

ELDERLY’S FEEDBACK ON THE SERVICE QUALITY OF URBAN GREEN OPEN SPACE IN PENANG AS A CATALYST FOR HEALTH AND LIFESTYLE RESILIENCE

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ABSTRACT

Sustaining health, social involvement, reducing institutionalization, and enhancing the quality of life of the elderly are community health challenges of the 21st era. Elderly citizens may endure numerous health illnesses due to their vulnerability to many physical and mental intrusions. Quality of life in elderly people can be affected by many environmental and physical factors. The quality of life for the elderly is partially and intimately related to their usage of green open space. The usage of this space will directly affect their health and lifestyle resilience. After this, the significance of getting more understanding and feedback about service quality in urban green open spaces is necessary. This research is aimed to study the link between elderly satisfaction and service quality of the urban green open space. Hence, this research aims to examine the catalyst for health and lifestyle resilience. The participants surveyed in this study were elderly people who were living in the surrounding community and come voluntarily to the urban green open space to use and enjoy all the facilities and activities that had been provided. The outcomes from this research deliver a platform for local authorities and developers in Malaysia to understand elderly expectations and behavior and how it affects their health and lifestyle resilience. The understanding is essential for planning and designing more inclusive, comprehensive and age-friendly urban green open space or parks, which should meet the needs, demand and expectations of older adults and encourage them to engage and participate in more activity.

Keywords: Elderly, Service Quality, Open Space, Health & Resilience

INTRODUCTION

Urban greenery or urban green open space offers a broad range of social benefits for urban residents. These benefits, which may enhance people’s quality of life, become of key importance and should be taken into account in the planning and design process of urban green parks functioning as green open public spaces free and available to everybody. This approach is essential and crucial nowadays, especially for the elderly in the context of increasing their physical condition and well-being. Demographic aging is a global trend resulting from a continual transformation in the age structure of the global population, determined by getting higher levels of life expectancy (Kinga & Paulina, 2022). The share of 60+ aged groups in the total population is expanding precipitously, mainly in the 21st century. At the same time, the number of threats, such as decreased physical and mental functioning and performance, the existence of illnesses and grievances, is expanding with age, which translates directly into increasing motor damage and progressive incapacity in ageing.

The Elderly is a natural process that continues throughout life that starting at childbirth and ending at death. According to the National Institute on Aging (2011), the percentage of elderly is rising around the world. Physical inactivity is a major public health issue worldwide and increasing physical activity levels in the aging population is a concern for policymakers in many countries. It is now widely accepted that regular physical activity can improve both morbidity and premature mortality in older people, even for those with prolonged and ongoing healthcare problems. Due to that, physical endeavor is an essential element to staying fit and being resilient. This study aimed to elderly's feedback on the quality of urban green open space in Penang as a catalyst for their health and lifestyle resilience. Few studies had discussed the needs of the elderly regarding the service quality of the open spaces and the design need and implications. Open spaces mentioned in this study refer to the urban green open space. The result from this study can be used to guide future research regarding the development of a framework to define the aspects of quality in Malaysian Urban Green Open Space, especially for the elderly context.

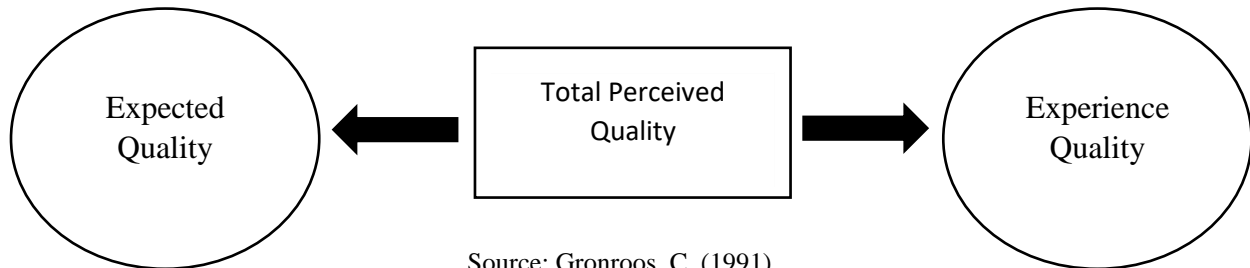
REVIEW OF LITERATURE

Service quality is all about products and services that meet or exceed customer expectations result in customer satisfaction. According to Ramya, Kowsalya & Dharanipriya (2019), service quality is an association of two different words which are service and quality. The word service means any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything, on the other hand, quality has come to be recognized as a strategic tool for attaining operational efficiency and better performance of a business. High quality of urban green open space infrastructures and services improved the quality of life especially among the elderly in the cities and neighbourhoods. It was supported by the statement by Han, Xiaoling, Jinglan, Xingyi, and Xin (2019) that urban green open space is a valuable resource for the physical activities of urban inhabitants and has the potential to reduce chronic illness and improve health. The Urban Green Open Space is primarily designed for recreation and gives enormous benefits to the neighborhoods and community by improving health, and social well-being and enhancing the enjoyment of the local environment. According to World Health Organisation (2017), urbanization results in an increasing proportion of the population living in cities. Urban living limits access to nature and can increase exposure to certain environmental hazards, such as air and noise pollution. Many urban areas face increasing pressure from expanding populations, limited resources, and growing impacts of climate change. These challenges must be addressed for cities to provide healthy and sustainable living environments with the good service quality of urban green open space. This is in line with the statement by Nor & Nur (2015), the rapid growth of service sectors in the whole world and the deregulations of many service industries especially in the theme park industry or in this case is urban green open space has led to an interest in the quality issue.

There are some model of service quality that can be a guidance or reference as in fundamental in this research. Firstly, the Perceived Service Quality Model (Figure 1) by Gronroos (1991), the quality of service, as perceived by the customer is the end result of a comparison between the expectations of the customer and his or her real-life experiences. If the “experienced quality” exceeds “expected quality,” the “total perceived quality” is positive. While, if the

expectations are not met by performance or the experience, the perceived quality is at a low level or negative. So, at the very final end of success or satisfaction is dependent on initial expectations compared to actual presentation as being evaluated by the user or the customer.

Figure 1: Perceived Service Quality Model



Source: Gronroos, C. (1991).

Secondly, the SERVQUAL instrument developed by Parasuraman et al (1991) has proved and popularly being used in many studies of service quality also being as guidance for the study. This is because it has a generic application and is a practical approach to any area based on the the gap model that had been developed also by Parasuraman et al (1985). These five dimensions instrument are: tangibility, reliability, responsiveness, assurance and empathy.

Thirdly, another widely used model of service quality known as the five gap model by Kotler, Bowen, and Makens (1996). Knowing what customers expect is the first and possibly the most critical step in delivering service quality. Thus, the marketing/ organization must know what customers expect to be able to provide services that customers perceive as excellent. This is an extension of the marketing concept and consultative selling approach which ara firstly, learns through thorough questioning of what the customer needs and wants, and secondly, delivers the product/service benefits that will solve the problem and satisfy the needs or wants.

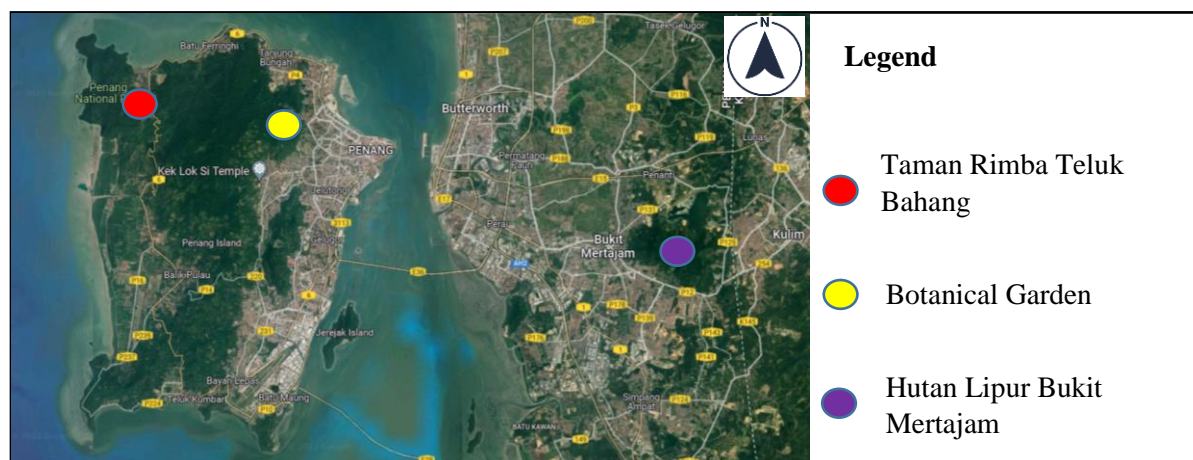
Services are unique in that they are intangible and, thus, customers the consumer must have trust *before* they used the item or the xservices. In predominantly selling *services*, as in the industry, quality and perception of quality are essential. Service quality has many benefits including the ability for the organization to compete with a “differentiation” strategy in a world of “look-alike” products or services.

Study Area

Penang was chosen because it has an urban green open space, which is a regional park that is the focus of many visitors, including senior citizens (Penang State Recreational Facilities Project, 2000-2020). The study area involves several green areas in Penang that are the focus of recreational communities to spend time with family. The significance of this area is chosen is because the senior citizens in this area spend a lot of their time in the green area to socialize and recreate. The selected study area of this research is at Regional Park which involves namely Botanical Garden, Hutan Lipur Bukit Mertajam, and Taman Rimba Teluk Bahang, Refer to Map 1. The selection of this study area is in line with the goals of the Penang State Structure Plan (RSNPP, 2020) which seeks to increase the provision and maintenance of public facilities and active and passive sports facilities to maintain the quality of the environment so that it can be visited by locals and tourists

as a recreational area. This is clearly to consider the views of the use of public spaces especially for the elderly in the context of this study to maintain, upgrade and maintain areas of recreational facilities and major public parks.

Map 1: Urban Green Open Space in Penang



RESEARCH METHODOLOGY

The respondents of this study were sampled among the elderly in the urban green open space in Penang namely Botanical Garden, Hutan Lipur Bukit Mertajam, and Taman Rimba Teluk Bahang starting in September till November 2021. In this study, the respondent comprises the elderly of different races in the different green open space area. As the list of the number of visitors among the elderly in the urban green open space is not available, the respondents were selected via the purposive sampling method. It is a non – probability sampling approach whereby samples were chosen based on the qualities that the individuals possessed. Purposive sampling, which is also known as judgment sampling, is a non-probability sampling in that it is applied in studies that are related to a “certain cultural domain with experts within” (Tongco, 2007, p.147).

The respondents were selected based on the following criteria senior citizens aged 60 and above only regardless of any nation, race, or religion. A total of 102 respondents consisting of 52 respondents from Botanical Garden, 10 respondents from Taman Rimba Teluk Bahang, and 40 respondents from Hutan Lipur Bukit Mertajam answered the questionnaires that were conducted during this session. The small number of respondents at each site was because at that time the questionnaire was conducted, the country was still in the period at the beginning of the issuance of Movement Control Orders (MCO) due to pandemic Covid19 and many senior citizens were less using public spaces.

The current Covid-19 pandemic has interested the whole world, changing habits and use of places and cities. During the lockdown period, cities and public spaces became empty and new urban landscapes substituted the previous ones, transforming the private into the public (Marichela, 2021). Children, young and elder people were those who mainly had problems: to them, real-life was negated at the time of their life which is more important.

RESEARCH FINDINGS

Based on the questionnaire session that was conducted, the findings showed encouraging results related to the feedback received from senior citizens who participated in the questionnaire. In this research paper, the findings are divided into three segments namely the overall quality of green space, the quality of green space services provided, and the improvements that should be made in the green space of this study area. The respondents' profile involved in this study is summarized in Table 1. Most of the respondents are Male in Gender which is 57.8 percent whereas the oldest age of respondents ranged from 75-79 years which is 1.97 percent with the age of 77 years old.

Furthermore, based on the analysis shown, the highest age group is Chinese which is 52.9 percent. This is due to the perceptions and attitudes towards exercise among Chinese elders in terms of the implications of culturally based self-management strategies for effective health-related help-seeking and person-centered care (Liu, Z., Speed, S., & Beaver, K., 2015). The respondents are mostly well educated, which is 33.3 percent have a degree, and the rest with other academic qualifications. This result has shown the respondent is well known in terms of education which help to participate in the survey with additional knowledge and experience. On the other hand, most of the respondents are married which is 72.5 percent.

Table 1: Respondents Profile

Respondents of Botanical Garden, Hutan Lipur Bukit Mertajam & Taman Rimba Teluk Bahang		Frequency (n=102)	Percentage (%)
Gender	Male	59	57.8
	Female	43	42.2
Age Group	60-64	51	50
	65-69	46	45.09
	70-74	3	2.94
	75-79	2	1.97
Race Group	Malay	36	35.3
	Chinese	54	52.9
	Indian	4	3.9
	Others	8	7.8
Education	Sijil Pelajaran Malaysia (SPM)	13	12.7
	Sijil Tinggi Pelajaran Malaysia (STPM) / Sijik Kemahiran Malaysia (SKM)	26	25.5
	Diploma	25	24.5
	Degree	34	33.3
	Master's degree	4	3.9
Status	Bachelor	25	24.5
	Married	74	72.5
	Divorce	3	2.9

In the context of the quality of urban green open space services in general that had been provided to the user at the urban green open space, the respondents were very satisfied which 97.1 percent, Refer to Table 2. This result shows that the urban green open space is in a good condition and quality. The respondent is satisfied with the service provided overall which led to attracting more users to use the services in the area. According to Bashir, Umar, Yousuf & Dharmendra Singh (2020), customer loyalty and customer satisfaction is related to the impact of service quality.

Table 2: Quality of Urban Green Open Space Services Provided

Items	Very Satisfying		Satisfying		Moderate		Unsatisfactory		Very Unsatisfactory	
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	F.	Freq.	(%)
Urban Green Open Space Services Provided	99	97.1	2	2	1	1	0	0	0	0

Next, in the context of the quality of urban green open space services quality of the urban green open space area is provided in detail, most of the item shows that the result is in a good condition or very satisfying to the respondents, Refer to Table 3. The respondents are very satisfied with the item of infrastructure facility which is stated at 98 percent. Item location suitability and cleanliness and beauty of the landscape are stated at 97.1 percent. This indicates that the infrastructure facility mainly is in the good condition and the rest of the items are in good hands or services. It is in line with Gustafsson, Johnson, and Roos (2005) which did mention that high-quality service that had been provided directly affects customer satisfaction and therefore results in the user behavioral intention in the future.

Table 3: Services Quality of The Urban Green Open Space Area Provided

Items	Very Satisfying		Satisfying		Moderate		Unsatisfactory		Very Unsatisfactory	
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	F.	Freq.	(%)
Maintenance	96	84.1	6	5.9	0	0	0	0	0	0
Monitoring	95	93.1	7	6.9	0	0	0	0	0	0
Security level	94	92.2	8	7.8	0	0	0	0	0	0
Cleanliness and beauty of the landscape	99	97.1	3	2.9	0	0	0	0	0	0
Location suitability	99	97.1	3	2.9	0	0	0	0	0	0
Law enforcement	97	95.1	5	4.9	0	0	0	0	0	0
Infrastructure facility	100	98	2	2.0	0	0	0	0	0	0
Safety	98	96.1	4	3.9	0	0	0	0	0	0

Besides that, even though the respondents are highly satisfied with all the services provided, there is some improvement in urban green open space conditions provided that need to look into consideration based on the respondents' feedback. The special pedestrian walkway, map of the area, facilities, and infrastructure are the item which 98 percent respond need to have a very need

improvement followed by another item in the list in Table 4. All the item in need or demand improvement by the respondents is because the elderly want to have suitable things and equipment that meet their need as elderly. According to Borneo Post (2018), Santubong Member of Parliament Datuk Seri Dr. Wan Junaidi Tuanku Jaafar admitted that there are leisure center facilities for the elderly, but it is still not enough to need to increase the special recreational facilities for senior citizens or the elderly. Even though the statement is made in Sarawak but needs to be applied in every urban green open space in Malaysia.

Table 4: Improvement of Urban Green Open Space Conditions Provided

Items	Very Need Improvement		Need Improvement		Moderate		No Need Improvement		Very No Need Improvement Required	
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	F.	Freq.	(%)
Special Pedestrian Walkway	100	98	2	2	0	0	0	0	0	0
Special Training Equipment for The Elderly	99	97.1	3	2.9	0	0	0	0	0	0
Explanatory Signage	99	97.1	3	2.9	0	0	0	0	0	0
Trained Guidance Officers	92	90.2	5	4.9	2	2	2	2	1	1
Information Counter/Office	88	86.3	12	11.8	2	2	0	0	0	0
Special Area	96	94.1	6	5.9	0	0	0	0	0	0
Map of the Area	100	98	2	2	0	0	0	0	0	0
Special Training Modules	88	86.3	9	8.8	4	3.9	1	1	0	0
Location	96	94.1	6	5.9	0	0	0	0	0	0
Safety System	99	97.1	3	2.9	0	0	0	0	0	0
Communication System	94	92.2	6	5.9	1	1	1	1	0	0
Facilities And Infrastructure	100	98	2	2	0	0	0	0	0	0

DISCUSSION

Social circles tend to get smaller when getting older and are at risk for loneliness and social isolation, which can negatively impact their physical and mental health. Population get older leads to change of people structure and increase care needs. Shortage of proper planning in this field will lead to occur increasing problems. According to Mohammad, Ali, Mehrnoosh, Khalil & Seyed (2021) without the support, intervention, planning and policies-making by the governments, the quality of life of the elderly is severely impaired. It was based on the study that had been carried out at German, Italy, Japan, Netherland, Norway, Sweden, Turkey, Australia and Iran. In addition to being a mood booster, exposure to urban green open space activity and recreation need to be shown up or introduced to the elderly to reduce the risk of health problems like diabetes,

cardiovascular disease, and high blood pressure. So, the good quality of infrastructure and utilities in the urban green open space need to be up to the good standard and quality based on the guideline and regulations. It is vitally important that all respective local authorities in Malaysia need ensure that the implementation policy, guidelines, and the rules for its open spaces especially to allocate and design or plan without compromising the need for the elderly which is under the provision of the Planning Standard Guidelines for Open Spaces and Recreation (JBPD 7/2000) issued by the PlanMalaysia. The commitment of each local authority to implement the open space policy, guidelines, and the rule within their respective jurisdiction is a key step in ensuring that the provision for a good quality of open spaces is not ignored by the developers in their proposed developments.

The services for the elderly must be provided nationwide, even in rural and or even in remote areas. On the other hand, due to the different costs of different organizations that develop the green open space in the country, the services provided at the country level are still insufficient and desirable for the elderly. One of the differences that our country has faced from the studied countries is the lack of dedicated and proper funding and the lack of coherence and coordination among various agencies in providing services to the elderly, especially in the green urban area. Lack of coordination among the elderly service providers, while increasing the cost will automatically reduce the quality of services. By proper planning at the national level and the provision of appropriate care packages for the elderly, the coordination and coherence among carers be enhanced and added to the quality and quantity of care services for the elderly.

According to Nor & Nur (2015) every service provider or in this case, the local authority should consider their physical and non-physical aspect of service to offer high-quality service to the user. According to Parasuraman et al (1988), a popular conceptualization of service quality involves comparing a customer's evaluation of the perceived performance of specific attributes of service to their prior expectations. On the other hand, Lewis and Booms (1983) point out that service quality in the service industries should "focus on meeting customers' needs and requirements, and how well the service delivery meets customers' expectations. Moreover, Parasuraman, Zeithamal, and Berry (1988) point out that, service quality is "an abstract and elusive construct of three features unique service: intangibility, heterogeneity, and inseparability of production and consumption". So, strong enforcement by the local authority will is highly needed to ensure the sustainability and good quality of open spaces will be more secure and well manage to ensure the user especially the elderly get the benefit of the urban green open space that had been provided.

According to Evans and Dean (2003), the customer is the judge of quality. Understanding customer needs, both current and future, and keeping pace with changing markets require effective strategies for listening to and learning from customers, measuring their satisfaction relative to competitors, and building relationships. Satisfaction and dissatisfaction information is important because understanding them leads to the right improvements that can create satisfied customers who reward the company with loyalty.

Satisfaction can be expressed in many ways, like positive word-of-mouth, giving compliments to the service provider, and brand loyalty to the service organization. Quite often it is assumed that satisfied consumers will be brand loyal. That needs not to be the case, especially even now entrants have come to the satisfied customers will show a higher repurchase rate than dissatisfactions of customers is an important one. Customer satisfaction leads to repeat purchases

and repeat purchases lead to loyal customers. In turn, customer loyalty leads to enhanced brand equity and higher profits.

On the other hand, the only measure of acceptable quality is customer satisfaction, which takes into account both objective and subjective interpretations of the needs and expectations of customers. If the customers are satisfied with the products and services offered, the organization has not only correctly interpreted customer needs and expectations but is also providing products and services of acceptable quality. When customers are dissatisfied, they can undertake a different kind of action as well. One can express dissatisfaction in many ways, for example by complaining to the service provider or the union. Another action can be to never visit the service provider again. Two models exist in explaining the ways to express dissatisfaction, the economic model and the behavioral model. The economic model, basically the perceived cost, the perceived benefits, and the probability of success determine whether consumers will express their dissatisfaction. In the behavioral model, this is determined basically by the ability and motivation to do so.

Satisfaction with the service quality of the urban green open space will affect their quality of life which is described as wellness resulting from a combination of physical, functional, emotional, and social factors. According to Kinga & Paulina (2022), open spaces provide opportunities for a range of physical activities, and their characteristics can likely influence elderly people's choices concerning being inactive outdoors. Good maintenance of urban parks is crucial to the perception of urban greenery as low-risk areas and allows people of advanced age to feel safer. It also determines a positive image of green areas. People tend to avoid areas containing equipment that is damaged because it suggests that the park is run down and possibly unsafe. Elderly prefer well-maintained infrastructure and facilities and pay particular attention to the technical condition of facilities such as benches, which are the basic elements ensuring rest.

On the other hand, many physical factors related to cleanliness can increase the feeling of insecurity in urban green spaces. These signs of insufficient management of green areas or an excessive number of visitors may also strongly impact the perception of security in urban parks. A low level of cleanliness in urban parks is often identified as the reason minimizing the number of visits, regardless of the type of users, and a factor decreasing their use in physical activity (Zhang, Wulff, Duan & Wagner, 2019). A clean space without rubbish is important for various groups of park users, especially for older adults. Therefore, according to Cozens, Saville & Hillier (2005), it is crucial to use various forms of external protection and adapt them to the characteristics of the site. The implementation of the Crime Prevention Through Environmental Design (CPTED) strategy, the aim of which is to reduce the sense of anonymity and strengthen the natural disposition of people to observe the environment, may also be helpful.

Cleanliness is one of the most important aspects that influence the attractiveness of urban green areas and the tendency to use them for recreational purposes. This is confirmed by the research results presented in this study. It shows that most of the factors discussed are important for the cleanliness are crucial for elderly due to the impact on their physical activity.

CONCLUSION

It can be summarized that the above discussion indicates that a good quality service of urban green open space is needed especially for the elderly to use and enjoy all the equipment and services at

the site. The environment has a strong impact on the sense of society. Open space and physical activity in and near parks can gain older adults' physical health and spiritual well-being to stay collectively engaged. Framed within the person-environment and life span point of view, open space, and physical activity in and near parks can accelerate an ideal fit between the elderly and their ecosystem as they continue to build up over a period. Physical activity provides various health advantages to the elderly and urban parks are one of the key settings where the elderly take part in physical movement. So, the elderly' park-based physical activity and their needs related to park ecological features are supposedly well understood and user friendly with good quality. It could provide an effect on park layout and management; specific, additional age-friendly plan approaches should be applied to facilities preferred by the elderly.

The delivery of high-quality services is one of the most important and most difficult tasks that any service organization faces. Because of their unique characteristics, services are very difficult to evaluate. Hence customers must look closely at service quality when comparing services. Service quality can be defined as a customer's perception of how well a service meets or exceeds their expectations. In most cases, service quality is judged by customers, and not by organizations. This distinction is critical because it forces service marketers to examine their quality from the customers' viewpoint. The biggest obstacle for customers in evaluating service quality is the intangible nature of the service. If an organization cannot at least meet its customers' expectations it will struggle. Ideally, an organization should exceed its customers' expectations, thereby, maximizing the satisfaction of its customers, and also the credibility of its goods and services in the eyes of its customers. Customers normally become delighted when a supplier underpromises and over-delivers. To over-promise and under-deliver is a recipe for customers to become dissatisfied.

A lack of customer satisfaction modeling and the nonexistence of a well-defined questionnaire could harm the development of sustainable and recurring businesses. For that reason, organizations could definitively take advantage of a proven systematic customer satisfaction process. The challenge for organizations is to implement and secure a standardized customer satisfaction process across their class of markets and geographic markets (countries). Customer satisfaction is addressed as a strategic business development tool. Ultimately it will lead to more loyal customers and more profitable business.

It is important to realize that many customers will not complain and this will differ from one industry sector to another. In other words, we often are not aware of the extent of satisfaction/dissatisfaction as long as we do not ask. Customer satisfaction research should be done with the greatest care. Measuring customer satisfaction must be a continuous, consistent, timely, accurate, and reliable process.

Organizations need the capacity to get many customers to survive or exist. Excellent services and responding to customers' demands can directly increase satisfaction. This is an indicator of satisfaction level with the services' quality. This can be measured by assessing their purchase and consumption experience on particular products, services, brands, and company names (Johnson, 2015).

Designing urban green areas open space needs ensuring equivalent prospects for different user groups and avoiding possible conflicts between them. The global ageing of urban populations is driving the adoption of age-friendly methodologies. The task and challenges is to get ready for these changes in such a way that both current and future generations of elderly can fully benefit

from these strategies approaches. A special role in this respect is played by shaping urban green parks, which are the basic places for leisure and improving health and well-being for elderly in cities. Urban green parks that do not age diverse, among other factors, become uninviting and exclusive.

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PAPER CONTRIBUTION TO RELATED FIELD OF STUDY

This study and research benefit various government agencies, especially the local authorities, namely agencies that regulate and manage the governance of a city. The private sector and the public will be affected by the overflow of this study when they will gain a clearer understanding of how to manage the governance of public space, especially urban green open space. The results of this study will also have a direct or indirect relationship to the sustainability of public space. Therefore, all decisions in development planning, especially those involving public space, especially urban green open spaces in the future, will be taken seriously. It is also given special attention to the relevant parties, especially those involving all new developments that take place or involve the use of public space. It can also be a reference to various sectors, especially the private sector and the public, on the needs and awareness of the requirements in the public space, especially to the elder communities. Our findings offer key insights for upcoming and future resilient and durable urban planning guidelines, strategies, approaches, and policies that can deliver a comprehensive range of physical and psychological needs during a time of crisis and beyond especially for the elderly and also other citizens.

REFERENCES

- Borneo Post (2018). *Perbanyak kemudahan rekreasi khas untuk warga emas*. Retrieved via <https://www.utusanborneo.com.my/2018/07/29/perbanyak-kemudahan-rekreasi-khas-untuk-warga-emas> on 21 April 2022
- Bashir Ahmad Fida, Umar Ahmed, Yousuf Al-Balushi & Dharmendra Singh (2020). Impact of Service Quality on Customer Loyalty and Customer Satisfaction in Islamic Banks in the Sultanate of Oman. *SAGE Open April-June 2020: 1–10*
- Cozens, P.M., Saville, G. & Hillier, D. (2005). *Crime prevention through environmental design (CPTED): A review and modern bibliography*. Prop. Manag.
- Evans, J. R. & Dean, J. W.(2003). *Total Quality: Management, Organization, and Strategy*.

- Gustafsson, A., Johnson, M.D. and Roos, I. (2005). The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. *Journal of Marketing*, 69, 210-218.
- Gronroos, C. (1991). "Quality Comes to Service," in The Service Quality Handbook, Scheuing, E.E and Christopher, W.F. (Eds.). New York: American Management Association.
- Han Wang, Xiaoling Dai, Jinglan Wu, Xingyi Wu and Xin Nie (2019). Influence of urban green open space on residents' physical activity in China. *BMC Public Health*.
- Kinga, K., & Paulina, P. (2022). The Use of Urban Parks by Older Adults in the Context of Perceived Security. *International Journal of Environmental Research and Public Health*
- Kotler, P, Bowen, J and Makens, J. (1996). *Marketing for Hospitality and Tourism*. Upper Saddle River, NJ: Prentice Hall
- Lewis, C and Booms, B. (1983). "The Marketing Aspects of Service Quality," In: Berry, L.L., Shostack, G. and Upah, G., Eds., Emerging Perspectives in Service Marketing, American Marketing Association, Chicago, 1983, pp. 99-107.
- Liu, Z., Speed, S., & Beaver, K. (2015). Perceptions and attitudes towards exercise among Chinese elders - the implications of culturally based self-management strategies for effective health-related help seeking and person-centred care. *Health expectations: an international journal of public participation in health care and health policy*, 18(2), 262–272. <https://doi.org/10.1111/hex.12028>
- Marichela, S. (2021). Covid-19 pandemic and public spaces: improving quality and flexibility for healthier places. *Urban Design International*
- Mohammad Asadzadeh, Ali Maher, Mehrnoosh Jafari, Khalil A. Mohammadzadeh & Seyed Mojtaba Hosseini (2021). A review study of the providing elderly care services in different countries. 2022 *Journal of Family Medicine and Primary Care*
- National Institute on Aging, (2011). Global Health and Ageing, National Institutes of Health US Department of Health, and Human Services.
- Nor Siah Jaharuddin & Nur Fadilah Yau Mul (2015). *The Customer Satisfaction on Service Quality of Local and International Theme Parks In Malaysia*. Conference: International Conference on Global Business & Social Entrepreneurship (ICoGBSE 2015)
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). *Perceived Service Quality as a Customer-Based Performance Measure: An Empirical Examination of Organizational Barriers Using an Extended Service Quality Model*. *Human Resource Management*, 30, 335-364.
- Ramya, N., Kowsalya, A., & Dharanipriya (2019). Service Quality And Its Dimensions. *EPRA International Journal of Research and Development (IJRD)*.
- Tongco, M. D. C. (2007). *Purposive Sampling as a Tool for Informant Selection*. *Ethnobotany Research and Applications*, 5, 147–158.
- World Health Organisation (2017). *Urban Green Spaces: A Brief for Action*.
- Zhang, R., Wulff, H., Duan, Y. & Wagner, P. (2019) Associations between the physical environment and park-based physical activity: A systematic review. *J. Sport Health Sci*.

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