Relative Satisfaction Index on Students' Satisfaction towards Hostel Facilities

Rosnalini Mansor[1], Bahtiar Jamili Zaini[2], Mohammad Nizam Sarkawi[3], Lee Ee Phay[4]

[1,2,4]School of Quantitative Sciences, [3]School of Business Management
Universiti Utara Malaysia, 06010 UUM Sintok Kedah Malaysia
[1]rosnalini@uum.edu.my, [2]bahtiar@uum.edu.my, [3]drnizam@uum.edu.my
[4]phay0209@hotmail.com

Abstract

This study aims to determine the level of satisfaction among undergraduate students based on Relative Satisfaction Index (RSI) on hostel facilities. The RSI on its facilities will be compared between students who stay outside the campus and students who stay inside the campus, and also among the 2genders. The study uses a survey based on the questionnaire administered to280 respondents (undergraduate students) who stayed at a hostel provided by a university in Malaysia. By using descriptive analysis, the levels of satisfaction among the respondents (undergraduate students) on the hostel facilities are identified and examined. The data analysis indicates that the levels of satisfaction between undergraduate students are mixed. Nevertheless, on average the students' satisfaction levels are considered fair towards the facilities provided by the university based on the values of RSI (0.51 and 0.79). The data analysis and research results will assist the university to enhance its facilities to improve the students' satisfaction.

Keywords: Hostel Facilities, Relative Satisfaction Index, Satisfaction, Undergraduate Students

1. Introduction

A hostel facility is referred to as a place where individuals can stay when their original residence is located far from the educational institution. The hostel is one of the facilities that offer an alternative residency in university apart from their hometown, and it has the obligation to manage the facilities for students. Since students are sharing their accommodation with roommates during their stay, students will become more independent when they experience life at the hostel. Furthermore, life at the hostel also makes students more disciplined, dynamic, tolerant, and encourages them to socialise with their peers [1]. Sifuna[2]revealed that the demand for higher education facilities is high. The increased demand for higher education has seen rapid expansion of facilities so as to improve access. The hostel facilities and green environment will contribute to the level of satisfaction among students. Satisfaction is the pleasurable fulfilment, which customers are familiar with the consumption that completes some objectives, needs, wishes, and therefore this completion creates a pleasurable feeling. Therefore, students' satisfaction is an important issue to be considered by the university authorities. It is thus vital to provide a conducive environment to the students. When the level of satisfaction is high, the student will have a good academic performance, enjoy their studies, and live comfortably. In addition, if students are satisfied with their institution, they will certainly exhibit the right attitudes and behaviour towards their university, especially in terms of loyalty [3]–[6]. On the other hand, if the level of satisfaction is low, it will influence the student's depression, boredom, daily activities, and academic performance as student's time are spent in the hostel for other activities, such as completing homework, assignment, and resting. The external environment of a university thus should be cared for since academic productivity to large extent depends on the available facilities and supporting services. The main issue is the comfort of students in terms of hostel facilities provided by the university. Satisfaction towards the facilities, such as room condition, safety, and security is fundamental in which it can estimate the students' satisfaction towardstheir hostel and its facilities. Currently in

Malaysia, the university has high awareness and gives a strong commitment to provide better services and facilities for the students in regards to solving hostel and facilities problems[7]. Thus, providing conducive environments for students is important for their satisfaction towards hostel facilities.

Globally, a study by[8]–[11] focused on comparative assessment of students' satisfaction towards facilities provided in the students' hostels and investigated the level of satisfaction among students in selected universities in Nigeria towards the current available hostel facilities. Their results demonstrated that students were generally dissatisfied with several hostel facilities and indicated that hostel accommodation significantly influences students' satisfaction level. Oke, *et al*[12] investigated on students' satisfaction towards their residences or housing with a view to sensitise the authority of higher education institutions on the degree of students' satisfaction so as to understand areas that require improvements to keep their students satisfied. In a recent study from Nwanekezie and Mendie,[10], it is revealed that most facilities in the hostel are reasonably maintained and that on average, the students are satisfied with these facilities. The study also recommended for further improvement in the area of Internet connectivity, laundry and toilet/bathroom, and construction of more hostels.

Meanwhile, in Malaysia, Najib*et al*[13] indicated that there are studies that have examined numerous aspects of satisfaction, including customer satisfaction, job satisfaction, hotel satisfaction, and environmental satisfaction. Study by Khozaei *et al*[14] suggested that satisfaction towards fees, distance from university facilities, room safety, room size, hostel security, and hostel facilities are the most important factors that predict undergraduate students' satisfaction towards their hostel. There was also a significant difference in the satisfaction level between inside-campus and outside-campus hostel students. In a recent development, a study from Yen[15] determined the perception of students on the facilities in their hostel. This finding showed that the functionalities of technology and security need to be focused and improved by the facility manager.

There are many analytical methods that could be used to measure students' satisfaction towards hostel facilities. Many researchers used descriptive analysis, such as frequency tabulation, mean, and standard deviation to assess the general levels of students' satisfaction. On the other hand, Relative Satisfaction Index (RSI) can also be used to measure students' satisfaction [8], [13], [16], [17]. The RSI is the degree of students' satisfaction level on each facility and its outcome in rank. The reason of using RSI is that it can indicate the level of satisfaction on each facility, so that we can clearly know each facility's rank and satisfaction level, and that comparison can be made within the RSI of students. Through RSI, the researcher can analyse the students' satisfaction towards hostel facilities.

This study aims to survey whether the facilities and the quality of hostel affects students' satisfaction towards their hostel life. Thus, this study will explore the differences in the satisfaction levels of students who stay at the hostel within the campus and those who stay at the hostel located outside the main campus area. Satisfaction towards facilities, condition, room safety, and security are the most important factors which can estimate the students' satisfaction towards their hostel. Besides that, the level of satisfaction between male and female students is also investigated in this study as there are differences in satisfaction based on gender. This study also investigates the feeling and response from the students to the green environment around the university. Therefore, it is vital to conduct this study to understand the students' satisfaction towards hostel facilities because when students are satisfied with the facilities provided in their hostel, it will improve their academic performance and less complaints being filed against the management, among others. This research can greatly benefit the university's administration to improve students' housing facilities and services, as well as fulfilling the students' needs and requirements.

2. Methodology

2.1 Data Collection

The current study is conducted at a student's hostel in a public university in Malaysia. In these hostel, students share rooms and facilities like toilet, laundry, and cafeteria, etc. There are 2 Student Residence Hall locations, both on and off the campus. Therefore, our study is focused on students living on and off the campus. This study is exploratory in nature, where the purpose is to describe the level of students' satisfaction on hostel facilities provided by the university. The type of data used to conduct this study is primary data. Primary data are data gathered specifically for the project. Primary data were generated from the questionnaire distributed to selected respondents. For this study, the population refers to undergraduate students who are living in the Students Residential Hall. The questionnaire about students' satisfaction towards hostel facilities was distributed to 280 respondents using stratified random sampling. Stratified random sampling is used to divide a population into smaller groups known as strata. Then, a random sample from every stratum is taken in a number corresponding to the stratum's size when contrasted to the population.

2.2 Instrument Development

This study used questionnaire form to obtain satisfaction level towards hostel facilities among undergraduate students. The survey of the questionnaire consists of 2 sections; Section A is demographic information, while Section B is related to the level of satisfaction towards available facilities. Facilities that are measured include the room, toilet, and outside room facilities. The questions in Section A are measured by nominal scale, while the questions in Section B are measured by Liker scale. This scale ranges from 7 scales, one to seven (1-7), in which

1- very strongly dissatisfied, 2- strongly dissatisfied, 3-dissatisfied, 4- neutral, 5- satisfied, 6- strongly satisfied, and 7- very strongly satisfied.

Before administering the questionnaire to the actual sample, a pilot study was conducted to validate the instrument. The aim of the pilot study is not only to test and refine the tools of research, but also to force the nature of analysis and processing that may be needed at a later stage after a questionnaire was prepared. It was given a trial on a small sample. Therefore, the instrument was confirmed to have content validity and reliability.

2.3 Method of Data Analysis

Descriptive statistics was conducted to analysethe demographic information as in Section A. Meanwhile, we calculated RSI for each facilityin order to determine the students' satisfaction towards the hostel facilities as in Section B. RSI can be obtained by using the Likertscale. The Likertscale questions ranged one to seven (1-7), in which 1- very strongly dissatisfied, 2- strongly dissatisfied, 3- dissatisfied, 4- neutral, 5- satisfied, 6-strongly satisfied, and 7- very strongly satisfied. The formula of RSI can be referredto the reference study. Data are then analysed through RSI based on this formula:

$$RSI = \frac{7n_7 + 6n_6 + 5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{7N}$$

where:

n_1 is the number of respondents with very strongly dissatisfied
n_2 is the number of respondents with strongly dissatisfied
n_3 is the number of respondents with dissatisfied
n_4 is the number of respondents with neutral
n_5 is the number of respondents with satisfied
n_6 is the number of respondents with strongly satisfied
n_7 is the number of respondents with very strongly satisfied, [16]

The RSI values measure the degree of measurement of the students' satisfaction level. The minimum value of RSI is equal to 0.1429, moderate value is equal to 0.5715, and the maximum value of RSI is equal to 1. The higherthe value is, the higherthe satisfaction degree will be. The minimum and maximum values of RSI can be calculated as below:

Minimum of RSI
$$= \frac{7(0) + 6(0) + 5(0) + 4(0) + 3(0) + 2(0) + 1(280)}{7(280)}$$
$$= 0.1429.$$

Maximum of RSI
$$= \frac{7(280) + 6(0) + 5(0) + 4(0) + 3(0) + 2(0) + 1(0)}{7(280)}$$
$$= 1.0.$$

Moderate of RSI
$$= \frac{0.1429 + 1.0}{2} = 0.5715$$

This RSI method is used to measure the degree of satisfaction and it can help in the analysis to obtain results that are clear and can be understood more easily. It can also make comparison as it indicatesthe level of satisfaction among students about each facility. Besides that, we compared the RSI values between their demographics, such as gender and students whostay outside and inside the campus.

3. Results and Discussion

3.1 Descriptive Analysis

The organised questionnaire was distributed to astudent population of 280. General demographics information, such as gender, race, and location of campus were gathered. There were 64 male respondents (23%) and 216 respondents (77%) female respondents. Most respondents are Malay, which totals to187 students, or 66.8%. Then, it is followed by Chinese, with 80 students, or 28.6% and Indian with 9 students, or 3.2%. The remaining 4 students are of other races, which is 1.4%. Most respondents livein-Campus, which is 198 students, or 70.6%. The remaining 82 (29.3%) students were living outside the campus. Table 1 provides the descriptions on respondents' demographics information.

Table 1: Demographic Information of the Respondent.

Measure	Items	Frequency	Percentage (%)
Gender	Male	64	22.9
	Female	216	77.1
Race	Malay	187	66.8
	Chinese	80	28.6
	Indian	9	3.2
	Others	4	1.4
Location	Inside Campus	198	70.6
	Outside Campus	82	29.3
TOTAL		**280**	**100**

3.2 RSI Student Satisfaction

3.2.1 RSI for Overall Students' Satisfaction Level

Table 2 shows the overall students' satisfaction level for each facility. We can see that students are mostly satisfied with facilities inside the room, which are table and chair, with an RSI of 0.7939. Besides that, wardrobe and lights also indicated satisfaction indexes of0.7918 and 0.7587 respectively and were ranked second and third. As for toilet facility, lights are the top facility that students are most satisfied with; with an index of 0.7148. This is followed by water supply and water tap with indexes of 0.7122 and 0.6128 respectively. Other than that, for outside room facility, the level of satisfaction towards facilities, such as lounge, drinking fountains, and the security indicated the highest satisfaction indexes;

0.7816, 0.6587 and 0.6469 respectively and were ranked first, second and third.

As for the satisfaction level for all 3 parts of facilities, we can see that the top 5 of satisfaction level were table and chair, wardrobe, lounge, room's electricity, and fan, in which their RSI were 0.7939, 0.7918, 0.7816, 0.7587, and 0.7536 respectively. On the other hand, the top 5 facilities with the lowest satisfaction level were washing machine, followed by Internet connection, shower tools, sink, and toilet cleanliness with indexes of 0.5112, 0.5240, 0.5643, 0.5643, and 0.5806 respectively. The value of overall satisfaction is between 0.51 and 0.79.

Table 2: Overall RSI Student's Satisfaction Level

Inside Room		Very strongly dissatisfied------Very strongly satisfied							RSI	Rank	Rank overall
1	Table and Chair	1	2	11	31	77	97	61	0.7939	1	1
2	Wardrobe	1	3	8	33	81	94	60	0.7918	2	2
3	Curtain	6	5	22	64	95	55	33	0.7010	7	10
4	Bed	3	4	25	33	95	62	58	0.7505	5	6
5	Mirror	15	24	31	64	75	41	30	0.6342	8	13
6	Light of Electricity	2	5	15	39	90	79	50	0.7587	3	4
7	Fan	4	6	16	39	87	74	54	0.7536	4	5
8	Internet Connection	33	44	51	54	63	23	12	0.5240	10	22
9	Window	15	19	42	66	69	44	25	0.6260	9	16
10	Door	2	4	18	52	90	73	41	0.7383	6	7
Toilet Facility											
1	Cleanliness	17	21	46	84	77	25	10	0.5806	5	19
2	Condition	11	20	50	92	74	26	7	0.5837	4	18
3	Shower Tools	16	28	52	86	65	22	11	0.5643	6	20
4	Water Supply	5	8	27	40	101	64	35	0.7122	2	9
5	Sink	18	27	58	70	72	25	10	0.5643	6	20
6	Water Tap	11	12	46	84	86	25	16	0.6128	3	17
7	Light of Electricity	4	6	22	50	106	55	37	0.7148	1	8
Outside Room Facility											
1	Lounge	2	6	5	33	99	69	66	0.7816	1	3
2	Drinking Fountains	6	18	28	64	97	45	22	0.6587	2	11
3	Drying Clothes Places	16	21	43	49	86	40	25	0.6265	5	15
4	Parking Lot	11	17	32	83	78	35	24	0.6332	4	14
5	Security	11	16	25	80	81	44	23	0.6469	3	12
6	Washing Machine	44	30	50	68	60	20	8	0.5112	6	23

3.2.2 RSI for Inside Campus Students' Satisfaction Level

Based on Table 3, it shows that the level of satisfaction for 1st to 10th rank were table and chair (0.7893), wardrobe (0.7807), lounge (0.7756), fan (0.7453), electricity inside the room (0.7446), bed (0.7352), door (0.7302), curtain (0.7063), toilet's electricity (0.7020), and water supply (0.6999). However, the top 10 facilities with the lowest satisfaction were washing machine (0.5216), Internet connection (0.5238), sink (0.5375), toilet cleanliness (0.5556), shower tools (0.5606), toilet condition (0.5678), water tap (0.6003), room window (0.6154), mirror (0.6255), and security (0.6263). The value of satisfaction is between 0.52 and 0.80.

Table 3: Inside Campus RSI Student's Satisfaction Level

Inside Room		Very strongly dissatisfied----Very strongly satisfied							RSI	Rank	Rank overall
1	Table and Chair	0	1	7	25	59	66	40	0.7893	1	1
2	Wardrobe	0	3	4	28	62	65	36	0.7807	2	2
3	Curtain	3	3	16	46	66	40	24	0.7063	7	8
4	Bed	2	3	20	25	76	33	39	0.7352	5	6
5	Mirror	13	17	18	51	51	29	19	0.6255	8	15
6	Light of Electricity	2	5	13	25	70	50	33	0.7446	4	5
7	Fan	4	3	11	30	62	56	32	0.7453	3	4
8	Internet Connection	24	30	35	42	42	16	9	0.5238	10	22
9	Window	12	17	30	47	41	33	18	0.6154	9	16
10	Door	2	2	14	40	63	50	27	0.7302	6	7
Toilet Facility											
1	Cleanliness	16	17	33	65	46	16	5	0.5556	6	20
2	Condition	9	17	37	69	44	17	5	0.5678	4	18
3	Shower Tools	12	22	37	57	46	16	8	0.5606	5	19
4	Water Supply	4	7	22	29	71	40	25	0.6999	2	10
5	Sink	14	24	48	46	46	15	5	0.5375	7	21
6	Water Tap	7	11	33	66	56	15	10	0.6003	3	17
7	Light of Electricity	2	4	16	40	82	33	21	0.7020	1	9
Outside Room Facility											
1	Lounge	2	4	2	28	69	49	44	0.7756	1	3
2	Drinking Fountains	6	13	21	46	70	26	16	0.6472	2	11
3	Drying Clothes Places	10	16	29	33	61	31	18	0.6335	3	12
4	Parking Lot	10	12	22	58	56	23	17	0.6270	4	13
5	Security	9	13	22	59	53	28	14	0.6263	5	14
6	Washing Machine	30	19	35	51	39	17	7	0.5216	6	23

3.3.3 RSI for Outside Campus Student's Satisfaction Level

Based on Table 4, it shows that the level of satisfaction for 1st to 10th rank were wardrobe (0.8188), table and chair (0.8049), lounge (0.7962), room electricity (0.7927), bed (0.7875), fan (0.7735), door (0.7578), toilet electricity (0.7456), water supply (0.7422), and security (0.6969). As for the top 10 for facilities with the lowestsatisfactionrate,the results revealed this; washing machine (0.4948), Internet connection (0.5244), shower tools (0.5732), drying clothes places (0.6098), toilet condition (0.6220), sink (0.6289), toilet cleanliness (0.6411), water tap (0.6429), parking lot (0.6481), and room window (0.6516). The value of satisfaction is between 0.49 and 0.82

Table 4: Outside Campus RSI Student's Satisfaction Level

Inside Room		Very strongly dissatisfied----------Very strongly satisfied							RSI	Rank	Rank overall
1	Table and Chair	1	1	4	6	18	31	21	0.8049	2	2
2	Wardrobe	1	0	4	5	19	29	24	0.8188	1	1
3	Curtain	3	2	6	18	29	15	9	0.6882	7	11
4	Bed	1	1	5	8	19	29	19	0.7875	4	5
5	Mirror	2	7	13	13	24	12	11	0.6551	8	13
6	Light of Electricity	0	0	2	14	20	29	17	0.7927	3	4
7	Fan	0	3	5	9	25	18	22	0.7735	5	6

8	Internet Connection	9	14	16	12	21	7	3	0.5244	10	22
9	Window	3	2	12	19	28	11	7	0.6516	9	14
10	Door	0	2	4	12	27	23	14	0.7578	6	7
Toilet Facility											
1	Cleanliness	1	4	13	19	31	9	5	0.6411	4	17
2	Condition	2	3	13	23	30	9	2	0.6220	6	19
3	Shower Tools	4	6	15	29	19	6	3	0.5732	7	21
4	Water Supply	1	1	5	11	30	24	10	0.7422	2	9
5	Sink	4	3	10	24	26	10	5	0.6289	5	18
6	Water Tap	4	1	13	18	30	10	6	0.6429	3	16
7	Light of Electricity	2	2	6	10	24	22	16	0.7456	1	8
Outside Room Facility											
1	Lounge	0	2	3	5	30	20	22	0.7962	1	3
2	Drinking Fountains	0	5	7	18	27	19	6	0.6864	3	12
3	Drying Clothes Places	6	5	14	16	25	9	7	0.6098	5	20
4	Parking Lot	1	5	10	25	22	12	7	0.6481	4	15
5	Security	2	3	3	21	28	16	9	0.6969	2	10
6	Washing Machine	13	11	15	17	21	4	1	0.4948	6	23

3.3.4 RSI for Female Student's Satisfaction Level

Based on Table 5, it shows that the level of satisfaction of the 1st to 10th rank were wardrobe (0.8009), table and chair (0.7989), lounge (0.7784), room electricity (0.7593), bed (0.7573), fan (0.7553), door (0.7421), toilet electricity (0.7202), water supply (0.7077), and curtain (0.7077). As for the top 10 for facilities with the lowest satisfaction rate, the results showed as follows; washing machine (0.5146), Internet connection (0.5463), sink (0.5589), shower tools (0.5661), toilet cleanliness (0.5714), toilet condition (0.5827), water tap (0.6111), drying clothes places (0.6157), room window (0.6283), and mirror (0.6303). The value of satisfaction is between 0.51 and 0.80.

Table 5: Female RSI Student's Satisfaction Level

Inside Room		Very strongly strongly satisfied			dissatisfied----------Very				**RSI**	**Rank**	**Rank overall**
1	Table and Chair	1	1	7	25	56	78	48	0.7989	2	2
2	Wardrobe	1	1	6	23	61	75	49	0.8009	1	1
3	Curtain	4	4	15	49	75	41	28	0.7077	7	9
4	Bed	3	3	17	24	73	48	48	0.7573	4	5
5	Mirror	15	16	23	50	58	31	23	0.6303	8	14
6	Light of Electricity	2	4	10	25	78	61	36	0.7593	3	4
7	Fan	3	5	11	32	65	57	43	0.7553	5	6
8	Internet Connection	19	27	44	44	56	17	9	0.5463	10	22
9	Window	11	14	36	48	51	36	20	0.6283	9	15
10	Door	1	3	13	40	71	55	33	0.7421	6	7
Toilet Facility											
1	Cleanliness	14	18	31	72	59	16	6	0.5714	5	19
2	Condition	6	16	39	75	59	16	5	0.5827	4	18
3	Shower Tools	12	20	45	63	49	17	10	0.5661	6	20
4	Water Supply	5	6	22	31	77	47	28	0.7077	2	9

									RSI	Rank	Rank overall
5	Sink	13	20	52	52	55	15	9	0.5589	7	21
6	Water Tap	8	10	37	64	66	18	13	0.6111	3	17
7	Light of Electricity	1	5	17	38	86	38	31	0.7202	1	8
Outside Room Facility											
1	Lounge	1	6	4	27	75	52	51	0.7784	1	3
2	Drinking Fountains	5	16	23	52	73	33	14	0.6448	3	12
3	Drying Clothes Places	14	20	32	35	67	30	18	0.6157	5	16
4	Parking Lot	7	11	19	64	68	29	18	0.6495	2	11
5	Security	9	12	22	59	65	33	16	0.6415	4	13
6	Washing Machine	28	24	41	56	51	12	4	0.5146	6	23

3.3.5 RSI for Male Student's Satisfaction Level

Based on Table 6, it shows that the level of satisfaction for 1st to 10th rank were lounge (0.7924), table and chair (0.7768), wardrobe (0.7612), room electricity (0.7567), fan (0.7478), water supply (0.7277), bed (0.7277), door (0.7254), drinking fountains (0.7054), and toilet electricity (0.6964). However, the top 10 facilities with the lowest satisfaction were Internet connection (0.4487), washing machine (0.5000), shower tools (0.5580), parking lot (0.5781), sink (0.5826), toilet condition (0.5871), toilet cleanliness (0.6116), water tap (0.6183), room window (0.6183), and mirror (0.6473). The value of satisfaction is between 0.45 and 0.79.

Table 6: Male RSI Student's Satisfaction Level

Inside Room		Very strongly strongly satisfied	dissatisfied----------Very						RSI	Rank	Rank overall
1	Table and Chair	0	1	4	6	21	19	13	0.7768	1	2
2	Wardrobe	0	2	2	10	20	19	11	0.7612	2	3
3	Curtain	2	1	7	15	20	14	5	0.6786	7	11
4	Bed	0	1	8	9	22	14	10	0.7277	5	6
5	Mirror	0	8	8	14	17	10	7	0.6473	8	14
6	Light of Electricity	0	1	5	14	12	18	14	0.7567	3	4
7	Fan	1	1	5	7	22	17	11	0.7478	4	5
8	Internet Connection	14	17	7	10	7	6	3	0.4487	10	23
9	Window	4	5	6	18	18	8	5	0.6183	9	15
10	Door	1	1	5	12	19	18	8	0.7254	6	8
Toilet Facility											
1	Cleanliness	3	3	15	12	18	9	4	0.6116	4	17
2	Condition	5	4	11	17	15	10	2	0.5871	5	18
3	Shower Tools	4	8	7	23	16	5	1	0.5580	7	21
4	Water Supply	0	2	5	9	24	17	7	0.7277	1	6
5	Sink	5	7	6	18	17	10	1	0.5826	6	19
6	Water Tap	3	2	9	20	20	7	3	0.6183	3	15
7	Light of Electricity	3	1	5	12	20	17	6	0.6964	2	10
Outside Room Facility											
1	Lounge	1	0	1	6	24	17	15	0.7924	1	1
2	Drinking Fountains	1	2	5	12	24	12	8	0.7054	2	9
3	Drying Clothes Places	2	1	11	14	19	10	7	0.6629	4	13

4	Parking Lot	4	6	13	19	10	6	6	0.5781	5	20
5	Security	2	4	3	21	16	11	7	0.6652	3	12
6	Washing Machine	16	6	9	12	9	8	4	0.5000	6	22

4. Conclusion

This study used RSI to determine the students' satisfaction towards the hostel facilities provided by auniversity in Malaysia. In this study, RSI is a concept ofthe overall satisfaction measure. The study has established that there is a variation in the level of students' satisfaction towardstheir hostel facilities provided by the university. Besides the overall satisfaction measure, this study also compared the RSI between students who stay outside the campus and students who stay inside the campus, and the RSI results among the 2 genders. Based on the data analysis and results, for the overall satisfaction level of SQS undergraduate students, the majority of students are more satisfied towards the inside room facilities, such as table and chair, wardrobe, lounge, room's electricity, and fan whereas facilities like the washing machine, Internet connection, shower tools, sink, and toilet cleanliness did not received the same outcome. The RSI of the overall satisfaction is between 0.51 and 0.79. Therefore, the RSI value is considered as low to moderate. Furthermore, for RSI comparison between inside hostel and outside hostel, we can conclude that the degree of satisfaction for outside hostel is similar as inside hostel. Meanwhile, for RSI comparison between genders, we can conclude that the degree of satisfaction for male is also similar to the female.

This finding shows that most students gave positive values in terms of the green environment, fresh air, and agreed that the environment is clean. On the other hand, the majority of students gavenegative opinion about the facilities as they felt that these facilities are not sufficient for all students, didnot agree that the services to fix the facilities are done quickly after report is made, and agreed that the comfortable environment at the hostel can affect the student's academic performance. In addition, students also recommended for facilities to be frequently upgraded, such as the toilet, washing machine, and Internet connection. Other major problems faced by students with the most frequencies were the Internet connection, animal disturbance, and toilet. The university's management needs to take necessary steps to address these inadequacies. For example, the cleanliness of the toilets should be improved by making the cleaners work, Internet connectivity should be upgraded to assist students' academic performance, and more washing machines are added at the hostel. This is consistent with various studies from [8], [13], [16]which are related to students' satisfaction towards the facilities given.

This study is significant to help the university identify the satisfaction level and problems faced by students when staying at the hostel provided by the university and thus, allowing the university to constantly improve these facilities. To increase the satisfaction level, this study suggests for the university's authority to put effort into this matter, which is to enhance and add more facilities at the hostel to fulfil the students' needs and expectations. For example, facilities that assist the academic performance of students living in the hostels, such as Internet connectivity, should be given priority.

References

[1] I. A. Chowdhury and N. Mohd Suki, "Students' Attitude and Satisfaction Living in Sustainable On-Campus Hostels," *Malaysia J. Bus. Econ.*, vol. 2, no. 1, pp. 35–47, 2015.

[2] D. N. Sifuna, "The Governance of Kenyan Public Universities," *Res. Post-Compulsory Educ.*, vol. 3, no. 2, pp. 175–212, 1998.

[3] B. J. Zaini, R. Mansor, N. Yusof, and M. N. Sarkawi, "PLS Equation Model of Student Loyalty based on Gender in IR 4.0 Environment," *Int. J. Supply Chain Manag.*, vol. 8, no. 5, pp. 447–453, 2019.

[4] N. Yusof, B. J. Zaini, and R. Mansor, "A Study on Factors Influencing Student Loyalty towards Higher Learning Institution," in *AIP Conference Proceedings*, 2019, vol. 020006, no. August.

[5] A. Kunanusorn and D. Puttawong, "The Mediating Effect of Satisfaction on Student Loyalty to Higher Education Institution," vol. 1, no. October, pp. 449–463, 2015.

[6] M. Mohamad and Z. Awang, "Building Corporate Image and Securing Student Loyalty in the Malaysian Higher Learning Industry," *J. Int. Manag. Stud.*, vol. 4, no. 1, pp. 30–40, 2009.

[7] M. H. Muslim, H. A. Karim, and I. C. Abdullah, "Students' Perception of Residential Satisfaction in the Level of Off-Campus Environment," *Procedia - Soc. Behav. Sci.*, vol. 105, pp. 684–696, 2013.

[8] T. Azeez, D. Taiwo, and Mogaji-Allison BasiratAzeez Bello, "Comparative Assessment of Students ' Satisfaction with Hostel Accommodation in Selected Private Universities in Ogun State , Nigeria," *Eur. Sci. J.*, vol. 12, no. 32, pp. 410–425, 2016.

[9] S. O. Babatunde and S. Perera, "Public-private Partnership in University Female Students ' Hostel Delivery Analysis of Users ' Satisfaction in Nigeria," no. 2012, 2016.

[10] O. F. Nwanekezie and E. A. Mendie, "A Study on Students' Satisfaction with Hostel Facilities in Public Universities : The Case of University of Uyo Hostels , Nigeria," vol. 9, no. 4, pp. 157–163, 2019.

[11] P. T. Sawyerr and N. A. Yusof, "Student Satisfaction with Hostel Facilities in Nigerian Polytechnics," *J. Facil. Manag.*, vol. 11, no. 4, pp. 306–322, 2013.

[12] A. E. Oke, C. O. Aigbavboa, and M. M. Raphiri, "Students ' Satisfaction with Hostel Accommodations in Higher Education Institutions," 2017.

[13] N. U. M. Najib, N. A. Yusof, and Z. Osman, "Measuring Satisfaction with Student Housing Facilities School of Housing, Building and Planning," *Meas. Satisf. with Student Hous. Facil.*, vol. 4, no. 1, pp. 52–60, 2011.

[14] F. Khozaei, N. Ayub, and A. S. Hassan, "The Factors Predicting Students' Satisfaction with University Hostels , Case The Factors Predicting Students' Satisfaction with University Hostels , Case Study , Universiti Sains Malaysia," *Asian Cult. Hist.*, vol. 2, no. 2, pp. 148–158, 2010.

[15] T. K. Yen, "Student Perception on Student Housing Facilities in Universiti Teknologi Malaysia through Post Occupancy Evaluation," Universiti Teknologi Malaysia, 2014.

[16] M. Ajayi, A. Nwosu, and Y. Ajani, "Students' Satisfaction with Hostel Facilities in Federal University of Technology, Akure, Nigeria," *Eur. Sci. J.*, vol. 11, no. 34, pp. 402–415, 2015.

[17] K. O. Dimuna and A. O. Olotuah, "Assessing Residents' Satisfaction with Planning and Neighbourhood Facilities of Some Public Housing Estates in Benin City, Nigeria Abiodun Olukayode Olotuah," *J. Educ. Soc. Res.*, vol. 9, no. 1, pp. 21–28, 2019.