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Comparing Shoppers' Perception in Image Dimensions: A Retail Case Study

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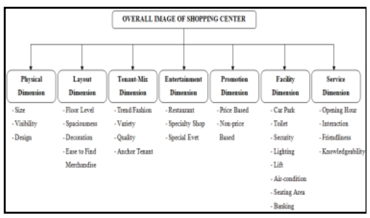
Graphical abstract



Abstract

In the highly competitive retail industry, an understanding on the perceptions of shoppers is important in attracting and retaining loyal customers. This study compares the shoppers' perceptions on various image dimensions using KSL City and Plaza Pelangi in Johor Bahru, Malaysia as case studies. Plaza Pelangi is more established but faces high vacancy rate and competition from KSL City. The latter is relatively new and needs to capture the shoppers market from Plaza Pelangi. A total 200 questionnaires were distributed using random sampling. Wilcoxon Signed Ranks Test, Paired-Samples T Test, Chi Square Test, One Way ANOVA were used. There was no significant difference between the overall preferences towards both shopping centers. However, there were significant differences according to demographic groups (race, age and marital status). Majority of the image dimension attributes were rated higher in KSL City compared to Plaza Pelangi. KSL City needs to improve the ease in locating merchandise and appoint higher quality tenants. KSL should strive for more inclusive shopper demographic groups. Plaza Pelangi needs to improve its physical dimension in terms of layout and facility dimension by undergoing upgrading works. Plaza Pelangi also needs to recruit more food and beverage outlets as well as entertainment outlets.

Keywords: Shopping center; image dimensions; perceptions of shoppers; demographic groups

Dalam industri runcit yang sangat kompetitif, kefahaman tentang persepsi pembeli adalah penting untuk menarik dan mengekalkan pelanggan-pelanggan setia. Kajian ini membandingkan persepsi pembeli pada pelbagai dimensi imej menggunakan KSL City dan Plaza Pelangi di Johor Bahru, Malaysia sebagai kajian kes. Plaza Pelangi adalah lebih mantap di pasaran tempatan tetapi menghadapi kadar kekosongan yang tinggi dan persaingan daripada KSL City. Akan tetapi, KSL City adalah lebih baru dan perlu bersaing untuk menguasai pasaran pembeli dari Plaza Pelangi. Sebanyak 200 soal selidik telah diedarkan secara rawak. *Wilcoxon Signed Ranks Test, Paired-Samples T Test*, Ujian Chi Square, *One Way ANOVA* telah digunakan. Tidak terdapat perbezaan yang signifikan antara pilihan keseluruhan untuk kedua-dua pusat membeli-belah. Walau bagaimanapun, terdapat perbezaan yang signifikan mengikut kumpulan demografi (bangsa, umur dan status perkahwinan). Majoriti sifat dimensi imej telah diberi nilai yang lebih tinggi di KSL City berbanding dengan Plaza Pelangi. KSL City perlu permudahkan pencarian barang dagangan dan melantik penyewa lebih berkualiti. KSL perlu berusaha untuk menarik pembeli dari kumpulan demografi yang lebih inklusif. Plaza Pelangi perlu meningkatkan dimensi fizikal dari segi susun atur dan dimensi fasiliti dengan menjalani kerja-kerja naik taraf. Plaza Pelangi juga perlu mengambil lebih ramai kedai-kedai makanan dan minuman serta pusat hiburan.

Kata kunci: Pusat membeli-belah; dimensi imej; persepsi pembeli; kumpulan demografik

1.0 INTRODUCTION

The number of shopping centers in the country increases every year [1]. The development of shopping centers was boosted by the fast growing economy and population in Malaysia [2]. In addition, Zafar *et al*. [3] revealed there was a trend in Malaysia shopping centers where most have similar merchandises and pricing.

Hence, with the increasing numbers of shopping centers and competition in the industry, prime location is no longer the sole key factor for a shopping center's success [4]. In addition, when shopping centers are located in close proximity, they will compete with each other to attract visitors [2]. In such cases, a possible outcome is one shopping center may lose their customers and need to close down. The other possibility is positive agglomeration effect [5] where more shoppers will be wooed by the collective attraction of the shopping centers.

Examples of shopping centers located in close proximity are Sungei Wang Plaza and Berjaya Times Square; One Utama

Shopping Center and The Curve; MidVally Megamall and The Gardens Mall which are all located in Klang Valley. However, besides their success in differentiating with their competitors, the location of Klang Valley as the largest metropolitan region in Malaysia is another reason for the survival of these shopping centers.

However, the situation is very different in Johor Bahru as many shopping centers face high vacancy rate and even risk closing down. Examples of them are JB Waterfront, Danga City Mall (formerly Plaza Best World), Holiday Plaza, and Skudai Parade. In last quarter of 2010, a new shopping center named KSL City was officially launched [6]. KSL City has become the new closest competitor to Plaza Pelangi since both of them are located 1.7 kilometers apart.

As both shopping centers are up-market based, it further makes their competition even more tensed. KSL City and Plaza Pelangi are not only similar in their targeted market, but they are both supported by their developer-built tower. KSL City has the residential and hospitality towers constructed above the retail podium whereas Plaza Pelangi has the Pelangi Office Tower located besides it.

Plaza Pelangi existed since 1991 and had undergone several renovations to attract shoppers [7]. This is supported by Kirkup and Rafiq [8] where the expansion and renovation works are common strategies often used by existing shopping centers to attract shoppers and keep its market position. However, there are at least 30 vacant shop-lots Plaza Pelangi as at end-2013 especially at the higher floors.

KSL City as the new shopping center has many more advantages than Plaza Pelangi in terms of physical design and facilities provided. Nevertheless, since KSL City is very new in the vicinity, it has to compete with Plaza Pelangi in capturing the shoppers market from Plaza Pelangi. Therefore, will KSL City be able to retain and increase the current shoppers' flow?

Shoppers will compare the shopping centers and choose the one that can achieve their expectations [9]. Since KSL City and Plaza Pelangi are located nearby, shoppers would make the comparison between them. But the question is which of the shopping centers will be chosen by shoppers? Will it be either one of the shopping center or both of the shopping centers?

Furthermore, shopping center must know the perceptions of shoppers and their intentions to visit their shopping center [10]. This was supported [9] where a shopping center shall differentiate from its competitors by knowing their position in the market and manipulating the attributes to match the expectations of the targeted market. Based on the current situation, what are the perceptions of shoppers towards Plaza Pelangi and KSL City?

Demographics such as earnings, gender, age, career, race and geographical sites were linked with the differences in shoppers' behaviors [11]. The differences in the background of shoppers will influence their choice in shopping center selection. Consequently, how do demographics influence the perceptions of shoppers?

The other key element influencing shoppers' behaviors is the image of shopping center [12]. With the desire to visit shopping center, the intention will be triggered and finally lead to the actual frequent of visit to the particular shopping center.

The key objectives that arise in this study are to identify the perceptions of shoppers between KSL City and Plaza Pelangi based on their demographics as well as shopping center image. This study is believed to be useful to shopping center developers and management teams to design their image according to their targeted demographic groups.

2.0 LITERATURE REVIEW

Shepherd and Thomas [11], they noted the variables such as earnings, gender, age, career, race and geographic sites are linked with the differences in shoppers' behaviours. The difference in the background of each shopper will influence on the shopper's choice in choosing the shopping center to visit.

Shopping behavior of post-secondary students in Klang Valley area found that quite a number of shoppers did not have strong loyalty to a single shopping center and they will often visit more than one shopping center [3]. Moreover, younger shoppers in Kuala Lumpur area were more frequent in visiting shopping centers. Besides that, the majority of these shoppers spend more time in every visit [2].

Shoppers' behaviors were related to the image of a shopping center. A model between the shopping center's image and shopping center visits with the relationship with anticipated emotion, desire, and intention of the shoppers to the shopping center was developed [12]. In his model, the shopping center image will induce the anticipated emotions of shoppers and induce the desire to visit the shopping center. With the desire to visit, the intention will be triggered and finally lead to the actual frequent visits to the shopping center.

2.1 Image of Shopping Center

Based on past studies, the image of a shopping center can be broadly compiled into seven major dimensions. A summarized overall image of shopping center on the seven dimensions is shown in Figure 1.

a) Physical Dimension

The physical dimension in shopping center's image includes three attributes, namely size, design and visibility. According to Eppli and Shilling [13], larger sized shopping centers could attract more shoppers and generate higher sales per square foot. The other attribute is the design of shopping center. Wakefield and Baker [10] stated that design plays an important role in generating excitement to the shoppers and desire to stay. Additionally, visibility of shopping center is important as mentioned high visibility will contribute to greater success in attracting shoppers [14].

b) Layout Dimension

The layout in the shopping center refers to the multiple levels in the shopping center, the arrangement of the shop units and the internal layout of each level. According to Wakefield and Baker [10], the layout of the shopping center impacts the experience and feeling of the shoppers. Older shopping centers with unattractive layouts (single level L-shapes or I-shapes) were less preferred by shoppers compared to new shopping centers with interesting layouts. Furthermore, the ease to locate specific merchandises Chang and Luan [15] and physical decorations in shopping center were found to be important attributes to the shoppers. Other than that, the spaciousness of the inner layout of shopping center is also considered as important to shoppers [16].

c) Tenant-Mix Dimension

The wide choice of merchandises is considered important to the shoppers [15]. Similarly, Shergill and Chen [16] found that updated style and fashion of products were important in attracting shoppers. Besides that, good tenant-mix and anchor tenant in the shopping center were found to be important criteria in attracting the shoppers [17].

d) Entertainment Dimension

The entertainment attributes in shopping centers is considered essential to shoppers which will influence their choice in shopping centers [18]. There are three categories of entertainment, i.e. special event entertainment, specialty entertainment and food entertainment [9]. The special event entertainment is event-based and not permanent in shopping centers. Specialty entertainment refers to the tenants that are involved with entertainment such as the Cineplex. Food entertainment generally refers to food-based tenants such as food courts, restaurants and cafés in the shopping center.

e) Promotion Dimension

Promotion activities are common in every shopping center. Promotional activities are crucial in creating the sustainable flow of shoppers and encourage their spending [19]. Similar in Jin and Suh [20], promotion in terms of pricing discount will attract the flow of shoppers to that particular shopping center. Advertising, promotion and publicity activities are believed to be able to draw the attention of shoppers to visit the shopping center and finally increased the total sales of the shopping center [21].

f) Facility Dimension

In generally, shopping center will provide basic facilities to shoppers for their convenience. According to Tan and Thang [22], facilities provided by the shopping center include car park, resting kiosks, child care room, toilet, diaper changing room, and drinking water dispensers. They further added these facilities could provide a convenient environment to the shoppers and will increase shoppers spending time in the shopping center. However, McGoldrick and Thompson [23] found that facilities such as the lighting, seating area, toilet, parking, air-conditioner, and security were other attributes in the facility dimension.

g) Service Dimension

Services are considered as important attributes in the shopping centers as people not only shop to buy merchandise but also to enjoy process of shopping. According to Tan and Thang [22], good customer service will enhance the desirability of shoppers to visit in future. Grewal and Sharma [24] also noted that employee's service and interaction with shoppers played a significant role in determining the shoppers' feeling and satisfaction on the overall environment. The friendliness of the staff Reynolds *et al.*, [18], knowledgeability of the staff Chang and Luan [15] and length of time of the service Kaufman and Lane [15] provided by the shopping center were important factors for shoppers in choosing the shopping center.

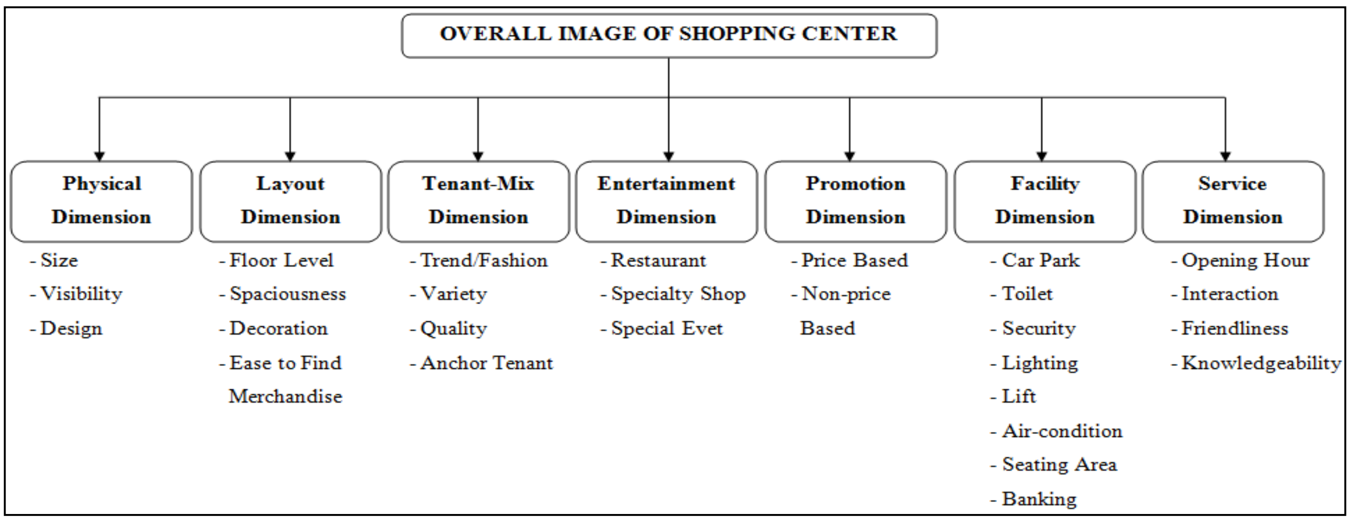


Figure 1 Overall image of shopping center (summarized from various sources)

3.0 RESEARCH METHODOLOGY

The primary data was collected through questionnaire surveys. The questionnaire was designed into three parts where part A was on respondents' demographic details, part B on shopping behavior and part C on perceptions of shoppers based on the image dimensions.

The perceptions of the respondents were measured using Likert scale which was considered as the most appropriate scale on the shopping center image comparison [26].

3.1 Sampling Size

According to Tinsley and Tinsley [27], a questionnaire survey's sample size must have at least a 1:5-10 proportion ratio between the no. of questions to the numbers of respondent, i.e. every single question should at least have 5 to 10 respondent. Furthermore, Comrey [28] mentioned 200 respondents as a fair sample size in questionnaire sampling. Based on the no. of question (41 questions) in this questionnaire, 200 respondents is decided as the sample size for this study.

3.2 Sampling Method

The questionnaires were collected using random surveys Shergill and Chen [16] at Plaza Pelangi and KSL City. Equally, each 100 complete questionnaires were collected at both shopping centers. In order to ensure the reliability and representation of the total shoppers, the data collection were carried out both during weekends and weekdays [16]. Furthermore, the distribution dates of questionnaires avoided the bias of seasonal shopping of festival periods.

The respondents were pre-qualified where they were intercepted as they were leaving the shopping centers. This was done for the purpose to ensure the respondents have enough time and can concentrate on filling the questionnaires [18]. On average, each respondent took 10 to 15 minutes to complete the questionnaires.

3.3 Analysis Method

Chi-square was used to test whether there was any significant difference between the respondents' demographics to the preference of the shopping centers [16]. Chi-square is suitable as the demographics of the respondents were independent variables with 3 or more groups; the preferences of the shopping center being the nominal dependent variable [29].

Paired-sample T Test was used to test whether there was any significant difference on the image dimension attributes between the both shopping centers. Paired-Samples T Test was suitable as the attributes in shopping center were the repeated measure independent variables and the ratings as the dependent variables were assumed to be normal data. However, the Likert scale might represent the ordinal data; hence Wilcoxon Signed Ranks Test was used as the checking method [29].

Furthermore, One-Way ANOVA was used to test whether there was significant relationship between the demographics and the mean rating of the shopping center's dimensions. One-Way ANOVA was suitable as the demographics of the respondents were considered as the independent variables with 3 or more groups; the mean rating of the shopping center's dimensions were the nominal dependent variable [29].

4.0 RESULTS AND DISCUSSIONS

The Cronbach's alpha coefficient (reliability test) for the overall sample was 0.94. The reliability for KSL City was 0.93 and for Plaza Pelangi was 0.95. This shows the set of items in the data had relatively high internal consistency. The cut-off of 0.80 is a good measure of the reliability of the data.

Based on the 200 respondents, there were more female (62%) than male respondents (38%). Majority of the respondents were Chinese (59.5%), followed by Malay (28.0%), Indian (10.0%) and others (2.5%). Almost half of the respondents were below 26 years old (47%), followed by 26-45 years old (39.5%) and above 45 years old (13.5%). In addition, 58% and 42% of the respondents were single and married respectively.

The education level of the respondents in primary school, secondary school, and college/university were represented by 1%, 42% and 57% respectively. Moreover, 59% of respondents had monthly income below RM3,000. Twenty-five percent of the respondents had monthly income between RM3,000-RM3,999; while 16% had above RM 4,000 monthly income.

Table 1 Preference vs. demographics

	KSL City	Plaza Pelangi	Both	Total	p-values
Overall	58	67	75	200	(n.s.)
Gender					
Female	36	39	49	124	(n.s.)
Male	22	28	26	76	
Total	58	67	75	200	
Race					
Malay	5	35	16	56	0.000
Chinese	49	22	48	119	
Indian	4	8	8	20	
Others	0	2	3	5	
Total	58	67	75	200	
Age					
Under 18	16	4	17	37	0.011
18-25	20	17	20	57	
26-35	10	22	14	46	
36-45	7	16	10	33	
46-55	3	3	10	16	
56 and above	2	5	4	11	
Total	58	67	75	200	
Education Level					
Primary School	1	1	0	2	(n.s.)
Secondary School	27	26	31	84	
College/University	30	40	44	114	
Total	58	67	75	200	
Monthly Income					
Below RM2,000	29	18	27	74	(n.s.)
RM2,000-RM2,999	12	15	17	44	
RM3,000-RM3,999	13	21	16	50	
RM4,000-RM4,999	3	7	9	19	
RM5,000 and above	1	6	6	13	
Total	58	67	75	200	
Marital Status					
Single	42	28	46	116	0.002
Married	16	39	29	84	
Total	58	67	75	200	

4.1 Preference of Shoppers between KSL City and Plaza Pelangi Based on Their Demographics

Table 1 displayed the demographics of the respondents and their preference towards the shopping centers. There is no significant difference in the overall preference of the respondents between the shopping centers. Similarly in the demographic section, there were no significant differences between the preference of shopping centers in regards to gender, education level and monthly income of the respondents.

More Malay respondents (62.5%) prefer Plaza Pelangi than KSL City (28.6%). On the other hand, 41.2 percent and 40.3 percent of Chinese respondents chose to visit KSL City and both shopping centers respectively and only 18.5 percent chose Plaza Pelangi. Hence, KSL City seemed more appealing to Chinese respondents and Malay respondents were more attracted to Plaza Pelangi.

Respondents below 26 years old (22.3%) were less attracted to Plaza Pelangi. In fact, 38.3 percent and 39.4 percent of them chose to visit KSL City alone and both shopping centers respectively. Almost half (48.1%) of the 26-45 year olds chose to visit Plaza Pelangi rather than KSL City. This indicates the younger respondents showed less preference to Plaza Pelangi, probably due to the lack of specialty shops catering to their age group.

There were 36.2 percent, 24.1 percent and 39.7 percent of single respondents that chose to visit KSL City, Plaza Pelangi, and both shopping centers respectively. For married respondents, 19.1 percent, 46.4 percent and 34.5 percent chose to visit in KSL City, Plaza Pelangi, and both shopping centers respectively. This showed fewer married respondents prefer KSL City as compared to single respondents.

Table 2 Mean ratings of shopping centers

	KSL City	Plaza Pelangi	T-Test (p=)	Wilcoxon (p=)
Overall Image	6.64	6.43	(n.s.)	(n.s.)
Size	7.14	6.23	(0.000)	(0.000)
Visibility	6.83	6.52	(0.002)	(0.000)
Design	7.49	6.05	(0.000)	(0.000)
Floor Level	6.19	6.17	(n.s.)	(n.s.)
Spaciousness	6.46	6.11	(0.000)	(0.000)
Decoration	6.46	6.14	(0.000)	(0.000)
Ease to find merchandise	5.94	6.78	(0.000)	(0.000)
Trend/Fashion of merchandise	6.48	6.43	(n.s.)	(n.s.)
Variety of merchandise	6.55	6.49	(n.s.)	(n.s.)
Quality of merchandise	6.48	6.83	(0.000)	(0.000)
Anchor tenant	6.20	7.26	(0.000)	(0.000)
Restaurant	6.88	6.51	(0.002)	(0.003)
Specialty shop	7.25	6.18	(0.000)	(0.000)
Special event	6.33	6.36	(n.s.)	(n.s.)
Price based promotion	6.22	6.23	(n.s.)	(n.s.)
Non-price based promotion	5.59	6.04	(0.000)	(0.000)
Car park	6.32	6.55	(0.009)	(0.014)
Toilet	6.45	6.12	(0.000)	(0.000)
Security	6.56	6.38	(0.006)	(0.001)
Lighting	6.78	6.25	(0.000)	(0.000)
Lift	6.94	7.13	(0.024)	(0.026)
Air-condition	6.77	6.62	(0.016)	(0.017)
Seating area	3.65	3.65	(n.s.)	(n.s.)
Banking	4.90	6.53	(0.000)	(0.000)
Opening hours	6.66	6.61	(n.s.)	(n.s.)
Customer service	6.65	6.36	(0.000)	(0.000)
Interaction of vendors	6.65	6.66	(n.s.)	(n.s.)
Friendliness of vendors	6.72	6.75	(n.s.)	(n.s.)
Knowledgeability of vendors	6.74	6.78	(n.s.)	(n.s.)

4.2 Shopping Center Image Dimensions: Perceptions of Shoppers on KSL City and Plaza Pelangi Based on Their Demographics

Perceptions (ratings) on the Two Shopping Centers

Table 2 showed the perceptions of respondents to KSL City and Plaza Pelangi based on the attributes listed. Wilcoxon Signed Ranks Test showed similar result with Paired-Sample T Test. The overall image of both shopping centers were not significantly different (p>0.05). In addition, there were 10 attributes that were no significantly different between the shopping centers, namely floor level, trend/fashion of merchandise, variety of merchandise, special event, price based promotion, seating area, opening hours, interaction, friendliness and knowledgeability of vendors. These were due to the similarity of the attributes in both shopping centers.

Certain attributes were rated higher by respondents in KSL City compared with Plaza Pelangi. There were 12 attributes of KSL City rated higher than Plaza Pelangi, namely size, visibility, design, spaciousness, decoration, restaurants, specialty shops, toilets, security, lighting, air-conditioning and customer service. As KSL City is newer compared with Plaza Pelangi, the attributes of physical dimension, layout dimension, entertainment dimension and facility dimension were generally rated higher in KSL City.

On contrary, 7 attributes of Plaza Pelangi were rated higher than KSL City, namely ease to locate merchandise, quality of merchandise, anchor tenant, non-price based promotions, car park, lifts and banking. The quality of tenant-mix in Plaza Pelangi seemed to be superior to KSL City since the rating on anchor tenant was higher in Plaza Pelangi.

4.3 Demographics VS. Image Dimensions of Shopping Center

As shown in Table 3, there were no significant difference (p>0.05) in the respondents' perceptions on all image dimensions of KSL City and Plaza Pelangi based on education levels and age.

Based on gender however, there are significant differences where male respondents tend to rate higher in the physical, layout and service dimensions in KSL City. There is no significant difference in rating for Plaza Pelangi based on gender.

According to different races, there is significant difference in rating of Plaza Pelangi and not KSL City. Malay respondents gave higher rating on the entertainment and facility dimension in Plaza Pelangi while Indian respondents gave high ranking in the service dimension. Other races rate highly for the physical dimension in Plaza Pelangi but gave low rating for the other dimensions. Chinese respondents rated lowest for Plaza Pelangi's physical dimensions. These indicated different races had different perceptions towards the image dimension of shopping center.

In addition, the income level of the respondents showed significant mean differences in the rating of promotion dimension in KSL City and Plaza Pelangi. The income group earning below RM2,000 per month tend to rate the promotion dimension highest. Higher income groups tend to be less satisfied with the promotions in KSL City and Plaza Pelangi.

The marital status of the respondents had significant mean differences in the rating of physical dimension in Plaza Pelangi and promotion dimension in KSL City. Married respondents were more satisfied with the physical dimension of Plaza Pelangi compared to single respondents. Furthermore, married respondents were less pleased with the promotion dimension in KSL City compared to single respondents.

Table 3 Dimensions of shopping center across demographic groups

	Physical		Layout		Tenant-Mix		Entertainment		Promotion		Facility		Service	
	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG
Gender														
Female	**6.992**	6.258	**6.155**	6.192	**6.351**	6.684	6.726	6.298	**5.770**	6.032	5.981	6.092	**6.563**	6.558
Male	**7.408**	6.276	**6.438**	6.270	**6.549**	6.859	6.970	6.434	**6.118**	6.302	6.145	6.252	**6.876**	6.742
p-values	***0.005***	*(n.s.)*	***0.035***	*(n.s.)*	***0.069***	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.039***	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.034***	*(n.s.)*
Race														
Malay	7.339	**6.494**	6.438	6.451	6.326	6.942	6.661	**6.631**	5.929	6.304	6.185	**6.475**	6.786	**6.889**
Chinese	6.992	**6.045**	6.181	6.143	6.424	6.647	6.954	**6.258**	5.908	6.088	5.960	**5.993**	6.645	**6.516**
Indian	7.433	**6.767**	6.363	6.113	6.650	6.813	6.567	**6.333**	5.925	6.100	6.206	**6.300**	6.870	**7.730**
Others	7.667	**6.933**	5.850	5.950	6.700	6.800	6.400	**5.467**	5.400	5.500	5.775	**5.750**	5.640	**5.960**
p-values	*(n.s.)*	***0.001***	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.039***	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.009***	*(n.s.)*	***0.033***
Monthly Income														
Below RM2,000	7.342	6.293	6.351	6.284	6.514	6.699	6.969	6.423	**6.264**	**6.378**	6.237	6.260	6.703	6.592
RM2,000-2,999	6.788	5.992	6.063	6.159	6.301	6.619	6.667	6.296	**5.489**	**5.750**	5.827	5.997	6.750	6.582
RM3,000-3,999	7.147	6.260	6.235	6.195	6.440	6.855	6.767	6.393	**5.830**	**6.160**	6.063	6.230	6.640	6.724
RM4,000-4,999	7.211	6.421	6.290	6.237	6.355	6.868	6.702	6.281	**5.632**	**6.132**	5.842	6.007	6.779	6.653
RM5,000 & above	7.205	6.821	6.500	6.154	6.404	6.904	6.846	6.051	**5.923**	**5.962**	5.894	5.981	6.354	6.585
p-values	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.006***	***0.047***	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*

Table 3 Dimensions of shopping center across the demographic (continued)

	Physical		Layout		Tenant-Mix		Entertainment		Promotion		Facility		Service	
	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG	KSL	PLG
Age														
Under 18	7.505	6.144	6.547	6.345	6.716	6.824	7.216	6.505	6.324	6.365	6.297	6.247	6.876	6.524
18-25	7.105	6.175	6.175	6.140	6.364	6.548	6.702	6.275	5.912	6.044	6.121	6.108	6.597	6.505
26-35	7.051	6.304	6.082	6.250	6.315	6.853	6.652	6.457	5.577	6.087	5.948	6.220	6.822	6.852
36-45	7.081	6.404	6.432	6.386	6.379	6.955	6.879	6.515	5.955	6.197	6.015	6.235	6.770	6.879
46-55	6.833	6.208	6.234	6.031	6.422	6.609	6.792	6.125	6.063	6.313	5.852	5.992	6.475	6.40
56 and above	7.273	6.636	6.046	5.886	6.386	6.705	6.636	5.606	5.409	5.591	5.546	5.773	5.927	6.255
p-values	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*
Education Level														
Primary School	7.500	6.333	6.625	6.375	6.625	7.125	7.667	7.167	6.500	6.500	6.188	6.563	7.100	7.000
Secondary School	7.226	6.294	6.339	6.384	6.521	6.801	6.837	6.361	5.970	6.226	6.097	6.299	6.755	6.693
College/University	7.088	6.243	6.200	6.099	6.353	6.706	6.790	6.328	5.842	6.061	6.001	6.037	6.621	6.574
p-values	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*
Marital Status														
Single	7.193	**6.144**	6.285	6.211	6.461	6.672	6.856	6.328	**6.056**	6.160	6.139	6.147	6.681	6.552
Married	7.091	**6.433**	6.232	6.235	6.378	6.857	6.766	6.381	**5.691**	6.101	5.911	6.161	6.683	6.733
p-values	*(n.s.)*	***0.050***	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	***0.027***	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*	*(n.s.)*

5.0 CONCLUSION AND STUDY IMPLICATION

The findings on preference of shoppers across the demographics showed shoppers with different races, age and marital status had different ratings between KSL City and Plaza Pelangi. However, there were no significant differences towards the preference of the shopping centers in terms of gender, education level and monthly income level. In general, Malay shoppers preferred Plaza Pelangi while Chinese shoppers preferred KSL City.

Younger shoppers below 26 years old preferred KSL City while older shoppers preferred Plaza Pelangi. Moreover, single shoppers preferred KSL City and married shoppers preferred Plaza Pelangi. These showed older and married shoppers are less attracted by the physical and entertainment dimensions in KSL City.

In regards to perceptions of shoppers to KSL City and Plaza Pelangi, KSL City was generally considered better than Plaza Pelangi. This is because there were 12 image dimension attributes rated higher in KSL City as compared to 7 attributes rated higher in Plaza Pelangi. KSL City had higher rating in physical, entertainment and facility dimensions. Plaza Pelangi had higher rating on tenant-mix and promotion dimensions.

Besides that, demographic groups such as gender, race, monthly income and marital status had significant effect on the ratings on the dimensions of shopping center. The physical, layout, promotion and service dimensions of KSL City were rated much lower by female shoppers compared to male shoppers. Rating on physical, entertainment, facility and service dimensions in Plaza Pelangi were highly influenced by the races of the shoppers. In addition, higher monthly income of shoppers will lower their rating on the promotion dimension in both shopping centers. Marital status of shoppers was also significantly different towards the rating in physical dimension in Plaza Pelangi and promotion dimension in KSL City.

5.1 Implication to KSL City

KSL City had high rating in the physical dimension and entertainment dimension in comparison with Plaza Pelangi. Moreover, since the layout, facility and customer dimensions of KSL City were rated higher than Plaza Pelangi, KSL City should also put more effort to maintain the superior position in these dimensions. The high rating on these dimensions was because KSL City is a new shopping center. KSL City must not be satisfied with the current condition, but put in effort in maintaining and improving the above dimensions over time.

In addition, the ease to locate merchandise in KSL City was rated lower compared with Plaza Pelangi. This might be due to lack of directory boards in strategic locations and the huge physical size of KSL City. Therefore, layout dimension attributes must be improved. Besides that, the tenant-mix in KSL City was considered as poorer compared to Plaza Pelangi. Other than recruiting high quality tenants, KSL City can manipulate their strengths (such as spaciousness) to help upgrade its tenant quality image.

Furthermore, KSL City had lower rating on car park, seating areas and banking facility. Thus KSL City needs to improve these facilities. Other than that, it is extremely important for KSL City to expand the range of demographics of shoppers. Since younger and low income groups were generally the main composition of the shoppers, the other demographic groups such as high income and older shoppers should be included in their marketing strategy. In order to get fully inclusive shoppers demographics, Malay shoppers should be included in the targeted market.

5.2 Implication to Plaza Pelangi

Plaza Pelangi as the established shopping center in Johor Bahru, should be aware that new shopping centers in the vicinity are directly competing with it. Plaza Pelangi can manipulate its strategic position at the major highway intersection to overcome competition from nearby shopping centers. Also, the high rating on promotion dimension showed shoppers can easily be attracted to the promotion by Plaza Pelangi. Hence, large promotion banners can be hung out visibly at Plaza Pelangi to create greater shopper awareness.

Besides that, Plaza Pelangi had high rating on the ease to locate merchandise and quality of merchandises. The ease to locate merchandise in Plaza Pelangi might be due to shoppers' familiarity with Plaza Pelangi and good current tenant-mix. Quality of tenant-mix in Plaza Pelangi must be improved especially with the current condition where many shoplots were vacant. If the current situation continues, the quality of tenant-mix will be affected. For this reason, it needs to figure out an effective way to keep and attract more high quality tenants into Plaza Pelangi.

The physical dimension (size, visibility and design), layout dimension (spaciousness and decoration) and facility dimension (toilet, security, lighting, lift and air-condition) of Plaza Pelangi were rated lower compared with KSL City. Hence, these dimensions need to be considered as priority in the next upgrading/ renovation works.

Other than that, the entertainment dimension (restaurant and specialty shop) was rated lower than KSL City. In order to improve the entertainment dimension of Plaza Pelangi, efforts in recruiting more restaurants and café, cinema and amusement park shall be done by Plaza Pelangi/

5.3 Limitations and Recommendations for Future Study

The limitations of this study are recommended to be improved in the future study. Firstly, the case studies in this study were limited to KSL City and Plaza Pelangi. In future study, it is recommended to include more shopping centers such as Holiday Plaza, Pelangi Leisure Mall and City Square. Secondly, this study only focused on testing the significant differences between the case studies. It will be better if deeper analyses are carried out in the future study. It is suggested that future studies include more specific details as well as recommend advanced strategies to the management team of the shopping center.

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