



Housing Satisfaction Among International Students in Hong Kong

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Abstract

Housing is one of the critical components that support human existence. However, access to housing is one of the challenges faced by international students. In an expensive city such as Hong Kong, this issue is exacerbated by high rental costs and a limited supply of on-campus hostel facilities. Therefore, this study examines housing satisfaction among international students studying at Hong Kong's universities, located in one of the most expensive cities in the world. Using the snowball sampling technique, data was collected from seventy-four international students of six nationalities studying at four universities in Hong Kong. Frequency distribution, mean score (MS) ranking and Chi-Square were adopted for the data analysis. The results show that 64% of the research participants reside off-campus, while the rest reside on campus. Furthermore, a majority of the respondents strongly agreed that the support from the universities for international students, in terms of scholarships and financial support to access housing first-year students, is critical. The international students opined that the universities could provide more financial assistance and accommodation support to meet rising housing costs. The Chi-square test results indicate a significant relationship between the type of accommodation and overall satisfaction with accommodation and a substantial relationship between the age of the respondents and their choice to retain their accommodation. This study has some far-reaching implications for Hong Kong universities as they need to revisit the issue of accommodation and support provided to international

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students. Furthermore, there needs to be a consideration in increasing the student housing stock to assist international students.

Keywords: *students, student housing, housing satisfaction, Hong Kong, international students*

1. Introduction

Globalisation, advancement in air travel and access to world-class university education have led to the emergence of international students. These international students attend universities outside their country of origin/birth (Parameswaran & Bowers, 2014). Usually, they need to adapt to their new environment during their study periods (Obeng-Odoom, 2012). In such situations, international students would need to secure accommodation, which could be either on-campus or off-campus. Consequently, when a university does not provide sufficient bed spaces or housing facilities on campus to cater for its students, some or most students will have to source for accommodation in the local property markets around the university (Chang, 2017; Gbadegesin et al., 2022). This suggests that such students would have to compete with other home seekers (the general public) in the open property market. Hence, students studying in expensive cities face difficulty in getting affordable accommodation.

One case is Hong Kong, which is acclaimed to be among the world's most expensive cities (Castro Campos et al., 2016; Chang, 2017; World Economic Forum, 2021), with an informal housing market marked by small-sized sub-divided units (Leung et al., 2022). Hong Kong's expensive housing market presents a dilemma for international students since studies have shown that there exists a relationship between students' housing satisfaction and their academic performance (Najib et al., 2011; Parameswaran & Bowers, 2014; Sawyerr & Yusof, 2013). Furthermore, student housing provides an avenue for fostering positive and beneficial intercultural relationships, which help international students in overcoming learning barriers (Ong et al., 2022). Furthermore, a growing number of international students enrol in institutions funded by the University Grants Committee (UGC) (Textor, 2021; University Grants Committee, 2022). This calls for an examination of student housing choices and satisfaction with those choices. Hence, this study investigates the housing satisfaction of international students enrolled in Hong Kong's universities and examines the relationship between their socio-characteristics and satisfaction.

The role of student housing in enhancing student satisfaction and academic attainment has received significant research attention. Governments, national and local, and higher institutions of learning who understand the critical role of student accommodation keep watchful eyes on demand and supply dynamics within the sector and invest appropriately to ensure students' learning progress is not hampered (Christie et al., 2002). And the reasons are not far-fetched. First, increased student satisfaction and academic attainment will continue to portray the affected institutions in a good light to potential applicants, thereby attracting more students (Roche et al., 2010). Second, students also play a vital role in boosting the local economy of the cities where their institutions are based as workers and spenders, some of whom settle and develop a career in the same areas (Munro et al., 2009).

Essentially, students constitute a valuable economic base that needs to be keenly monitored given the effects changes in student population, composition, and quality might have on local economies. The influences of international students on local economies are even more pronounced and remain a topical issue in housing studies and other related fields. By investigating housing satisfaction with accommodation among international students from two continents, this study makes a novel and significant contribution to the existing body of literature, which would be useful in shaping university and city-level policies in Hong Kong.

The findings from this study align with other studies on student housing (Najib et al., 2011; Parameswaran and Bowers, 2014; and Sawyerr and Yusof, 2013) to offer a reference on the perception of international students on the relationship between their housing and particular aspect of their studentship, which includes academic performance, and this may be vital to tackling dissatisfaction among students, especially, those of non-Chinese backgrounds.

The remaining part of the paper is structured as follows. The review of relevant literature is presented in the following section, followed by the research methodology in the third section. The discussion of findings is presented in the fourth section, followed by conclusions in the last section.

2. Literature Review

On-campus and purpose-built student accommodation in universities can be a source of positive intercultural relationships and social interaction for non-local students (Paltridge et al., 2010; Ong et al., 2022). However, this type of student housing is usually expensive and unaffordable for students, even those on scholarship; they are also not designed to meet the needs of students with families (Ruming & Dowling, 2017). Furthermore, there is growing evidence that universities admit more students than their teaching and residential space capacities (Gbadegesin et al., 2022). In some countries, university executives see student housing as a marginal issue that should not be the priority of their universities (Parameswaran & Bowers, 2014). Hence, students have chosen to seek residence in the private rental market (Morris et al., 2021; Gbadegesin et al., 2022; Zasina & Antczak, 2021). Nevertheless, even with these gaps that have pushed students into the private market for accommodation, studies (e.g., Laidley, 2014; Prada-Trigo et al., 2020; Revington et al., 2020; Ruming & Dowling, 2017) have reported that students are negatively looked upon as gentrifiers and are constituting a significant source of neighbourhood decline, crime, and rising housing costs.

Housing satisfaction is relative and difficult to measure (Waziri et al., 2014). Still, it tends to be a function of factors such as social and cultural background, financial situation, expectations, and characteristics of a building or a dwelling (Gbadegesin et al., 2022). It is generally evaluated by comparing people's expectations and the actual conditions of their housing (Thomsen & Eikemo, 2010). Najib et al. (2011) reported that students in research universities in Malaysia were satisfied with their housing facilities. The study suggested a correlation between student satisfaction with housing facilities and staying until completion of their program, with satisfied students indicating a desire to maintain residence in the housing facilities until graduation.

The housing satisfaction of students is an essential theme in housing studies. However, several global studies on the housing satisfaction of students focus on on-campus accommodation (see Adewunmi et al., 2011; Amole, 2009; Najib et al., 2011; Nazarpour & Norouzian-Maleki, 2021; Oke et al., 2017; Sawyerr & Yusof, 2013; Xu et al., 2020), with only a few focusing on satisfaction in off-campus student housing (Zasina & Antczak, 2021). Yet, since it has been established that on-campus accommodation facilities are limited, off-campus housing seems to be the principal accommodation source for students (Chang, 2017; Chang, 2018).

Zasina and Antczak (2021) revealed that most student respondents in Lodz, Poland, and Turin, Italy, were satisfied with their off-campus private accommodation. However, in terms of neighbourhood attributes, many respondents were neither satisfied nor dissatisfied with the proximity to their workplace, music or dance clubs, cultural facilities, sports facilities, and neighbourhood student atmosphere. The study revealed increased satisfaction levels when the students' accommodation is affordable, in a pleasant-looking building, and in a neighbourhood accessible by public transportation and with a student atmosphere. In the

study conducted by Thomsen and Eikemo (2010), the type of tenancy/ownership, quality of housing characteristics and location were reported as the most important determinants of student residential satisfaction. Conversely, individual facilities and demographic variables did not significantly affect housing satisfaction (Thomsen & Eikemo, 2010).

In Hong Kong, sourcing for student housing is a herculean task due to information and cost-related barriers (Chang, 2018). Chang (2017) argues that despite the limited housing facilities in Hong Kong universities, which have made many students seek accommodation off-campus, the universities are incentivised to keep admitting more international students as international students pay more than local students. Through a survey of 2000 respondents representing Chinese mainland students studying in four Hong Kong universities connected by the east rail line, Chang (2017) found that the primary factors influencing the housing choices of the respondents are accessibility of public transportation, distance to university, rent affordability and living environment. The study highlighted that female respondents also gave huge consideration to safety. Over 50 per cent of the students indicated that their accommodation is sourced through social networks (friends or relatives). The study revealed that the students lived in a clustered pattern and shared accommodation to reduce the cost of renting. Ultimately, the housing may be of less satisfaction for the students.

Chang (2018) surveyed the opinions of 1,120 Chinese mainland students studying at four UGC-funded Hong Kong universities. The east rail line connects the universities under focus in this study. The study found that the students who used housing agents to find a house were able to view more houses and spent less time searching when compared to those who relied on social media to search for houses. The study revealed that social networks (friends or relatives) were the most significant housing information source. They significantly enhanced the residential satisfaction of the students who leveraged such networks. On the other hand, social media (WeChat and Internet) provided comparatively low benefits for students searching for housing. Meanwhile, housing agents who provided access to more housing were of little benefit to the students due to the service cost.

Previous students' housing satisfaction studies (Chang, 2017; Chang, 2018; Ong et al., 2022) among non-local students in Hong Kong have only considered the views of students from mainland China. However, Hong Kong universities are home to thousands of students of different nationalities (Textor, 2021; University Grants Committee, 2022). Therefore, a gap exists in investigating international students' satisfaction with the housing options available to them since there is a link between housing satisfaction and academic performance. Hence, this study will consider the affordability and satisfaction of international students of different nationalities with their housing choices.

3. Research Methodology

A quantitative research approach was adopted for this study, being the most suitable approach to address the set aim of investigating the housing satisfaction of international students in Hong Kong, and also because of the relatively large target population of research participants (Easterbrook et al., 2008). An online questionnaire was designed using the University of New South Wales Sydney Qualtrics platform to collect data from the targeted respondents. This approach was considered appropriate because a wider coverage of the respondents can be reached simultaneously, and the data collected would be error-free to a large extent, thereby enhancing data reliability (Dix & Anderson, 2000). This data collection approach is common in the literature (Abidoeye et al., 2019; Ameyaw & Chan, 2015; Oyedokun et al., 2021). The questionnaire contained four sections. Section 1 focused on the respondents' personal characteristics, while Section 2 included questions about the respondents' academic

information, followed by questions about respondents' housing in Section 3. Statements regarding the respondents' housing satisfaction were presented in Section 4, in which they were asked to indicate their level of agreement with each statement on a five-point Likert scale that ranged from strongly disagree (1) to strongly agree (5).

The respondents of this research are international students studying at universities in Hong Kong who were reached via their respective student associations. The link to the online questionnaire was sent to all registered members (students) of the associations by the individual executives of the associations. Adopting a snowball sampling approach, each student who got the link for the questionnaire was requested to share it with other students from their home country who may not be a member of the association. The data collection period was three months, and two reminders were sent during this period to increase the response rate. At the end of the data collection period, 82 responses were received. However, only 74 responses were completed adequately and deemed valid for subsequent analysis. A sample size greater than 30 respondents can be considered adequate for statistical analysis since the size of the data meets the requirement of the central limit theorem (i.e., at least 30) (see Islam, 2018). The 74 responses were, therefore, deemed sufficient for the data analysis and the findings that were made hereafter. Furthermore, Adewunmi et al. (2011) and Bianchi (2013) are previous studies that surveyed a smaller sample size (54 and 34 participants, respectively), which further demonstrates the adequacy of the sample size for this study. Figure 1 shows a brief description of the research process.

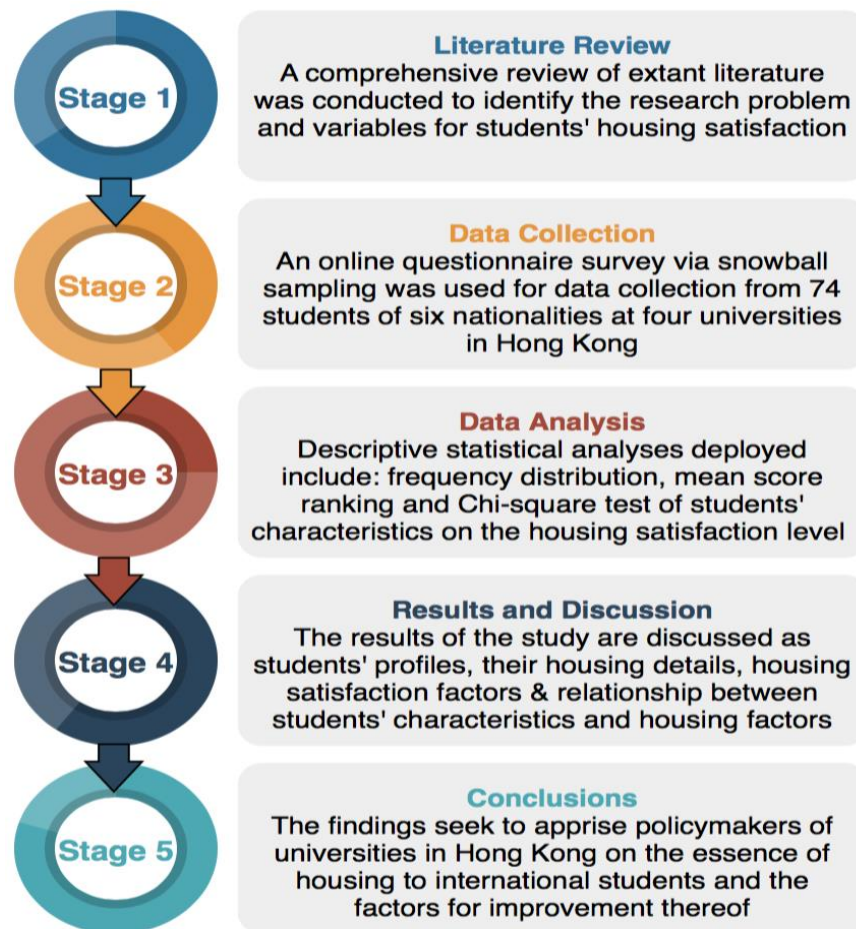


Figure 1: Research Process on International Students' Housing Satisfaction

The preliminary data showing the students' profile, demographics and housing details were analysed using descriptive statistics. In contrast, the satisfaction factors and indicators were analysed using mean score (MS) ranking and percentages of responses provided. A similar approach has been adopted in previous studies (see Najib et al., 2011; Sawyerr & Yusof, 2013; Adewunmi et al., 2017; Poon, 2019). In analysing the MS, any score between 4.00 and 5.00 is deemed highly important, an MS between 3.50 and 3.99 is deemed important, and scores below 3.50 are considered unimportant (Oyedokun et al., 2021). In addition, the Chi-square (X^2) test was conducted to examine the statistical relationship that exists between selected student characteristics and student housing factors, i) the possibility of retaining their current accommodation next academic session, ii) the possibility of recommending their current accommodation to their friends and iii) overall satisfaction with their current accommodation.

A similar approach was adopted in previous studies (see Jiboye, 2012; Abidoeye and Chan, 2017). In interpreting the Chi-Square test results, the level of significance considered was 0.05 and 0.1 significance levels (see Lájer, 2007; Yenigün et al., 2011). The Cronbach's alpha test was conducted to test the data's internal consistency and reliability (Tavakol & Dennick, 2011). The alpha value ranges between 0 and 1; the closer the alpha value is to 1, the more reliable and consistent the collected data (Hair et al., 2010; Nunnally & Bernstein, 1978). For this study, a Cronbach alpha value of 0.720 was obtained, which connotes an acceptable internal consistency and reliability of the collected data. The entire data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software (version 25.0).

4. Results and Discussion

4.1 Respondents' Profile

The demographic information of the respondents is presented in Table 1. It can be concluded that most of the students are males. The majority of the students are between the ages of 26 and 30. The respondents were students at The Hong Kong Polytechnic University, City University of Hong Kong, Chinese University of Hong Kong and Hong Kong University of Science and Technology. The location of these universities is depicted in Figure 2. The majority of the respondents are students at the Hong Kong Polytechnic University.

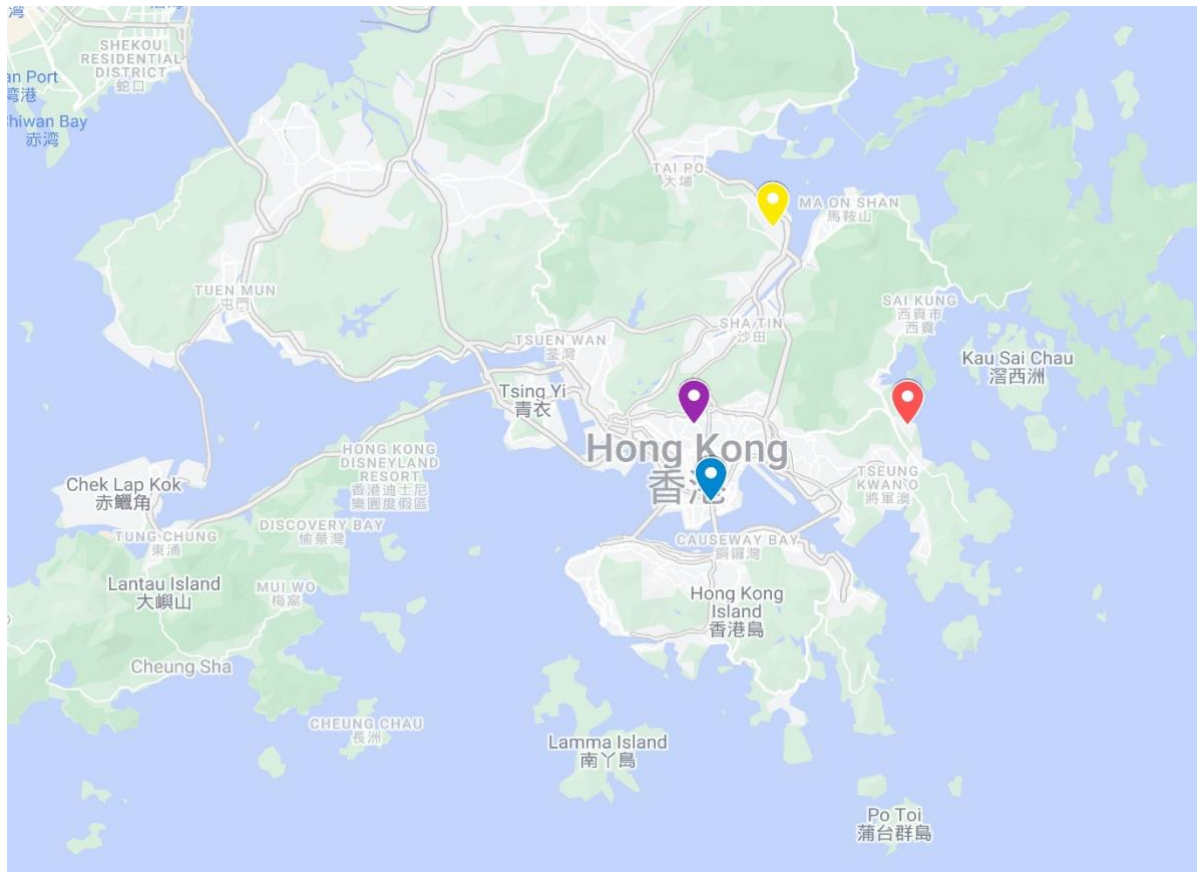


Figure 2: Map of Hong Kong with the Universities of the Surveyed Students

Source: Google Maps

Legend: The yellow pin represents The Chinese University of Hong Kong; the purple pin represents the City University of Hong Kong; the red pin represents the Hong Kong University of Science and Technology; the blue pin represents The Hong Kong Polytechnic University

Most of the respondents are studying for a PhD degree. Furthermore, most of the respondents are on full scholarships, while the remaining few who may be self-funded receive some form of support from their respective universities. The monthly stipend of the respondents is between 15,001 and 20,000 (HKD)². The students who responded to the survey are nationals of the following countries: Bangladesh, Ghana, Kenya, Nigeria, Pakistan, and Palestine, with the majority being Nigerians. The nationalities of the respondents differ from the studies of Chang (2017), Chang (2018), and Ong et al. (2022), who only considered respondents from mainland China for their study on student housing in Hong Kong. This study, therefore, benefits from international perspectives through the participation of several nationalities across two continents, Africa and Asia.

² Rate on March 13, 2023: 1 USD = 7.845 HKD. Source: www.xe.com

Table 1: Students' Demographics

Characteristics	Response (n=74)
Gender	
Male	65/74
Female	9/74
Age	
18 – 25	3/74
26 – 30	43/74
31 – 35	27/74
36 – 40	1/74
University of Respondents	
The Hong Kong Polytechnic University	35/74
City University of Hong Kong	29/74
Chinese University of Hong Kong	2/74
Hong Kong University of Science and Technology	8/74
Level of study	
Undergraduate	1/74
Masters	1/74
MPhil	4/74
PhD	68/74
Mode of finance	
Scholarship	68/74
Self-funded	0/74
Both	6/74
Country of origin	
Bangladesh	4/74
Ghana	16/74
Kenya	5/74
Nigeria	36/74
Pakistan	10/74
Palestine	3/74
Monthly stipend or allowance (HKD)	
10,000 – 15,000	10/74
15,001 – 20,000	64/74

Note: HKD means Hong Kong Dollars, which is the legal tender in Hong Kong

4.2 Students' Housing Details

The information about the students' housing details is presented in Table 2. It was found that 64% of the students live in off-campus accommodation. The probable reason could be that the hostel accommodation available at each university is insufficient for all the students. The inadequate on-campus accommodation and the high number of international students residing in off-campus accommodation align with the observations of studies by Chang (2017) and Chang (2018), which show that off-campus accommodation is most popular among Chinese students in Hong Kong. Forty-three percent of the students secured their current accommodation through estate agents, which indicates that the students competed for their accommodation spaces in open market situations in the world's most expensive city. This mode of securing accommodation by international students differs from that of Chinese students. According to Chang (2018), Chinese students rely on social networks and

relationships to secure their accommodation. This could be attributed to the close culture and cultural similarity shared between Hong Kong and Mainland China (Brown & Wang, 2015), implying that Chinese students, irrespective of their non-local status, have strong ties to the Hong Kong community.

About 78% pay between 3,000 and 5,000 (HKD) per month as their rent. This rent range is somewhat similar to the sum paid by Chinese students (an average of 4,000 HKD) (Chang, 2017). Most respondents stated that the commute distance between their current accommodation and universities is about 15 minutes. Moreover, this is the same time it takes most students to get to the nearest transport facility and shopping centre.

Table 2: Students' Housing Details

Characteristics	Response (n=74)
Accommodation type	
On-campus	27/74
Off-campus	47/74
Source of the accommodation	
Through an agent	35/74
Through a friend	12/74
Through the university	27/74
Rent/month (HKD)	
2,000 – 3,000	16/74
3,001 – 4,000	19/74
4,001 – 5,000	19/74
More than 5,000	20/74
Travel time to university	
Less than 15mins	55/74
16 – 30 mins	15/74
31 – 60 mins	3/74
Over 1 hour	1/74
Travel time to the nearest transport facility	
Less than 15mins	67/74
16 – 30 mins	7/74
Travel time to the nearest shopping centre	
Less than 15mins	64/74
16 – 30 mins	10/74

4.3 Housing Satisfaction Factors

The mean score represents the housing factors that are most important to the respondents. Based on the MS presented in Table 3, the most important factors for international students are factors of support and financial assistance provided to international students to secure accommodation by the universities. The highest-ranked statement is that *the universities should provide more assistance to first-year international students*, yielding an MS of 4.74, which falls within the 'strongly agree' region. The second-ranked statement that *scholarship awarding authorities should provide more financial allowance for accommodation* has an MS of 4.69. In contrast, the third-ranked statement, an *acknowledgement that the universities were helpful to international first-year students to secure accommodation*, yielded an MS of 4.24.

The factors that were least important to the international students were the impact of travel time on the productivity of the students, the conduciveness of their accommodation to studying and the ease of securing accommodation off-campus.

Table 3: Students' Housing Satisfaction

Statements	SD	D	I	A	SA	Mean Score	Standard Deviation	Rank
The universities should provide more assistance to international students in their first-year	0 (0%)	1 (1.4%)	5 (6.8%)	6 (8.1%)	62 (83.8%)	4.74	0.642	1 st
Scholarship awarding authorities should provide more allowance for accommodation	0 (0%)	0 (0%)	8 (10.8%)	7 (9.5%)	59 (79.7%)	4.69	0.661	2 nd
The university authority helped secure accommodation in my first year	3 (4.1%)	3 (4.1%)	7 (9.5%)	21 (28.4%)	40 (54.1%)	4.24	1.057	3 rd
I will complete my study within the expected study period	0 (0%)	5 (6.8%)	10 (13.5%)	25 (33.8%)	34 (45.9%)	4.19	0.917	4 th
I am making progress in my study	0 (0%)	4 (5.4%)	7 (9.5%)	43 (58.1%)	20 (27.0%)	4.07	0.764	5 th
The nature of my accommodation has a direct impact on my research/academic performance	1 (1.4%)	0 (0%)	31 (41.9%)	14 (18.9%)	28 (37.8%)	3.92	0.962	6 th
I will recommend my apartment to friends	4 (5.4%)	8 (10.8%)	19 (25.7%)	31 (41.9%)	12 (16.2%)	3.53	1.063	7 th
My accommodation is affordable	6 (8.1%)	13 (17.6%)	12 (16.2%)	32 (43.2%)	11 (14.9%)	3.39	1.18	8 th
Overall, I am satisfied with my apartment in terms of price, location, space and distance to the university	12 (16.2%)	9 (12.2%)	5 (6.8%)	34 (45.9%)	14 (18.9%)	3.39	1.363	9 th
I will be retaining my present accommodation next year	18 (24.3%)	11 (14.9%)	8 (10.8%)	24 (32.4%)	13 (17.6%)	3.04	1.475	10 th
It was easy to secure accommodation off-campus	12 (16.2%)	16 (21.6%)	14 (18.9%)	32 (43.2%)	0 (0%)	2.89	1.142	11 th
My accommodation is conducive to studying	14 (18.9%)	23 (31.1%)	10 (13.5%)	15 (20.3%)	12 (16.2%)	2.84	1.385	12 th
The travel time to the university negatively affects my study productivity	15 (20.3%)	13 (17.6%)	24 (32.4%)	15 (20.3%)	7 (9.5%)	2.81	1.246	13 th

SD: strongly disagree, D: disagree, I: indifferent, A: agree, SA: strongly agree

The respondents were posed with certain statements representing variables that determined their satisfaction with their housing choice. Table 3 presents the responses to the statement questions. Most respondents, 82.5 per cent, affirmed that the university authorities were instrumental in securing accommodation for first-year international students. Hence, it can be said that universities in Hong Kong realise the importance of facilitating the housing process for first-year international students and the importance of allowing them to adapt quickly to studying in the city. Thirty-eight per cent of the respondents disagreed with the statement that it was easy to secure accommodation off-campus. Nineteen per cent of the respondents were indifferent to the ease of securing accommodation off-campus.

In comparison, 43 per cent of the respondents agreed that it was easy to secure off-campus accommodation. The results of the statement on ease of securing off-campus accommodation indicate that securing accommodation off-campus is not much of an easy affair for international students in Hong Kong. It may be suggested that this is due to finding themselves in a new environment. Obeng-Odoom (2012) found that the accommodation source for international students depends on how long they have lived in the country.

Twenty-six per cent of the respondents thought their accommodation was unaffordable, and sixteen percent of the respondents were indifferent to the statement concerning affordability. Fifty-six per cent of the respondents agreed that their accommodation was affordable. The results indicate that international students see their housing options as affordable, contrary to the findings of Chang (2017), who found that Chinese students thought their housing was not affordable. This implies that the surveyed international students (non-local students, i.e., from non-Chinese backgrounds) receive university support to cater for their living expenses. As shown in Table 3, 64 respondents (92%) are on scholarships through which they fund their accommodation costs.

The statement on the negative impact of travel time on the study productivity of international students produced mixed results. While 30 per cent agreed that the travel time from their accommodation to the university had a negative impact on their productivity, 38 per cent disagreed with the statement, and the remaining 32 per cent were indifferent. Probing further on the productivity of the students and the linkage to their housing, 50 per cent of the respondents perceived their accommodation as uncondusive for study. In comparison, 36.5 per cent agreed that their accommodation was conducive to studying. The remaining 13.5 per cent were indifferent.

Fifty-seven per cent of the respondents affirmed that their accommodation directly impacted their academic/research performance; one per cent disagreed, while the remaining 42 per cent were indifferent. The results from the statements on student housing and their productivity as well as performance aligned with the findings of Najib et al. (2011), Parameswaran and Bowers (2014), and Sawyerr and Yusof (2013) that there exists a strong relationship between student housing satisfaction and their academic performance.

Eighty-five per cent of the respondents agreed that they are making progress in their study, a minute five per cent disagreed, while 10 per cent were indifferent. Eighty per cent of the respondents were on track to complete their program in the expected duration; conversely, seven per cent were not on course to finish within the expected completion period. It could be suggested that since most of the respondents are scholarship holders on student visas, a certain level of academic performance is expected, which may lead to on-time completion of the program. This aligns with the position of Jiranek (2010) that international students on scholarship mostly finish their studies on time to maximise the visa grant period and funding.

Regarding the willingness to retain their present accommodation, 50 per cent of the respondents agreed with the statement proposed. Thirty-nine per cent of the respondents were unwilling to maintain their accommodation, while the remaining 11 per cent were indifferent. This mixed result on the willingness to retain accommodation slightly disagrees with Najib et al. (2011) findings that 59 per cent of surveyed students will keep their accommodation. Nevertheless, our findings align with the position of Obeng-Odoom (2012) that international students living in private rental units regularly change accommodation due mainly to dissatisfaction with their accommodation. Fifty-eight per cent of the respondents were willing to recommend their current accommodation to their friends, and 16 percent were unlikely to recommend it. In comparison, the remaining 26 per cent were indifferent. Our findings align with Najib et al. (2011), though to a lesser degree, as the study found that 69.9 per cent of respondents will recommend their accommodation to their friends.

An overwhelming 92 per cent of the respondents affirmed that the universities should provide more assistance to first-year international students, 1 per cent disagreed on the need for extra assistance, while 7 per cent are indifferent. This result indicates that the universities need to do more despite the current efforts being provided, as affirmed by 82.5 per cent of respondents who noted that the university provided accommodation for them in the first year. Regarding the assistance provided by the universities, 89 per cent of respondents affirmed a need for scholarship-awarding bodies to increase the financial allowance for international students. The remaining 11 per cent are indifferent. This inadequacy of scholarships for international students compared to accommodation costs has been affirmed in Obeng-Odoom (2012), with calls for Universities to review the scholarship and duration.

Chang (2017) found that the primary factors influencing the housing choices of Chinese students in Hong Kong were accessibility of public transportation, distance to their university campus, rent affordability and living environment. Thus, the research participants were asked about their satisfaction with their accommodation as a function of price, location, space, and distance to the university. Sixty-five per cent of the respondents were satisfied with their accommodation, twenty-eight per cent were dissatisfied, and seven per cent were indifferent.

4.4 Relationship Between Students' Characteristics and Students' Housing Factors

The Chi-square test of independence was used to analyse the relationship between some factors associated with the students and selected student housing factors. The result of the Chi-Square test of independence between selected student characteristics and the willingness of the respondents to retain their accommodation, the willingness of the respondents to recommend their accommodation, and the respondents' overall satisfaction with their accommodation are presented in Table 4.

Table 4: Association between students' characteristics and WTA, WTRA and OSWA

Characteristics	Willingness to retain accommodation (WTA)			Willingness to recommend accommodation (WTRA)			Overall satisfaction with accommodation (OSWA)		
	Value	df	Asymp. Sig.	Value	df	Asymp. Sig.	Value	df	Asymp. Sig.
Gender	7.719	4	.102	5.753	4	.218	.939	4	.919
Age	20.389	12	.060	10.196	12	.599	11.589	12	.479
Present year of study	20.395	16	.203	10.635	16	.831	11.156	16	.800
Mode of finance	2.366	4	.669	4.784	4	.310	7.682	4	.104
Accommodation	7.545	4	.110	1.892	4	.756	8.034	4	.090

type									
Travel time to the university	13.286	12	.349	9.423	12	.666	15.995	12	.191
Travel time to the nearest transport facility	2.515	4	.642	5.144	4	.273	4.162	4	.385

Firstly, the results indicate a significant relationship between the age of the respondents and their choice to retain their accommodation. This is based on the Chi-Square value, $X^2 = (12, 20.389)$ with a p-value (0.06), which is significant at a 0.1 level of significance. The other characteristics, gender, year of study, mode of finance, accommodation type, travel time to the university and travel time to the nearest transport facility, had no significant relationship with the decision of the respondents to retain their accommodation due to the p values which are greater than 0.05 and 0.1. This result is contrary to Li et al. (2005) findings that found a significant relationship between features of the accommodation and the willingness to retain such accommodation. Consequently, this significant relationship between the age of the respondents and the willingness to retain their accommodation may be because the international students want some semblance of stability since most of the respondents fall between 26 and 35 years of age. This aligns with the findings of Clemes et al. (2001) that students' perception of service quality varies with age, and Amole (2009) found that age is a predictor of students' satisfaction with their housing. Furthermore, Amole (2009) found that as students stay in an accommodation, their satisfaction with the accommodation increases.

The result indicates no significant relationship between the characteristics, gender, age, year of study, mode of finance, accommodation type, travel time to the university, travel time to the nearest transport facility, and the willingness of the respondents to recommend their accommodation. This is because the characteristics produced p-values greater than 0.05 and 0.1. It may be suggested that the willingness to recommend accommodation is a function of satisfaction instead of student characteristics.

Also, the results indicate a significant relationship between the type of accommodation and the respondents' overall satisfaction with their accommodation. This is based on the Chi-Square value, $X^2 = (4, 8.034)$ with a p-value of (0.090), which is significant at a 0.1 level of significance. The other characteristics, gender, age, year of study, mode of finance, travel time to the university and travel time to the nearest transport facility, had no significant relationship with the overall satisfaction of the respondents about their accommodation due to the p values which were greater than 0.05 and 0.1. This result is unsurprising as it aligns with Obeng-Odoom (2012) that international students living in private rental units (i.e. off-campus accommodation) face disproportionate accommodation problems. Hence, it can be said that the accommodation type will determine the international student's satisfaction level.

5. Conclusions

Housing is an important issue, and for students especially, it is one issue that significantly influences their academics. However, the satisfaction of international students studying in Hong Kong, one of the most expensive cities in the world, has not been subjected to empirical study. Therefore, this research surveyed the opinions of international students studying in Hong Kong on their satisfaction with their housing choices. This study differs from previous housing studies in Hong Kong by focusing on students who are not of Chinese background. Through literature review, it was found that while the city was acknowledged to be expensive in terms of the cost of housing, studies on student housing in Hong Kong were scanty, with

the few in existence only focusing on Mainland Chinese students. This left a puzzling gap since Hong Kong universities have many international students. Consequently, a questionnaire survey was conducted to gather the opinions of international students of six nationalities studying in Hong Kong across two continents. The data analysis revealed that most international students settled for off-campus accommodation. However, the universities in Hong Kong provide support to first-year students in accessing accommodation. Furthermore, it was found that most international students received full scholarships. At the same time, the few self-funded students also received some financial support from the authorities. These factors of support to students are also ranked as the most critical satisfaction factors for students. Nevertheless, the cost of housing is still an issue, with clamour from the students for more support from the universities both in terms of increased funding and in providing more assistance to first-year international students. Our research showed that most international students were satisfied with their accommodation, and the accommodation type had a significant relationship with the overall satisfaction levels. In conclusion, the findings of this study have far-reaching implications as it presents an opportunity for universities in Hong Kong to understand how student housing is an essential issue for international students. This is reflected in the fact that the students, though benefitting from scholarships and support in their first year, still seek more funding and support.

This study was faced with some limitations, which would warrant caution in the generalisation of the findings. Firstly, the number of respondents was 74, representing a small sample size. Furthermore, a considerable number of the respondents were scholarship holders, which could have an effect on their satisfaction levels. Also, the respondents were from Africa and Asia. Therefore, future studies can consider including students from European, North American and South American countries. Furthermore, consideration should be given to how international students who do not enjoy university scholarships cope in Hong Kong.

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