且還可通過基本操作，特別行動及特色業務服務，提高物業的使用功能，提高物業檔次，從而促進物業升值。

## 2. 高質量的物業管理為物業公司贏得市場

另一方面，物業管理的質量，是精明的房地產商與客戶的首選，提高物業市場交易率，提高房地產投資效益。物業管理的目的為業主創造一個清潔、舒適、安全、安靜、優雅的工作生活環境，隨著社會的進步，逐步擴大和提升。隨著人們生活水平的逐步提高，生活內容豐富和充實，無論從物質還是精神上都是與生活與工作環境的優化和美化是分不開的。高品質的物業管理不僅是一個技術維護和管理，並在此基礎上為業主創造一個從物質到精神，不僅具有現代都市風格，又具有個性特徵的工作與生活環境，形成一個以物業為中心的「小社會」。在充分保護業主的合法權利與利益的同時，增進睦鄰意識，建立相互尊重，和諧共處的居住關係。因此，高品質的物業管理服務不僅能改變城市風貌、還改善了人們的工作和生活環境，而且還可以提高人的素質與精神文明的現代城市意識，為樹立城市形象，完善城市起到了積極的促進作用。

## 二、我國物業管理中存在的問題及原因分析

### （一）存在問題分析

隨著物業管理服務的發展，綜合效益越來越明顯。地方政府主要是減少了大量的財政補貼同時也緩解城市就業的壓力；對於房地產企業的發展，主要是為物業管理完善的開發商建立了良好的企業形象，吸引了大批購房者和潛在消費者，提高房地產企業在市場上的競爭力，使發展中的房產暢銷，加速資本周轉。對城市環境，居住區環境和布局，安全和城市建築風貌統一風格，提升城市品位和環境效益。然而，相比，目前我國物業管理服務中還存在諸多問題。

### 1、物業管理立法相對滯後，法規體系有待完善。

改革開放後，我國經濟才由計劃經濟向市場經濟過渡並伴隨著我國福利分房轉向個人購房，從而呈現出居民小區物業的管理問題。物業管理概念也是由香港引鑒而來，後期國務院出台了《物業管理條例》也更多借鑒香港的法律法規，而我國政治制度、社會現狀以及公民素質等大環境與現有的物業管理法規不匹配，國家出台了的法規雖然填補了我國物業管理法律制度的空白，初步改變了我國物業管理無法可依的狀況，然而，與物業管理實踐對立法的要求相比，仍有相當差距，由於在許多方面都缺乏明確的法律規定，使得在管理中形成大量的矛盾與分歧，物業管理的糾紛事件日益增多我國物業管理立法現狀明顯滯後於物業管理行業的發展。

### 2、部分物業管理企業服務質量不高，物業管理企業缺乏監管。

由於我國的物業服務行業還是在發展的初期，技術含量不高，行業的准入門檻較低，從業人員更多的社會底層人員，人員素質低下，再加上部分企業內部管理方式落後，造就了物業管理服務質量低下；由於物業服務企業競爭激烈，部分企業為降低成本，管理水平和服務質量嚴重滯後，人員管理和財務狀況混亂等，物業服務企業多屬於包乾制收費，法規無權要求企業公開財務數據，物業公司基本上不公開財務收支情況，或公開的數據都是由物業公司自己提供，缺乏公信力，居民對物業公司的真實收支情況一無所知，造成物業公司中飽私囊，損害業主利益。

### 3、物業小區收費難

#### (1) 是因違約行為造成的矛盾

住宅小區在服務中任意減少服務項目的內容，對房屋及附屬設備、公用設施等修繕不及時，對物業管理區域內的環境、綠化、公共秩序未盡到管理的職責，造成小區居住環境惡化，對個別業主違反業主公約侵犯他人權利的行為不予制止。如某些業主裝修、安裝設備等妨礙了其他業主的生活和休息；個別業主在裝修房屋時不顧住宅樓整體安全而私自拆改結構，給其他業主造成危險；有的業主為圖自己方便，在共用部位搭建臨時建築、養鴿棚等，破壞了小區環境，妨礙了其他業主的生活，而住宅小區未能及時處理，從而導致一些業主不滿意而拒交物業費。

#### (2) 是因侵權行為造成的矛盾

住宅小區的一些做法侵害了業主利益，擅自將小區的物業管理轉讓給他人，或擅自改變小區內土地、房屋和共用設施的用途。如許可他人將共用部分諸如平台、屋頂用於自營或出租經營以及安裝廣告，將小區房屋租給他人做售貨亭；還有些時候無故扣押業主裝修房屋保證金，導致業主拒交物業費。

#### (3) 是因開發商出售的房屋配套設施不齊全、公共設施不到位而造成的矛盾。在前期物業管理階段，由於開發商不履行售房承諾，導致業主生活不方便。而前期住宅小區一般與開發商存在某種關係，其本來應是聯繫開發商與業主之間的紐帶，然而住宅小區不是想方設法解決問題，只是將自身置之事外，故與業主造成矛盾，導致業主拒交物業費。

### (4) 違約成本低

業主對物業管理知識和政策法規缺乏認識，業主對「掏錢買服務」消費觀念不適應，國家法治建設的落後導致的，因為沒有哪一條法律明確了業主欠費之後需要承擔的後果；物權法、物業管理條例、民事訴訟法、合同法等方面都不是非常具體，導致業主鑽了法律的空子。

### 4、物業管理企業管理方式落後

我國現有的物業管理企業不是市場機制所產生的，相反是大多數行政配置的產物。其中一些是從原有的房管所分流建立的；有些是從房地產開發商解決售後服務而建立的；有些是從大型企業制度改革中逐漸推到社會後勤科室的轉變，其餘的才是專業從事物業管理的公司。因此，我國大部分的物業管理企業不是真正意義上的現代企業制度形成的獨立的、自負盈虧、自我發展，自我積累的業務實體。舊制度對我國事業單位的依附嚴重束縛在競爭激烈的市場中靈活性的運用。

### 5、服務管理水平有待提升

就物業企業來看，法律意識淡薄，缺乏社會責任感和誠信意識的問題，不能很好的按合同辦事，服務水平低下，處理各方面關係和矛盾問題簡單生硬，造成業主信任度、滿意度下降，拒絕交納服務費，形成惡性循環。

物業企業與業主之間屬於平等主體之間的委托服務合同關係，但由於住宅小區的工作方法和理念還停留在過去行政管理的老一套，缺乏市場意識和服務理念，不重服務只重管理，凌駕於業主之上。對業主反映的維修、綠化、安全、衛生等問題一味地推諉、拖延，並巧立明目多收費、亂收費，以押金、罰款等不正當手段強制業主服從管理，這一定位差錯是造成物業管理糾紛迭起的關鍵因素。

## （二）存在問題的原因

### 1. 物業管理企業經營問題

我國的物業管理由於起步較晚，加上我國房地產業主的經濟收入水平的限制以及對物業管理的認識不足和企業的自身原因，造成了我國目前物業管理服務品種較少，質量低。由於經濟收入以及居住小區條件的制約，承擔不起較高的物業費用，除了清潔與保安外不需要其他的服務。物業管理公司，由原來的房管所或單位後勤部門重組而成，一些房地產公司暫時組建形成的，大多數從業人員沒有經驗、素質較低，管理落後。在服務的項目中，僅限於提供保安、清潔、維修和其他基本服務，缺乏深入瞭解物業的服務意識。業主沒有認識到物業管理是使其房產保值增值的一種投資行為，也沒有認識到物業管理是一種消費行為，在繳納服務費時總要「左盼右顧」，生怕自己「吃虧」。

### 2. 業主參與公共事務的意識較差

業主本身對物業管理的認識存在誤區。一方面，多數業主在購房時，往往忽略了物業管理的問題。只知道住房商品化，不清楚住房管理亦需商品化，消費觀念尚未適應「花錢買服務」的模式，對物業管理問題知之甚少。有些住宅小區的業主委員會遲遲未能成立，亦無人過問；已成立以業主委員會，也是徒有虛名，遇到物業管理服務中的問題，不懂得如何保護自己的利益。對物業管理企業不履行義務，個別業主的行為侵犯大多數業主的利益時，不是通過正當途徑和手段解決，而是採取不交物業管理費的消極方式，這也是導致物業管理矛盾產生的重要原因。另一方面，有些業主有意無意將不同主體間的法律關係相混淆，將不屬於物業管理職責範圍的問題硬拉到物業管理企業上，如供熱未達標以及房屋質量問題，是業主與供熱企業及房產開發商之間的糾紛，並非物業管理企業問題。以此要求物

業管理企業解決問題並拒交物業管理費，是違反法律規定的過激行為。

## 三、完善我國物業管理的對策建議

### （一）完善物業管理收費機制

制定管理服務標準是建立「分等定級，質價相符」的收費機制為前提條件。制定標準的收費機制，是物業管理的服務質量和服務水平分級分類，只有達到相應的服務水平，才能獲得相應的等級管理費。業主也可根據需要選擇服務標準，並承擔相應的物業管理費用，避免物業把業主不需要的服務項目而強加給業主。同樣，物業公司依照雙方的標準服務，物業管理費用以服務質量制定收費標準。各地區在具體制定和實施管理的服務標準時，應考慮以下因素：

第一、受地域文化、收入水平及物業管理市場發育成熟度等因素的影響，不同地區的消費理念和承受能力有所差異，對物業管理的接收及認知度亦有所不同。因此，各地區的物業管理服務標準應符合實際，切忌一概而論。

第二、不同檔次的物業和消費群體，物業管理服務的深度和廣度均有所不同，服務的標準也應有所不同。

第三、物業管理公司的服務需質價相符，意味著所提供服務的實際質量和水平不同，猶如五星級酒店的服務水準和收費標準與普通招待所相比有著天壤之別。企業資質體現企業的規模和實力，規模和實力決定了服務的成熟素質。

### （二）加快現代企業制度建設

建立真正的以資產為紐帶的有限責任公司，明晰產權，強化物業管理企業在市場上的獨立決策和運作的能力，是物業管理企業參與市場競爭的基本條件。應堅持「抓大放小」的原則，放開搞活中、小物業管理企業。對一些規模小、管理質量差、經濟效益低的中、小企業，應鼓勵兼併、合併和購買重組，允許和規範破產，使物業管理市場結構更趨合理。



深化物業的制度改革，建立現代企業制度，離不開政府的指導與支持。在物業管理企業改革原有的體制和機制的同時，要求政府相應的轉變職能，理順社會經濟管理職能與資產所有者的職能關係。要加強行政管理與行業管理，從宏觀上指導企業以市場化改革，但也要創造良好的政策環境和寬鬆的經營環境，從微觀上做好服務工作。各級政府部門領導人親自抓房管所改革與重組工作、鼓勵、支持轉型物業公司大膽探索和創新，為物業管理體制改革的不斷創造條件。

### （三）規範管理提高服務質量

建立一個標準化的管理，務實和有效的家庭訪問系統是贏得業主信任的基礎。物業管理公司應建立和完善各種規章制度，如「居民公約社區綠化管理系統」，使社區管理規則與系統可以提高管理透明度。對業主的合理要求，應實施有限的期限，制定服務承諾、服務標準，達諾責任具體明確。房屋質量問題及時解決；室內上下水，電路故障限時維修；業主意見、投訴限期答覆，儘量滿足他們的要求，暫時無法實現的，要闡明正當理由，不得無故拖延，拖延的責任人要嚴肅處理。提高物業管理企業的精神文明建設水平，引導業主行為走向文明、規範。使用文明禮貌用語，讓業主感到物業人員的溫暖。

## 四、物業行業發展趨勢

一直以來，物業管理行業作為傳統服務業，行業集中度低、與資本市場關聯較小，盈利水平較低。不過，近年以來，物業管理行業作為新經濟的重要增長點和提高居民生活品質的重要載體，受到了社會和資本市場的廣泛關注。法規政策的進一步完善、監管體系的建立、定價機制的轉變、稅收政策的突破，將為行業發展打造更為健康的外部環境。市場競爭的加劇，將極大地推進行業專業化、市場化、規範化進程城鎮化戰略的實施。

### （一）運營模式的創新轉變

隨著物業管理行業競爭的不斷加劇，物業管理企業愈來愈需要順應瞬息萬變的市場，商業模式的創新對改善物業行業生存狀況產生深遠影響。國人對於高端物業服務有著不斷的追求，面對市場前景良好的高端物業行業，在未來發展過程中，需側重於商業地產的物業管理的開發和創新。高端物業服務包括對建築、設備、設施的運行管理與維護保養，管轄區域的安全秩序管理、環境管理與環境保護，以及對物業客戶自尊與服務享受的滿足，這些服務構成了物業服務所提供的核心附加價值。通過嘗試改變勞動密集型和簡單服務提供者的現狀，向依托現代科學技術、現代信息技術、大數據、現代企業經營管理方式的轉變，提高服務模式需與市場需求的匹配程度，以此為契機改變傳統的物業服務運作模式。

### （二）服務的多元化發展

行業發展所依托的社會、經濟、法制、市場環境的變化，物業管理緊跟市場需求的多樣化的特點，已呈現提檔升級的多元化發展態勢，積極開拓創新多遠業務，促進營業收入快速增長。物業管理在清潔、綠化、秩序維護、設施設備維護等基本服務的基礎上，已縱向延伸至房地產開發前期的規劃、設計、設施設備選用顧問等整個鏈條，橫向涵蓋消費者居家養老、家政服務、房屋租賃、電子商務等各類個性化需求，不斷挖掘出物業服務產品的附加價值和邊際效益，體現出物業管理豐富的商業價值，中國物業管理行業仍將是有較好發展前景的行業。

2016年，百強企業管理面積總值達54.50億平方米，佔全國物業管理面積的29.44%，較2015年提升1.02個百分點，市場佔有率接近三成。同期，TOP10企業市場佔有率快速提升至10.18%，較上年提高2.54個百分點，行業的發展呈現出進一步增長的態勢。我國物業行業在傳統業務和延伸業務的共同作用下，基礎物業服務實現平穩增長。

可以看出，行業內企業在堅持做好傳統物業服務的同時，充分利用互聯技術和資本力量，大力拓展延伸服務，推進多元化共贏發展模式。隨著行業創新業務的不斷加強和逐漸進入收穫期，預期將為企業帶來更高的附加價值。

### （三）管理的專業化能力提升

物業管理是由專業的管理企業——物業管理公司實施對物業的統一管理，除了物業管理公司從事專業服務外，綠化公司、保安公司、清潔公司、清潔公司等專業化公司提供專業服務已逐步成為一種趨勢。物業管理公司僅僅是一個管理機構，而將一些專業管理以經濟合同的方式交予相應的專業經營服務公司，這有利於提高城市管理的專業化和社會化程序，並能進一步推進城市管理向現代化管理方式轉換。

## 結論

物業管理是城市管理體制的重大改革，也是房地產業發展到一定程度的必然產物。它涉及到人們觀念的更新，政府職能的轉變，多方面利益的調整與理順，以及在人們心理上，經濟上的承受能力。隨著物業管理的不斷發展，物業管理新體制的優越性，已經滲透到人們生活的各個領域，從我們熟知的住宅小區、高檔別墅到賓館飯店、學校、商場、醫院、機關，以及其他的企事業單位，都開始接受並肯定了物業公司的存在，物業公司正逐步取代原來單位的後勤總務部門，以嶄新的專業化、市場化、現代化的公司形象，重新打理後勤服務工作。較之傳統的後勤部門，物業公司既提高了效率、降低了成本，又提高了服務質量、方便了人們的生活。政府也認識到了實施物業管理是改變城市管理體制，提高城市整體管理水平的有效途徑。未來幾年，將是我國物業管理全面、快速發展的黃金時代。堅信：隨著物業管理服務領域的不斷拓展，在不久的將來，一個具有特色的物業管理模式將在全國的物業管理行業中熠熠生輝。

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## 百貨商場物業管理服務需求關鍵因素之研究 — 以保全、清潔、機電服務為例

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**資產與物業管理系**

### **摘要：**

台灣全省近期添加了许多大型百貨商場，如夢時代、大魯閣、華泰名品城、林口三井、麗寶、台中大遠百、台中新光百貨等面積都是幾萬坪以上商場，為滿足客人舒適安全需求，故需依靠保全、清潔、機電服務管理來維護及保養，使商場設施、設備安全無虞，並創造乾淨、舒適的良好環境。然而要提供舒適的良好環境則有賴於優質的物業管理，因此本研究將探討百貨商場物業管理需求關鍵因素，經深入探討歸納出百貨商場物業管理服務需求關鍵因素為保全管理、清潔管理、機電管理等三大構面，每個構面各有五分項關鍵因素、總計有十五分項關鍵因素。本研究採用AHP層級分析法，先定義出百貨商場物業管理服務需求關鍵因素的三大構面十五分項評量指標，並設計出AHP問卷，接續應用層級分析法(Antylytic Hierarchy Process, AHP)，分別計算出三大構面及十五分項之權值，再配合結果分析，即可判斷出百貨商場物業管理服務需求關鍵因素。

研究結論顯示，百貨商場物業管理服務需求關鍵因素評量指標的三大構面，是以機電服務管理構面為最重要(權值0.594)，在十五分項次評量指標中，又以供電系統管理(電力供應、緊急供電設備<高壓電、發電機、UPS>)(0.400)為最高，整體而言，在人潮眾多百貨商場內遇到緊急事故時，供電系統管理是不可或缺的一環。整體調查結果顯示保全服務管理構面關鍵因素為保全在遇到緊急事件時，職前的教育訓練及應變能力必須處理的適當得宜；清潔服務管理構面顯示關鍵因素為百貨商場之清潔管理，從其開放式空間之設備良劣、清潔與否，便可知道顧客是否重視環境衛生。

經研究分析建議百貨商場物業管理之設施設備委外管理時，須考慮其專業能力、規模大小及擁有充分的材料備品，可隨時有人力因應百貨商場突發事件等條件。謹慎選擇協力廠商，是因為「供電系統管理」是百貨商場物業管理需求最關鍵的一環，商場設施管理部門定期的檢

測維修設施、設備之外，仍須依賴台電能充分供應百貨商場龐大的電力需求，例如台北東區台電時常無預警停電，每一次的停電，各百貨的自備發電能力，不足支撐太長時間，造成暫停營業，倘若百貨商場本身電力幹線設備耗損，造成停電(如BUSWAY主電力匯流排損壞，無備品修護，將無法營業)，短時間因無備品而無法修復，以致暫停營業，而暫停營業皆會造成百貨業主及專櫃業者鉅額營業損失。

關鍵詞：百貨商場、保全服務、清潔服務、機電服務

### **1. 緒論**

#### **1.1 研究背景與動機**

由於國人的生活型態改變，加上資訊科技的興起，消費習性與購物行為也大幅轉變，因此百貨商場業者在此百業爭鳴的激烈環境下，面對消費者對體驗經濟重視的趨勢及電子商務發展快速，各大百貨公司及購物中心競爭調整營運模式，引進餐飲、娛樂、時尚品牌等體驗式消費。故百貨商場設施、設備需要更完善的物業管理，以提供顧客安全、舒適的購物環境，並保障專櫃廠商營業利益。

本研究旨在了解百貨商場物業管理需求關鍵因素之研究，探討百貨商場物業管理服務需求關鍵因素之保全管理、清潔管理、機電管理，此三項服務求之關係。

#### **1.2 研究目的**

本研究首先整理相關文獻及專家訪談的方式，找出百貨商場物業管理在設置時所考慮的因素，將這些因素建立起層級評估架構，並針對百貨商場物業管理進行實證研究，以實證本評估模式之適用性，最後將研究結果整合，指出對實務工作上之涵義，提供給業界人士參考。



### 1.3 研究方法

本研究將針對現行運作實況請教國內百貨商場二十三位物業管理專家，徵詢其意見，以整理出國內百貨商場營運管理上的特殊現象中，各個服務項目的重要性順序，再就近期已開幕營運的大型購物中心如麗寶購物中心、遠東巨城購物中心、林口三井Outlet、華泰名品城Outlet、大魯閣草衙道購物中心，以及101購物中心等及SOGO百貨、新光百貨物業管理種種問題之彙整比對，再將各項資料歸納、分析，做出結論及建議。

## 2. 文獻回顧

### 2.1 百貨商場經營管理相關文獻

#### (1) 百貨公司之概述

台灣的百貨公司約自1949年發展至今可分為九個階段(如表2.1)，分別為初創期(商品以衣帛布料)、成長期(引進國外經營技術)、整合期(成立百貨綜合小組)、介入期(導入日本百貨經營理念)、轉型期(中外合資)、挑戰期(區域型百貨公司)、衰退期(景氣衰退)、復甦期(景氣復甦)、發展期(互聯網時代)。其經營形態可以分為三種，分別為：台日合資經營(佔總產業60%)、台灣本土經營(佔總產業28%)、台日技術合作(佔總產業10%)、其他經營形態(佔總產業2%)，因此由統計數據來觀察，可以發現台灣的百貨公司產業以與外資合作為主要經營模式，其中又以與日本合作為大宗。百貨公司是以賣場使用面積達1000坪以上的一種大型零售業形態，採用統一收銀制、統一開立該百貨公司為主名的發票，統一由一個合法的機構負責整體有效的管理經營，服飾和非耐久性的商品之銷售必須佔整體銷售額的20%以上，部門販售多種商品。商品與食、衣、住相關，各項營業額比例在10%以上到70%之間。

#### (2) 購物中心之概述

購物中心起源於美國，1999年由台茂設立台灣第一個工商綜合區購物中心，並在相繼幾年於全台各地陸續有購物中心成立，最早的時候大概規劃了22個生活圈，每個生活圈都是以兩個綜合區為主。大型購物中心為一包含所有計畫、開發、經營管理等商業和服務業的集合體，並規劃能供一千部以上汽車停放之停車場，基地開發包括規劃、設計、開發租賃及管理，均經過一套完整的考量過程，以提供消費者一個多元化，且兼具便利性、舒適性和娛樂性之購物場所為目標。

經濟部於1994年陸續頒布了工商綜合區的相關法規，藉由開放民間投資，並由業者自行統籌規劃、經營管理，盼能以集中、垂直的方式開發商業區，有效地利用土地，於是便有許多大型購物中心陸續以工商綜合區的名義提出申請、開發(羅清達，2001)。1999年7月4日，台茂正式營運，台茂是第一個在工商綜合區所設立的購物中心。2000年紐約購物中心、2001年大江購物中心、高雄大遠百、微風廣場、統一夢公園接著開幕，接著新竹風城、台中老虎城等等陸續開業，工商綜合區主要分布在城市大都會。

### 2.2 百貨商場物業管理相關文獻

鐘慶新(2102)探討商場長期修繕計畫之研究，收集個案商場自2009年至2011年間之商場營運設備計畫、管理維護制度、成本費用分析，整理統計營運階段設備管理維護各項費用之佔比分析，藉由國外物業管理公司商場經營管理計畫制度與經驗數據，來建立商場設備長期修繕計畫，導入設備生命週期維護耐用年限與成本費用預估概念，擬訂一套完善的設備維護長期修繕計畫標準格式，並以個案商場為例制定30年之長期機電修繕計畫。

### 2.3 AHP層級分析法相關文獻

層級分析法(analytic hierarchy process, AHP)於1980年由Thomas Saaty所提出，經過三十多年之發展，已成為現今決策領域中常見之決策工具，其結構的建立分為三個階段，第一階段(建立層級結構面對複雜的決策問題，層級分析法採用分解的原則，由上而下分為決策目標、決策準則、選擇方案

三層其中每一層只影響下一層級)、第二階段(建立判斷矩陣，以上一層級某一要素為評估基準，針對下一層級之組成要素，計算各層級要素的權值)、第三階段(整體層級權值的計算，各層級要素間的權值計算後，再進行整體層級的權值計算)。

表 2.1 台灣百貨公司發展歷程

時期	時間(西元)	代表商場	發展內容
初創期	1970 以前	菊元百貨 新建百貨 南洋百貨 大新百貨	台灣百貨業興起期。 台北市出現第一家百貨公司-「菊元百貨」，是當時最高的大樓，且亦為唯一也電梯升降設備的大樓。「新建百貨」是台灣光復後第一家成立的百貨商場，商品以衣帛布料為主。 「南洋百貨」是台灣第一家率先始用電動手扶梯的百貨公司。「大新百貨」是台灣第一家商品內容最豐富達到多樣性需求的大型綜合百貨公司。
成長期	1971~1978	新光百貨 遠東百貨 來來百貨	百貨公司如雨後春筍般的成立，這個時期已經開始直接自國外引進經營技術。捨棄傳統經營方式，開始現代化經營及連鎖計畫。這七年間陸續開設了多達 15 家百貨公司，但因成長過於快速等原因，開始造成百貨同業之間進行強烈的折扣競爭。
整合期	1979~1983	遠東百貨 新光百貨 統領百貨 力霸百貨 環亞百貨	因缺乏正的營運手法，造成業界間不當的惡性折扣只為了各店家的營業成效，形成百貨市場的一片混亂，但終於在 1980 年 7 月 1 日，由新光與遠東等百貨發起成立台北百貨綜合小組，主要目的在於協調業界之間的不當折扣造成的混亂。
介入期	1984~1986	先施百貨 SOGO 百貨	這個期間台北東西商圈興起，是日本百貨業的經營理念和管理模式真正進入國內市場參與營運的開始。而因為鐵路的開發調整，本來繁盛的西區商圈漸漸地衰退，形成東區商圈營業狀況追過西區。
轉型期	1987~1990	SOGO 百貨 新光三越百貨	中外合資的百貨公司導入市場造成了業界的震撼，使得促使本土業界深入研究百貨業的經營理念和方法，並且開始追求各店的差異性和個性化等。
挑戰期	1991~2000	大葉高島屋百貨 德安百貨 衣蝶百貨	1992 年主要商圈的百貨公司競爭激烈，業者往高密度住宅區或新商圈成之區域型百貨公司，如內湖德安百貨、天母大葉高島屋。力霸百貨轉型為「衣蝶生活流行館」定位為女性高級用品專門店。
衰退期	2000~2003	來來百貨、 永琦百貨、 建台百貨	2001 年都會型購物中心相繼設立，及受景氣影響，導致百貨業者營收縮水，許多中小型、老字號百貨衝擊最大，包括來來、永琦、建台等業者結束營運。2003 年 4 月下旬，整體百貨又在 SARS 疫情衝擊百貨營收呈現衰退。
復甦期	2004~2010	SOGO 百貨 新光三越百貨	2004 年隨景氣復甦，SOGO 百貨進駐 101 購物中心。2005 年 9 月專為女性打造的新光三越 A4 館開幕。2006 年 12 月 SOGO 復興館開幕，與忠孝、敦化形成東區鐵三角。2008 年高雄漢神巨蛋開幕。
發展期	2011~2016	遠東百貨	2011 年 Top City 台中大遠百重新開業，營業面積達 5.4 萬坪，為因應互聯網時代，百貨公司進而購物中心化，對既有實體通路是增加客源、強化服務，滿足不同客層，在不同時段消費購物的需求。

資料來源：蔡惠如(2008)，本研究整理

### 3. 研究方法與結果

#### 3.1 層級分析法(AHP)專家問卷

本研究將百貨商場物業管理關鍵因素分為保全服務、清潔服務及機電服務三大構面以及十五分項指標詳如下表3.1，採用層級分析法(AHP)進行20位專家問卷。

表3.1 百貨商場物業管理關鍵因素之三大構面以及十五分項指標

項目	三大構面	十五分項指標
一	保全服務管理構面	1. 進出安全管制：廠商進出登記、物品進出管制、停車場管理(停車繳費、車輛動線指揮)。 2. 商場巡查維護：定點(時)巡邏、監控系統分區管制(營業時間、非營業時間)、異常事件通報、突發狀況緊急應變。 3. 百貨節慶管理：人流總量管制、商場人流疏導、門哨交通管制、車流引導及安全維護。 4. 災害防治管理：災害分級處置、災前應變推演、災後緊急應變。 5. 緊急危機處理：異常事件通報及追蹤、突發事件預測及防護、業主指示方案處置。
二	清潔服務管理構面	1. 清潔管理：營業前賣場清潔、後場清潔、廁所清潔、停車場清潔、館內特設空間清潔(育嬰室、吸菸室、兒童區)、清潔技術檢測。 2. 維護管理：垃圾收取及分類、雨天清潔作業、系統化廚餘管理、前後場清潔度維持、廁所清潔維持(廢棄衛生用品、異味消除、出風口清潔、鏡面維護)、衛生耗材補充、垃圾運送路線規劃、天候災害緊急應變、設施故障緊急應變。 3. 美食街管理：收(洗)碗、回收台及桌椅整理、洗碗機設備管理、顧客桌邊禮儀互動。 4. 耗材管理：業主端(作業量化、表格溝通、預估狀況溝通)、後勤端(採購、設備維護、清潔藥劑設備管理)。 5. 週期工項管理：戶外陽傘清潔、玻璃刮拭清潔、不銹鋼材保養、館內設備清潔(雨遮、指引牌、燈箱)、夜間工項(石材養護、研磨打蠟、補漆作業、消毒作業、滅鼠作業)、高處清潔作業(空調管線、高空擺設裝飾)。
三	機電服務管理構面	1. 供電系統管理：電力供應、緊急供電設備(高壓電、發電機、UPS)。 2. 空調設備管理：空氣品質監控、廚房排油煙監控、設備故障排除、體感溫度監控及風量管制。 3. 環境控制管理：給排水設備(加壓馬達、污廢水管線、自來水用量管制、水質檢測與水塔養護)、照明設備維護、電梯及手扶梯設備維護。 4. 消防系統養護及運作(安全通道及安全門設定、供水泵浦、火災感知受信對講機)、照明設備維護。 5. 弱電控制系統：區域網路、金流、物流管理。



### 3.2 三大構面十五分項評量指標計算之權重

經由AHP Online軟體輸入資料及得出三大構面權值結果，再計算出三大構面下，兩兩比對所產生的權重及一致性檢驗結果。

- (1) 百貨商場物業管理需求三大服務管理構面各項評量指標之權重值如下圖3.1。

#### Resulting Priorities

Category	Priority	Rank
1 保全服務管理構面	24.9%	2
2 清潔服務管理構面	15.7%	3
3 機電服務管理構面	59.4%	1

圖3.1 三大服務管理構面各項評量指標權重值

- (2) 十五分項評量指標計算之權重值如下圖3.2-3.4。

#### A. 保全服務管理構面分項

#### Resulting Priorities

Category	Priority	Rank
1 進出安全管制	17.3%	3
2 商場巡查維護	8.9%	4
3 百貨節慶管理	8.8%	5
4 災害防治管理	29.9%	2
5 緊急危機處理	35.1%	1

圖3.2 保全服務管理構面分項各項評量指標權重值

#### B. 清潔服務管理構面分項

#### Resulting Priorities

Category	Priority	Rank
1 清潔管理	30.1%	1
2 維護管理	22.6%	3
3 美食街管理	25.6%	2
4 耗材管理	8.1%	5
5 週期工項管理	13.6%	4

圖3.3 清潔服務管理構面分項各項評量指標權重值

#### C. 機電服務管理構面分項

#### Resulting Priorities

Category	Priority	Rank
1 供電系統管理	40.0%	1
2 空調設備管理	15.5%	3
3 環境控制管理	7.5%	5
4 消防系統養護及運作	27.7%	2
5 弱電控制系統	9.3%	4

圖3.4 機電服務管理構面分項各項評量指標權重值

#### 4. 實證探討

經專家問卷訪談後，所歸納出百貨物業管理服務需求關鍵因素評量數據，採用 BGMSG AHP on line system 軟體計算出三大構面及十五分項評量指標之最後結果如下圖 4.1-4.2 所示。依據二十三位百貨商場物業管理專家訪問資料，透過

AHP 分析，證實了現今百貨公司及購物中心在每日的營業中，以機電服務之電力供應最為重要，尤其是因為停電而休館，或人們恐慌擁擠致跌倒損傷事故，或美食街及超商冷凍問題，都是百貨商場不樂見的商業損失。

Project: 百貨商場物業管理服務需求關鍵因素

Decision Hierarchy			
Level 0	Level 1	Level 2	Glb Prio.
百貨商場物業管理服務需求關鍵因素 AHP	保全服務管理構面 0.249 AHP	進出安全管制	0.173 4.3%
		商場巡查維護	0.089 2.2%
		百貨節慶管理	0.088 2.2%
		災害防治管理	0.299 7.5%
		緊急危機處理	0.351 8.7%
	清潔服務管理構面 0.157 AHP	清潔管理	0.301 4.7%
		維護管理	0.226 3.6%
		美食街管理	0.256 4.0%
		耗材管理	0.081 1.3%
		週期工項管理	0.136 2.1%
	機電服務管理構面 0.594 AHP	供電系統管理	0.400 23.8%
		空調設備管理	0.155 9.2%
		環境控制管理	0.075 4.4%
		消防系統養護及運作	0.277 16.4%
		弱電控制系統	0.093 5.5%
			1.0

圖 4.1 百貨物業管理服務需求關鍵因素評量分析總表權值

#### Consolidated Global Priorities

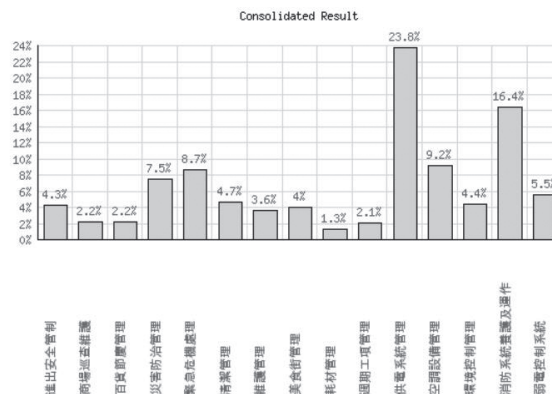


圖 4.2 百貨物業管理服務需求關鍵因素評量分析權值統計圖

## 5. 結論與建議

### 5.1 研究結論總結

本研究經由文獻探討、層級分析法，探討百貨商場物業管理服務需求關鍵因素評量指標及計算權重，並經實證結果得到以下結論：

- (1) 三大構面重要性，依權值由高而低依序為：機電服務管理構面 (0.594)、保全服務管理構面 (0.249)、清潔服務管理構面 (0.157)。代表機電服務管是最重要的百貨商場物業管理服務需求關鍵因素評量指標，其次是保全服務及清潔服務。
- (2) 十五分項評量指標說明如下：
  - A. 保全服務管理構面：權值依序為進出安全管制(0.173)、商場巡查維護(0.089)、百貨節慶管理(0.088)、災害防治管理(0.299)、緊急危機處理(0.351)，以緊急危機處理(0.351)為最高，顯示結果為保全在遇到緊急事件時，職前的教育訓練及應變能力必須處理的適當得宜，其次項為輔佐的要素，是評量指標的關鍵之一。
  - B. 清潔服務管理構面：權值依序為清潔管理(0.301)、維護管理(0.226)、美食街管理(0.256)、耗材管理(0.081)、週期工項管理(0.136)，以清潔管理(0.301)為最高，顯示結果為百貨商場之清潔管理，從其開放式空間之設備良劣、清潔與否，便可知道顧客是否重視環境衛生。
  - C. 機電服務管理構面：權值依序為供電系統管理(0.400)、空調設備管理(0.155)、環境控制管理(0.075)、消防系統養護及運作(0.277)、弱電控制系統(0.093)，以供電系統管理(0.400)為最高，顯示結果為在百貨商場之電力等設備為不可或缺之一環，其次項為輔佐的要素。

### 5.2 研究建議

百貨商場物業管理之各項設施電力供應、緊急供電設備維修保養。清潔服務管理之營業前賣場清潔、後場清潔廁所清潔、停車場清潔、館內特設空間清潔、建材的清潔維護。商場安全管理之異常事件通報及追蹤、突發事件預測及防護。各項服務已有分析研究實證及結論，而為了百貨商場設施、設備更完善的物業管理，以提供顧客安全、舒適的購物環境，並保障專櫃廠商營業利益，本研究提出下列建議，供各界參考：

- (1) 百貨商場物業管理對於各項設備，建立完整資料庫，讓使用者容易瞭解如何有效準備相關計劃，並隨時明瞭設備故障維修情形及備品庫存狀況。
- (2) 百貨商場物業管理之設施設備委外管理時，須考慮其專業能力、規模大小及擁有充分的材料備品，可隨時有人力因應百貨商場突發事件等條件。
- (3) 百貨商場電力費用是百貨賣場的沉重營運成本，百貨業者都期望從節源節約減少營業成本，增加營業效益。
- (4) 百貨商場定期消防演習時，應要求各樓面專櫃人員，一同參與消防演練，加強防火、防災應變能力。
- (5) 百貨商場樓地板面積動輒萬坪以上，為避免安全死角，應增設360度監視系統及各項偵測器，輔助保全管理，因應緊急事件。
- (6) 清潔人員普遍年齡過高，體力及學習能力差，物業主管應製作簡易操作圖片，定期教育訓練，穩定人員流動率，提高服務品質。



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